

Supporting Information

Optimized protocol for quantitative multiple reaction monitoring-based proteomic analysis of formalin-fixed, paraffin embedded tissues

*Jacob J. Kennedy^{#1}, Jeffrey R. Whiteaker^{#1}, Regine M. Schoenherr¹, Ping Yan¹, Kimberly Allison², Melissa Shipley³, Melissa Lerch³, Andrew N. Hoofnagle³, Geoffrey Stuart Baird³, Amanda G. Paulovich^{*1}*

¹Clinical Research Division, Fred Hutchinson Cancer Research Center, Seattle, WA ²Department of Pathology, Stanford University, Stanford, CA

³Department of Laboratory Medicine, University of Washington, Seattle, WA

Contents

Supplemental Methods.

Figure S1: Preparation of samples was designed to minimize the effects of tissue heterogeneity.

Figure S2: Response curves for assays measured in FFPE and frozen tissue. *Note: due to size, Supplemental Figure S2 is appended at the end of this document.*

Figure S3: Preparation of breast cancer tumor tissue samples for comparison of protein quantification in fresh frozen and FFPE samples was designed to minimize the effects of tissue heterogeneity.

Figure S4: Comparison of endogenous peptide measurements for lysine-containing and arginine-containing peptides in frozen and FFPE samples.

Table S1: Analytical performance figures of merit for LC-MRM and immuno-MRM assays characterized in frozen and FFPE samples.

SUPPLEMENTAL METHODS

Digestion sample desalt. Digests were desalted using an Oasis HLB 96-well Plate with 5 mg sorbent per well (Waters Cat. #186000309). The wells were washed with 3 volumes of 80% MeCN/0.1% formic acid (FA), and then equilibrated with 4 washes of 0.1% FA. The digest was applied to a well, then washed with 4 volumes 0.1% FA before being eluted with 3 washes of 80% MeCN/0.1%FA. The eluate was then aliquotted by volume and digests were lyophilized, followed by storage at -80°C until use.

Antibody cross-linking to Protein G magnetic beads. The antibodies were covalently coupled to 37-100 µm Protein G magnetic sepharose beads (GE Healthcare Life Sciences, Cat.# 28-9513-79) as follows. Each antibody was coupled and immobilized separately using an antibody-bead ratio of 5 µg antibody to 1 µL beads. Eighty microliters of beads were added to microcentrifuge tubes, the supernatants were discarded, and 1X PBS, 5% CHAPS (final concentration 0.03%), and 400 µg of mAb were added to arrive at a final volume of 900 µL, and the tubes were tumbled overnight at 4 °C. (Larger volumes and tubes were used if the concentrations of the purified mAbs were low; after overnight coupling, excess supernatant was removed to arrive at 900 µL.) Automated immobilization was subsequently performed using a KingFisher magnetic bead handling platform (5400500, Thermo Scientific, Waltham, MA) equipped with a deep well magnet head and using 96 deep well plates (95040450, Thermo Scientific) and 96 tip combs for deep well magnets (97002534, Thermo Scientific). The KingFisher was moved into a fume hood for the immobilization procedure due to the toxicity of DMP (dimethyl pimelimidate dihydrochloride, Sigma, Cat.# D8388), triethanolamine (Sigma, Cat.# T1377), and monoethanolamine (Sigma, Cat.# 411000). Seven plates were used, with the following contents per plate and well, and using the following mixing times: plate 1, 900 µL of the antibody-coupled beads that had been transferred from the microcentrifuge tubes into the plate (5 min); plate 2, 900 µL of freshly-made 20 mM DMP in 200 mM triethanolamine, pH 8.5 (30 min); plate 3, 900 µL of 150 mM monoethanolamine, pH 9.0 (30 min); plates 4 and 5, 900 µL of 1X PBS-0.03% CHAPS (5 min); plate 6, 800 µL of 1X PBS-0.03% CHAPS-0.1% sodium azide (5 min); plate 8, tip comb. A medium mixing speed was used for each plate. The antibody-beads were left in the 800 µL of 1X PBS-0.03% CHAPS-0.1% sodium azide in plate 6 at the end of the method (at a final antibody concentration of 0.5 µg/µL). The individual antibody-bead suspensions were subsequently transferred to separate, new 1.5 mL screw-cap tubes (72.692, Sarstedt, Nümbrecht, Germany) and kept at 4 °C until use. For ESR1 (peptide LLFAPNLLLDR), 2000 µg of antibody was coupled to 400 µL of magnetic beads (more antibody was coupled for it than for the other antibodies, since 10 µg of it was used per capture (see below), versus 1 µg of the other antibodies.

Peptide immunoaffinity enrichment. Peptide immunoaffinity enrichment for all experiments was performed on at least 25 µg of digested cell lysate and consisted of overnight incubations of the cross-linked monoclonal antibodies (mAbs) using a mix of the 42 mAb prepared with a concentration of 1 µg of each mAb per 50 µL 1X PBS-0.03% CHAPS-0.1% sodium azide (except for the ESR1 (LLFAPNLLLDR) antibody, for which 10 µg per 50 µL was used). The lyophilized protein digests were resuspended in 200 µL of 1X PBS-0.01% CHAPS (pH 7), and the pH was tested to ensure a pH ~7. Subsequently, 50 µL of the 42 mAb mix was added to each sample. The captures were performed in 96-well plates (97002540, Fisher Scientific) that were covered with plastic mats (Thermo Scientific, Cat.# 4421) and then tumbled overnight at 4°C. A KingFisher platform was used to wash the beads as described previously¹ with the following modifications: the beads were washed twice with 250 µL of 1X PBS-0.01% CHAPS, pH 7, and once with 250 µL of 1/10X PBS-0.01% CHAPS, pH 7), and the peptides were eluted using 26 µL of 3% acetonitrile-5% acetic acid-50 mM citric acid. A PCR plate (HSP9601, BioRad, Hercules, CA) was used for the peptide elution step. Ten microliters of an eluate were injected for an LC-MRM-MS analysis (immuno-MRM).

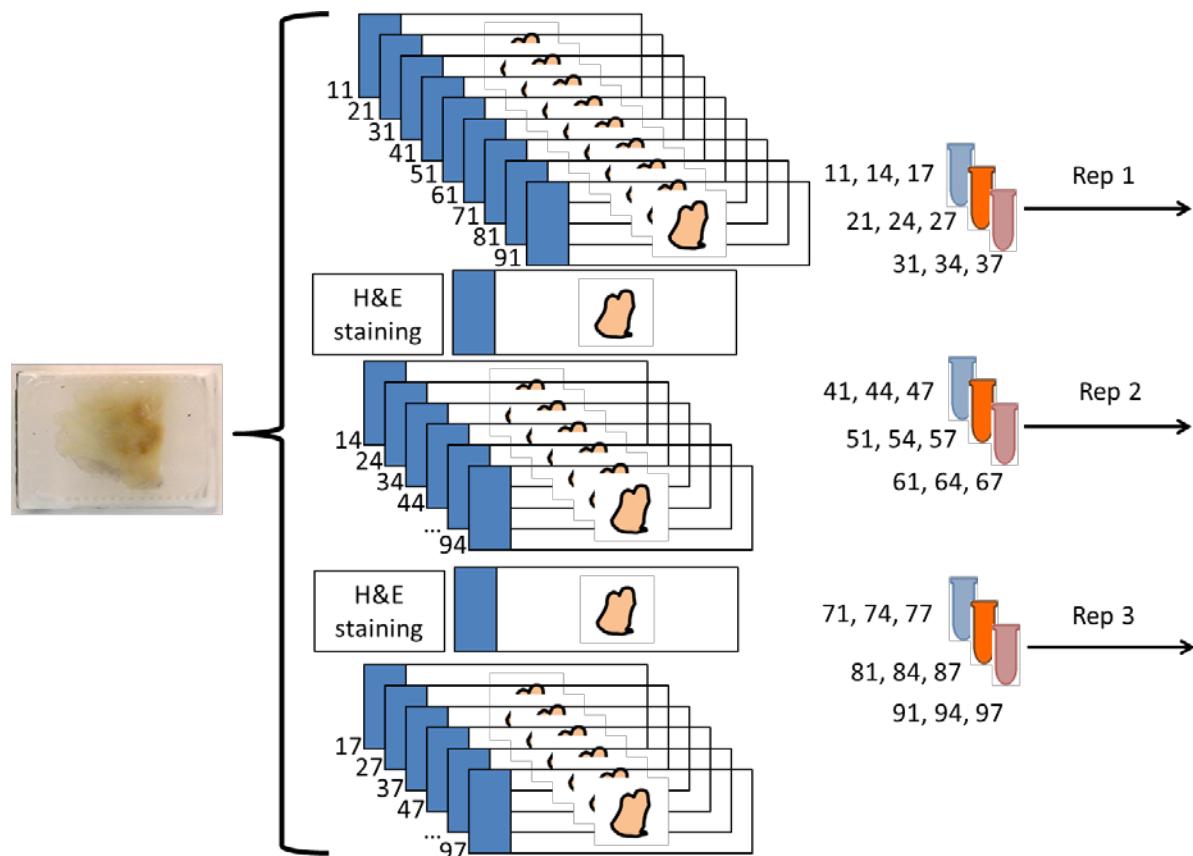
MRM parameter optimization. Heavy stable isotope-labeled standards (SIS) and matched light versions were synthesized and purified to >95% purity by HPLC. Heavy peptides incorporated a fully atom labeled ¹³C and ¹⁵N isotope at the C-terminal lysine (K) or arginine (R) position of each (tryptic) peptide, resulting in a mass shift of +8 or +10 Da, respectively. Peptides were quantified by amino acid analysis and aliquots were stored in 5-30% acetonitrile/0.1% formic acid at -80°C until use. Transitions monitored by LC-MRM were selected and optimized as previously reported.² Briefly, each synthetic peptide was analyzed by MS/MS on an LTQ mass spectrometer using infusion with an Advion TriVersa interface. The spectral library from these analyses was used to select transitions for optimization. Optimal collision energy for a hybrid triple quadrupole/linear ion trap mass spectrometer (5500 QTRAP) for each of the peptides was determined by injecting 50 fmol standard peptide solutions into a flow of 30% acetonitrile, 0.1% formic acid at a flow rate of 1 µL/min. Optimal values were determined by ramping the potentials and evaluating the results through DiscoveryQuant (Sciex). These optimized values were used to prepare linear regressions provided in Skyline for collision energy (CE) depending on the molecular weight and charge state of the peptides by using slope and intercept parameters of 0.0528 and -2.1786 for charge state +2, and 0.0448 and -1.2844 for charge state +3. Transitions monitored by immuno-MRM were optimized by using these linear regression values for the CE and were selected by injecting 50 fmol of a synthetic peptide mix (in 3% acetonitrile-0.1% formic acid) onto the LC-MRM-MS system. A static declustering potential (DP) of 100 V was used for all transitions.

Retention times on the LC platform were empirically determined using a mixture of the standard stable isotope-labeled synthetic peptides in a non-scheduled fashion. Once the retention times were known, scheduled MRMs were set up using a 150 second MRM detection window and a target cycle time of 1.5 seconds.

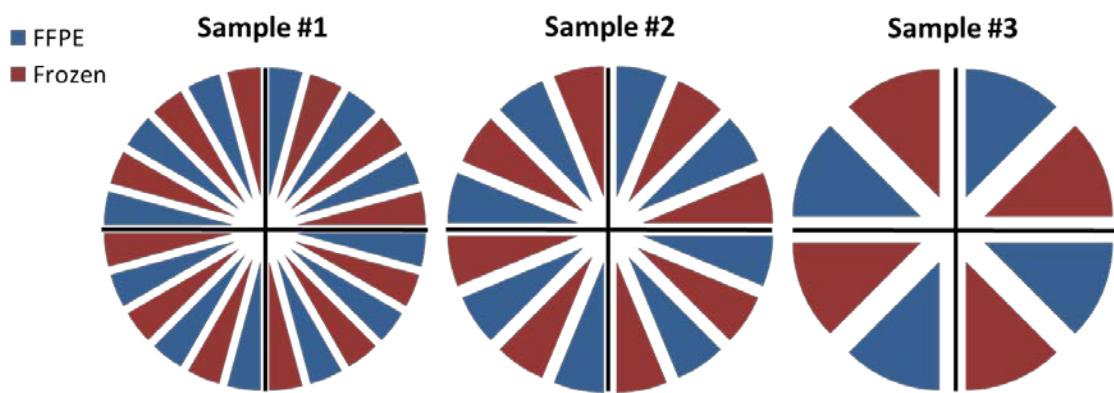
MRM mass spectrometry data analysis. MRM peak integration was performed by Skyline⁴, and the integrations were manually inspected to ensure correct peak detection, absence of interferences, and accurate integration. Reported peak areas are the sum of the peak area and background area reported by Skyline. Peak specificity between the light (or endogenous) and heavy (or SIS) MRM signal was defined as the detection of ≥ 1 transition from the endogenous peptide exactly co-eluting with ≥ 2 transitions from the stable isotope-labeled peptide, with the relative intensity of the light transition(s) deviating no more than 20% compared to the relative intensity of the corresponding heavy transitions. Integration results were exported to the program R for linear regression and statistical analysis. Peptide concentrations are calculated as the peak area ratio of the sum of all transitions with no interferences times the concentration of SIS peptide.

- (1) Schoenherr, R. M.; Whiteaker, J. R.; Zhao, L.; Ivey, R. G.; Trute, M.; Kennedy, J.; Voytovich, U. J.; Yan, P.; Lin, C.; Paulovich, A. G. Multiplexed quantification of estrogen receptor and HER2/Neu in tissue and cell lysates by peptide immunoaffinity enrichment mass spectrometry. *Proteomics* **2012**, *12* (8), 1253–1260.
- (2) Kennedy, J. J.; Abbatiello, S. E.; Kim, K.; Yan, P.; Whiteaker, J. R.; Lin, C.; Kim, J. S.; Zhang, Y.; Wang, X.; Ivey, R. G.; et al. Demonstrating the feasibility of large-scale development of standardized assays to quantify human proteins. *Nat. Methods* **2014**, *11* (2), 149–155.
- (3) Maclean, B.; Eng, J. K.; Beavis, R. C.; McIntosh, M. General framework for developing and evaluating database scoring algorithms using the TANDEM search engine. *Bioinformatics* **2006**.
- (4) MacLean, B.; Tomazela, D. M.; Shulman, N.; Chambers, M.; Finney, G. L.; Frewen, B.; Kern, R.; Tabb, D. L.; Liebler, D. C.; MacCoss, M. J. Skyline: an open source document editor for creating and analyzing targeted proteomics experiments. *Bioinforma. Oxf. Engl.* **2010**, *26* (7), 966–968.
- (5) Maclean, B.; Tomazela, D. M.; Abbatiello, S. E.; Zhang, S.; Whiteaker, J. R.; Paulovich, A. G.; Carr, S. A.; MacCoss, M. J. Effect of collision energy optimization on the measurement of peptides by selected reaction monitoring (SRM) mass spectrometry. *Anal. Chem.* **2010**, *82* (24), 10116–10124.

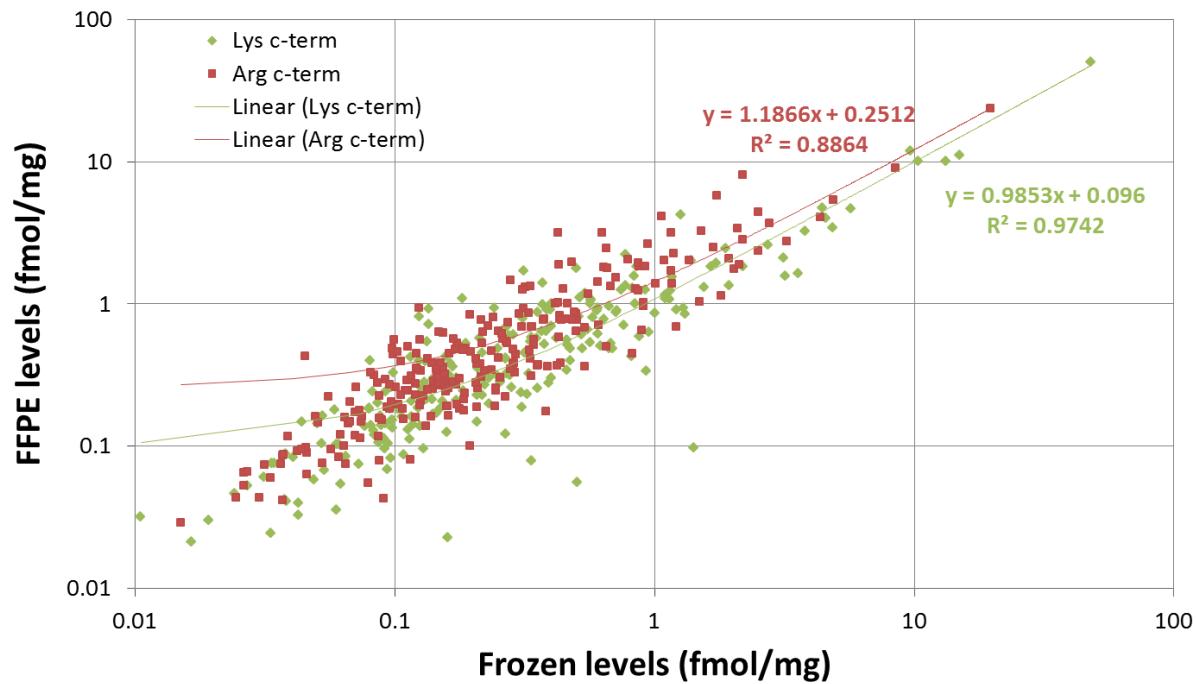
Supplemental Figure S1. Preparation of samples to minimize the effects of tissue heterogeneity. Tissue blocks embedded in paraffin were sectioned by mounting 10um slices onto slides. Alternating slides were distributed across replicates to minimize, to the largest extent possible, variations in cell type composition throughout the tissue block. In this manner, each replicate analyzed in the optimization experiment contained roughly equal tissue composition.



Supplemental Figure S3. Preparation of breast cancer tumor tissue samples for comparison of protein quantification in fresh frozen and FFPE samples was designed to minimize the effects of tissue heterogeneity. Three individual breast cancer tumor tissue samples were collected and immediately quartered. Each quarter was sectioned into pieces, with the number of pieces approximated by tumor size. Each section weighed at least 5 mg (wet weight). Alternating pieces were either flash frozen in liquid nitrogen or placed in formalin for fixation. For protein analysis, pieces were combined into one sample, and protein extraction and digestion performed in triplicate.

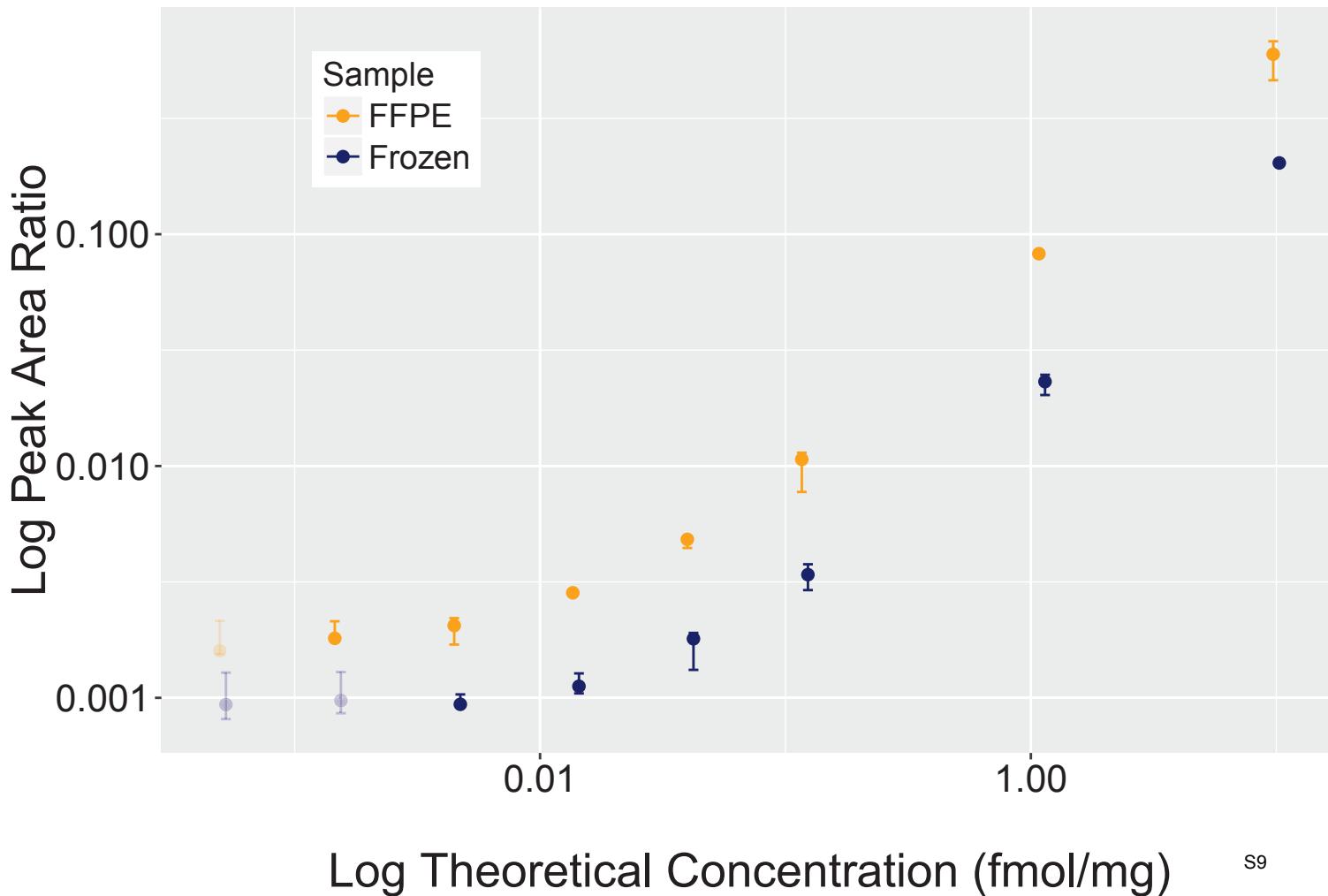


Supplemental Figure S4. Comparison of endogenous peptide measurements for lysine- and arginine-containing peptides in fresh and FFPE samples. LC-MRM quantitative results for peptides ending in lysine (K) were plotted separately from peptides ending in arginine (R). The scatter plot of peptide measurements in FFPE and frozen samples shows good correlation for both peptide types.

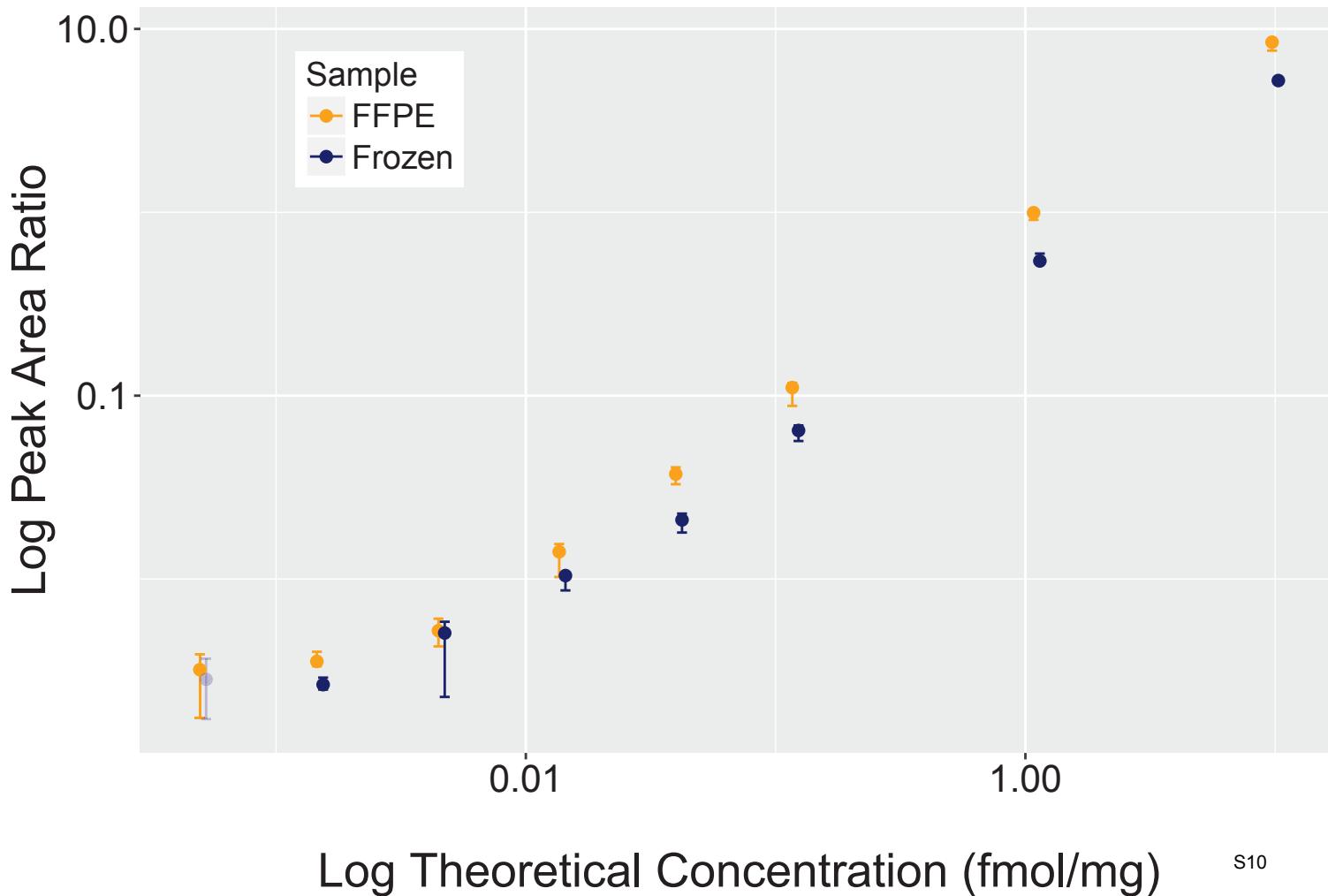


Supplemental Figure S2. Response curves for assays measured in FFPE and frozen tissue. For the following pages, peak area ratio (heavy:light) is plotted as a function of spiked heavy peptide concentration (fmol/mg) for individual peptides quantified by LC-MRM and immuno-MRM. Each page corresponds to an individual peptide. The peptide sequence and gene symbol are reported at the top of the page. The curve plots are transformed to \log_{10} scale. Values measured in FFPE background matrix are in yellow, values measured in fresh frozen tissue are in blue. Error bars are the standard deviation of triplicate measurements.

Analyte: sp|Q01995|TAGL_HUMAN.AAEDYGVIK

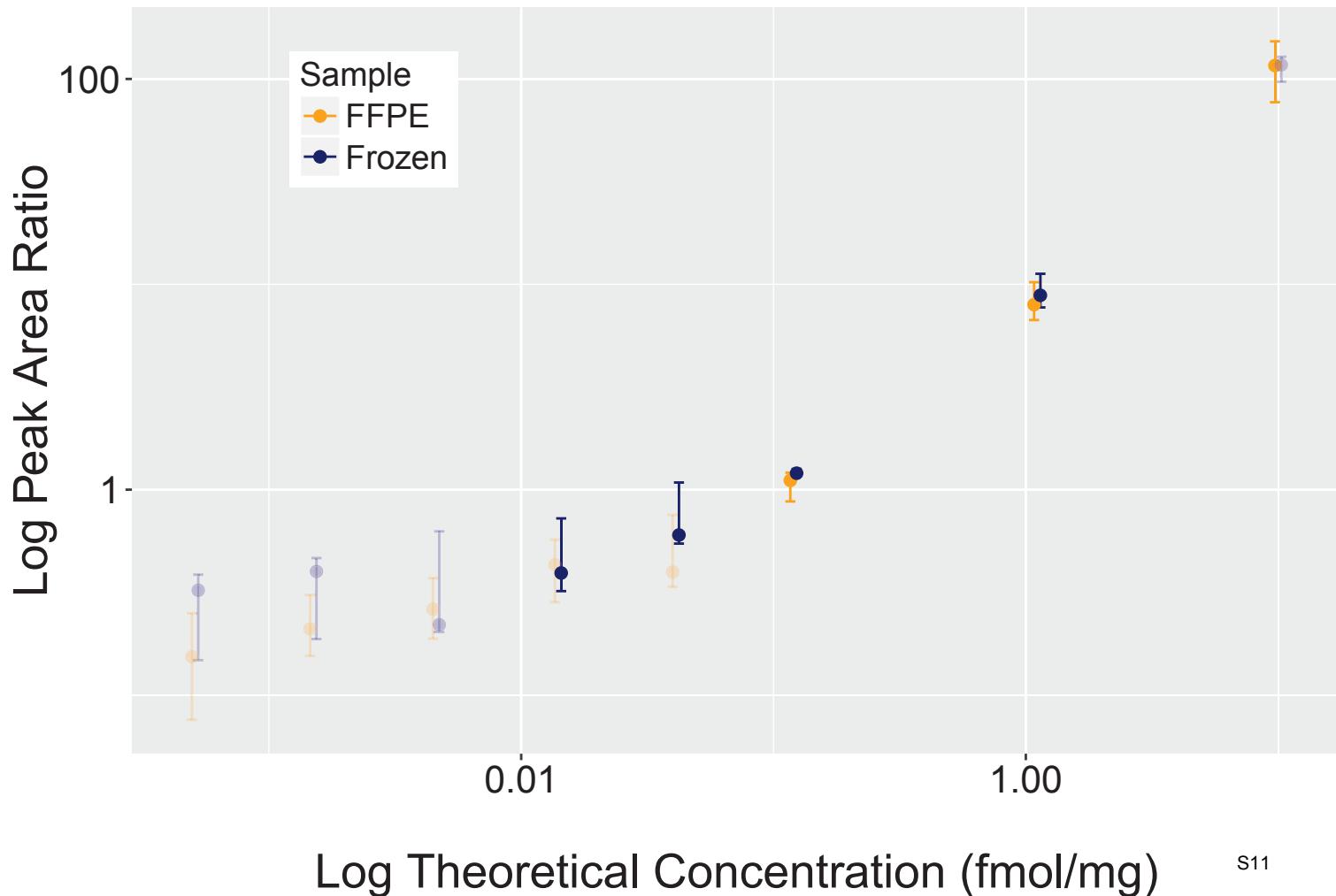


Analyte: sp|P04083|ANXA1_HUMAN.AAYLQETGKPLDE'

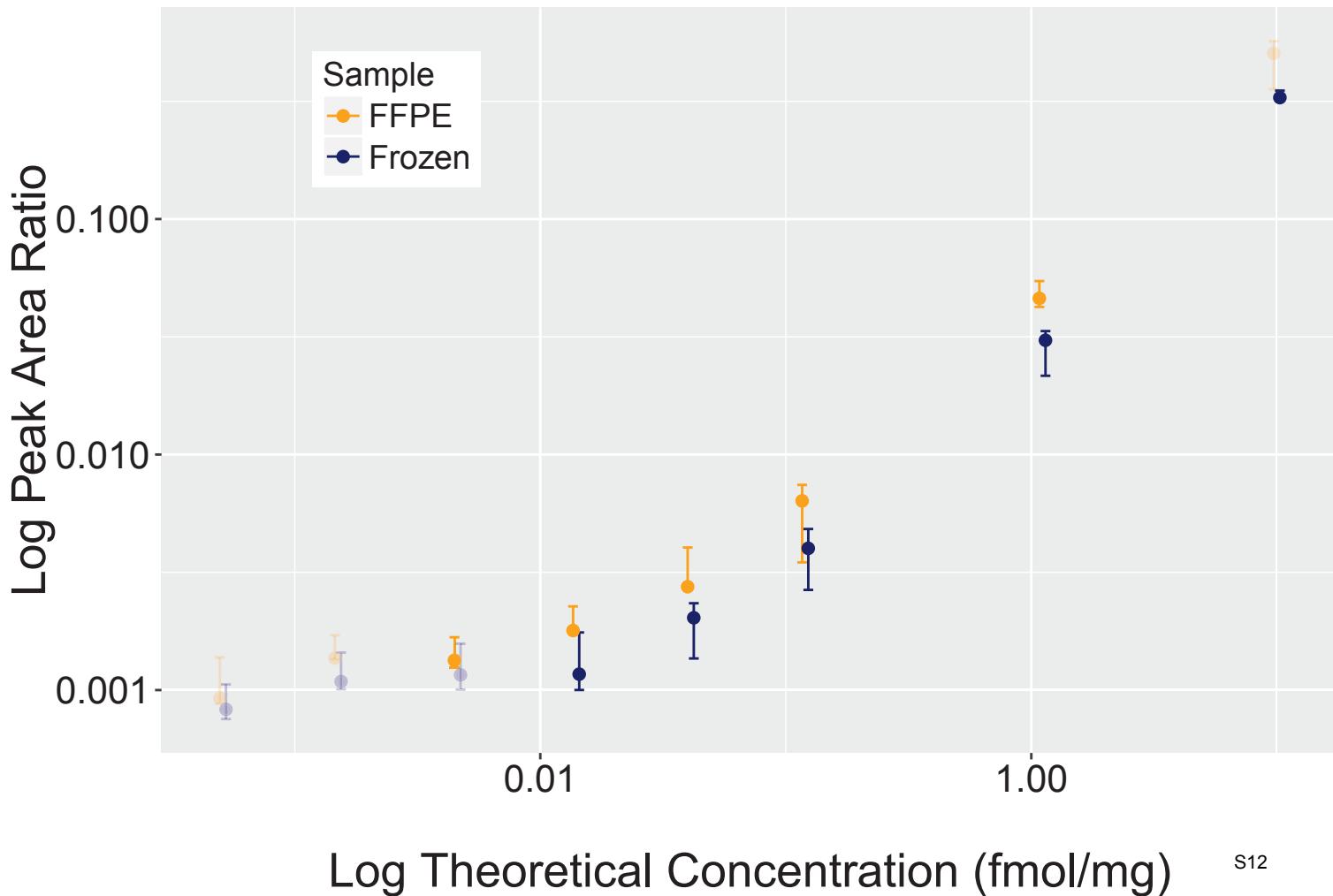


S10

Analyte: sp|P08185|CBG_HUMAN.AQLLQGLGFNLTEF

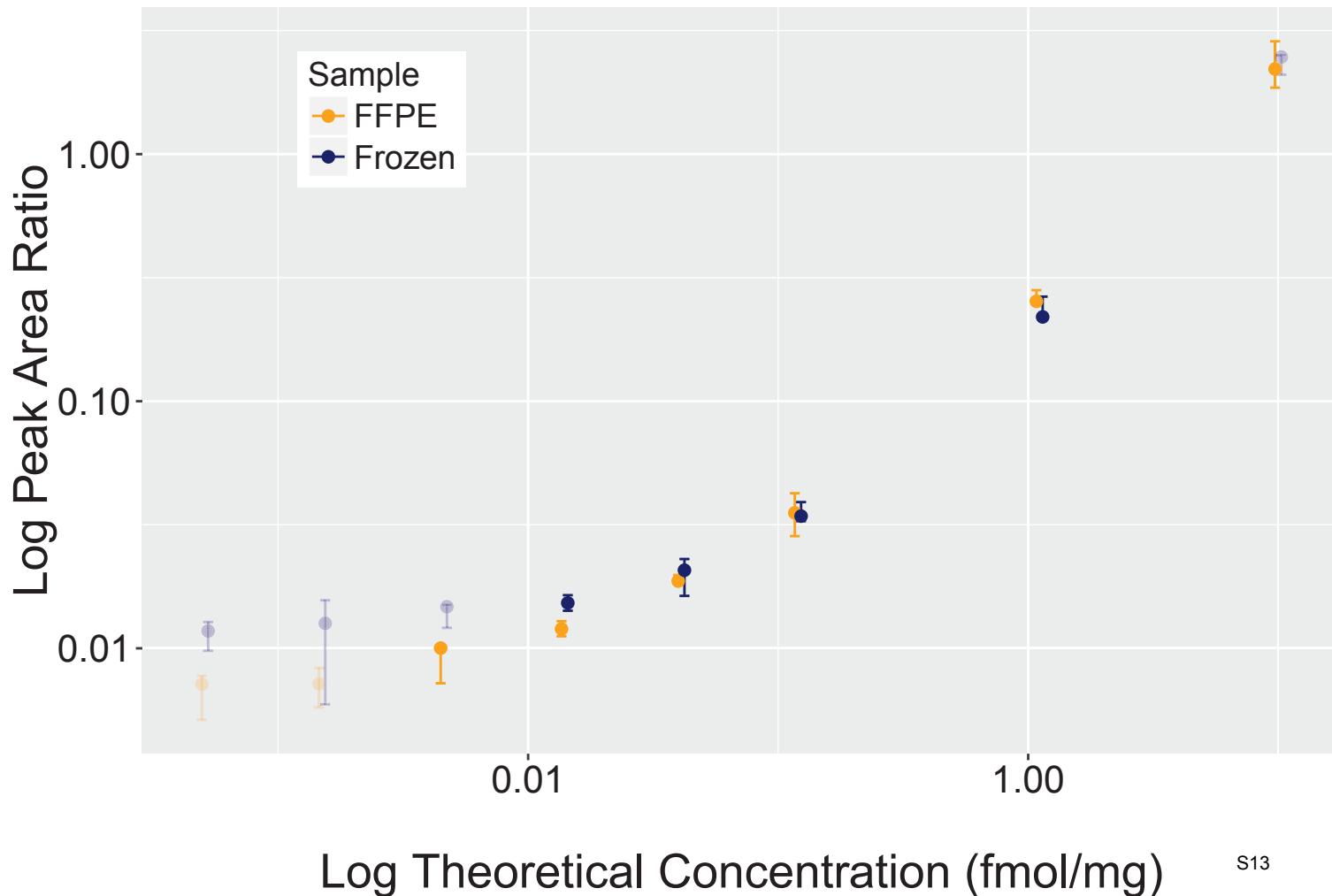


Analyte: sp|P10909|CLUS_HUMAN.ASSIIDELFQDR

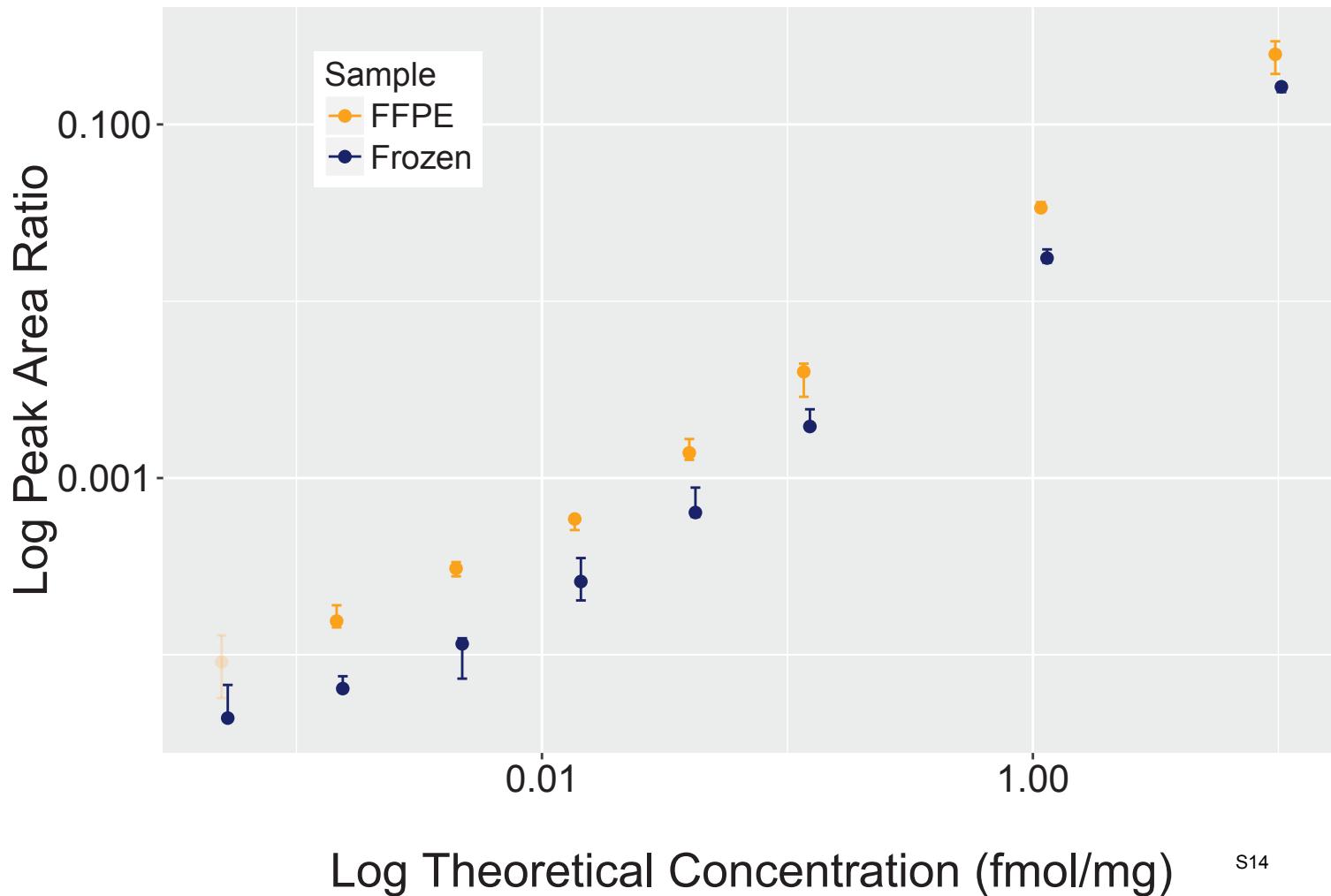


S12

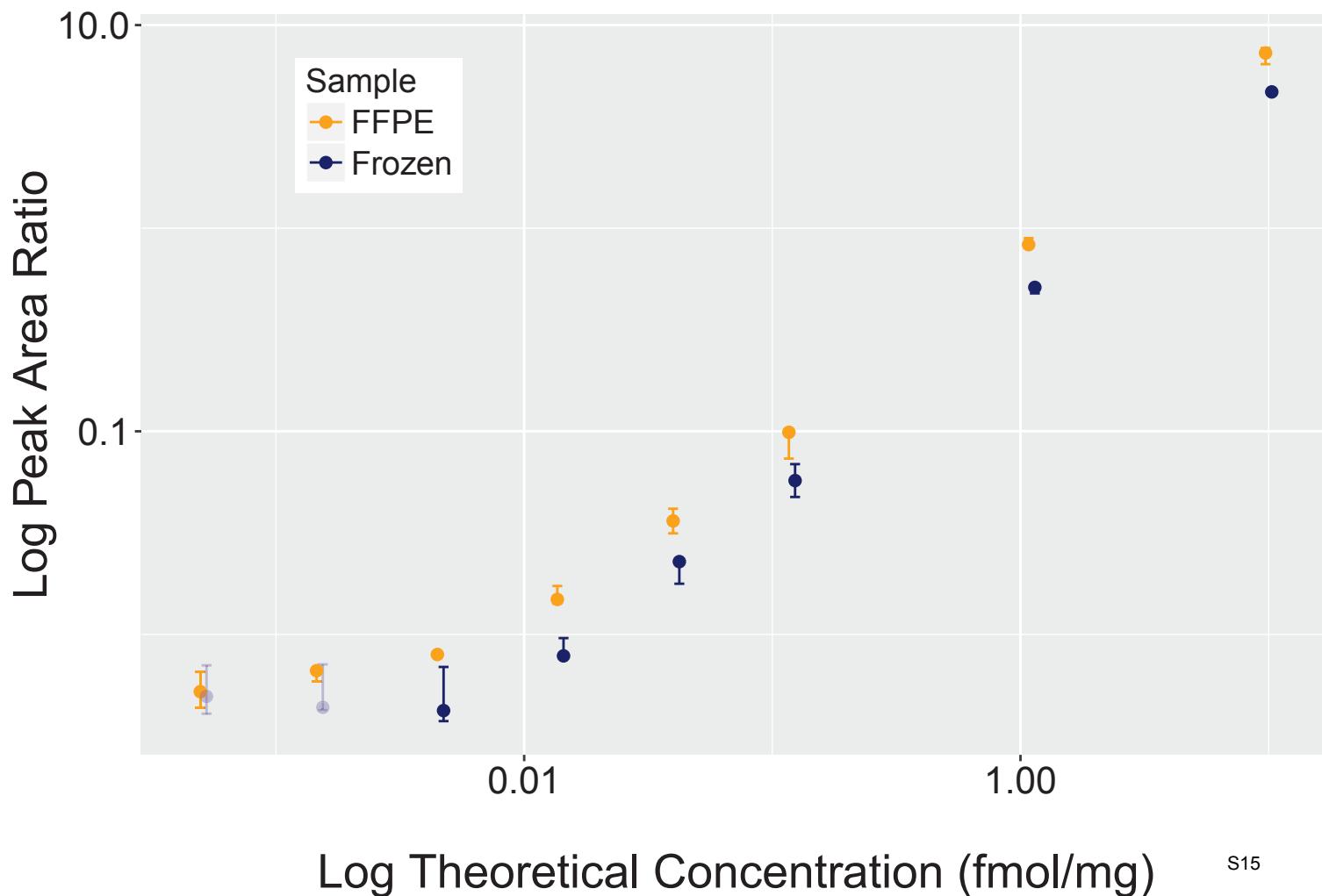
Analyte: sp|P09525|ANXA4_HUMAN.DEGNYLDDALVI



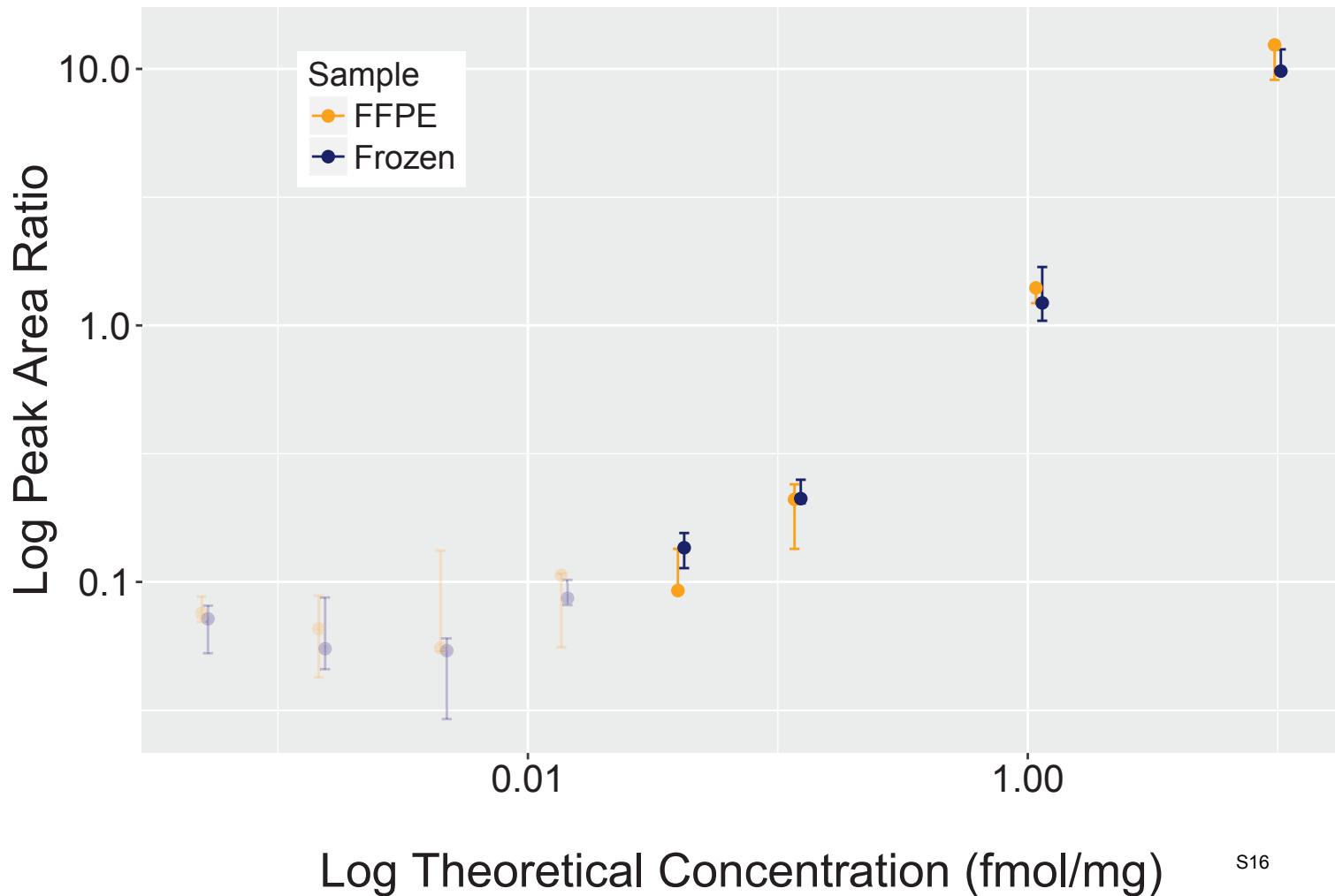
Analyte: sp|P04792|HSPB1_HUMAN.DGVVEITGK



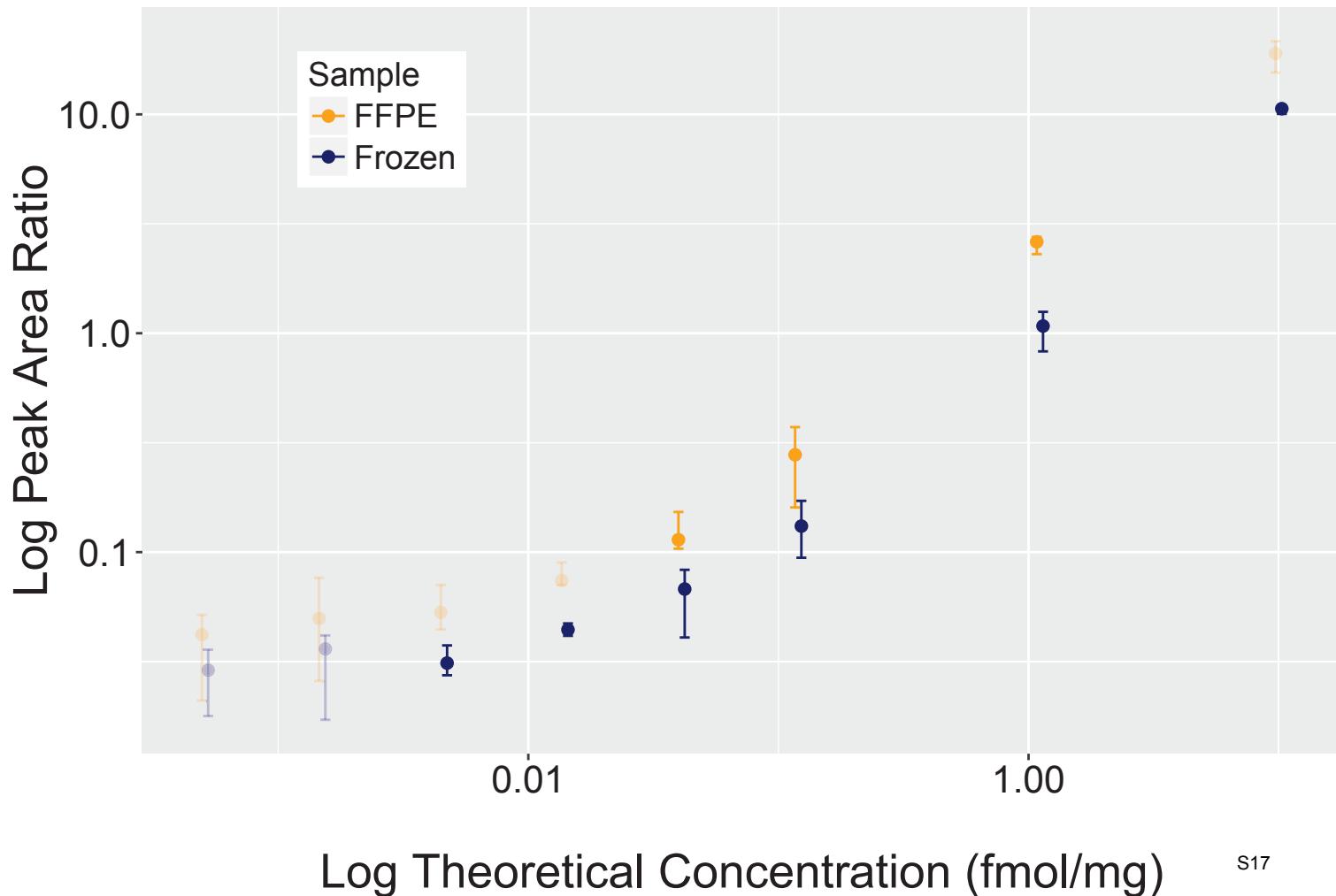
Analyte: sp|P63279|UBC9_HUMAN.DHPFGFVAVPTK



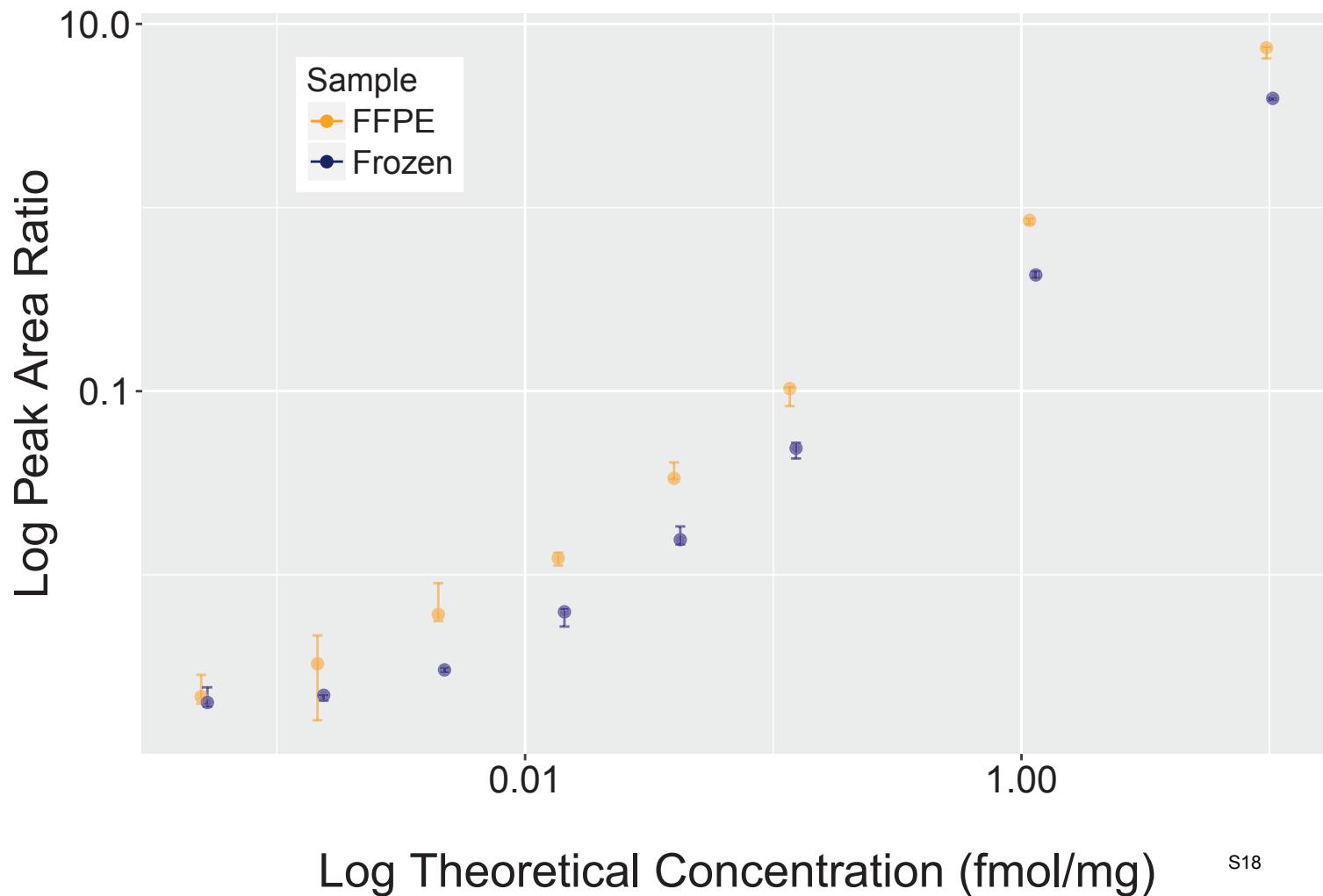
Analyte: sp|P31350|RIR2_HUMAN.DIQHWESLKPEEF



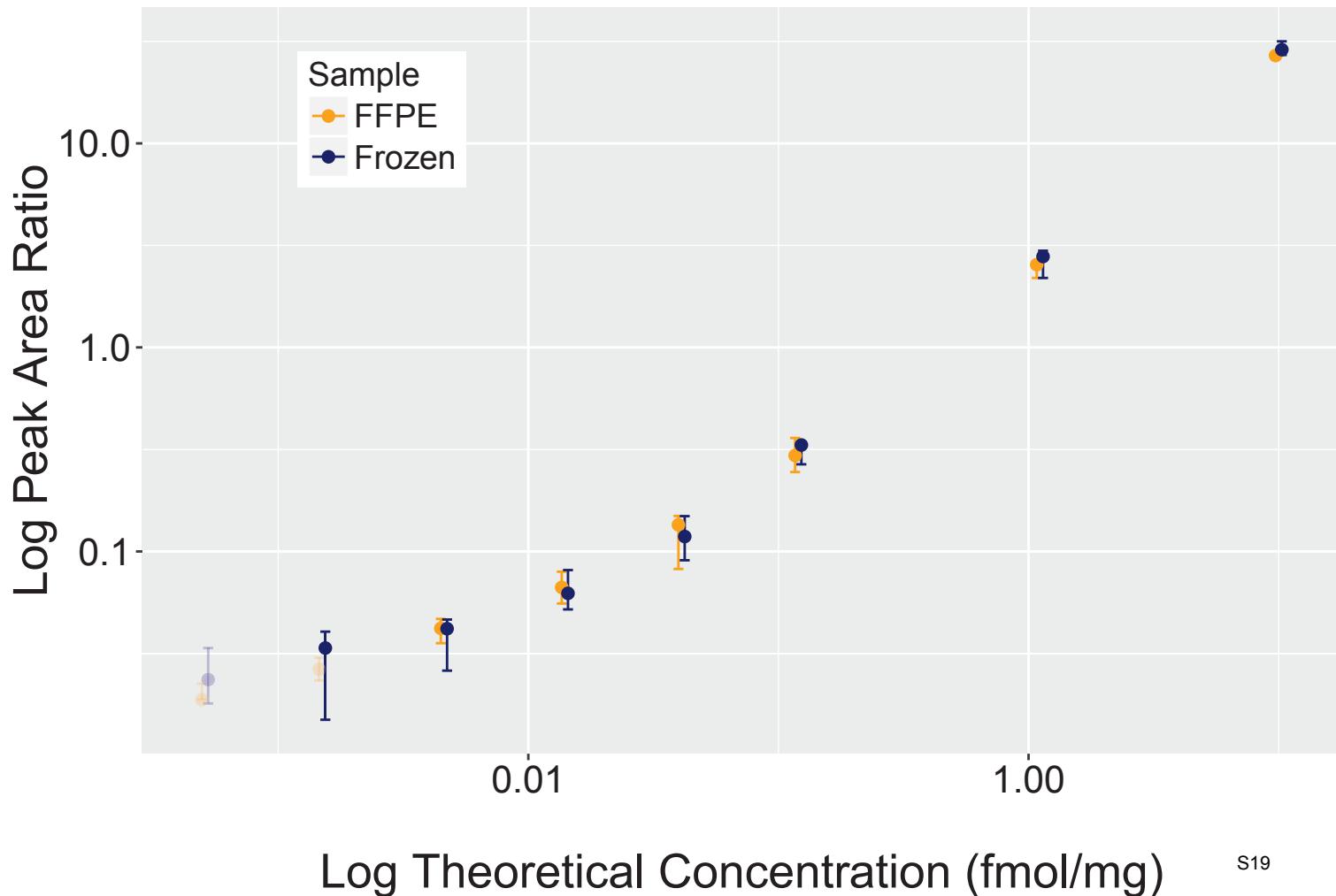
Analyte: sp|P15941|MUC1_HUMAN.EGTINVHDVETQFN



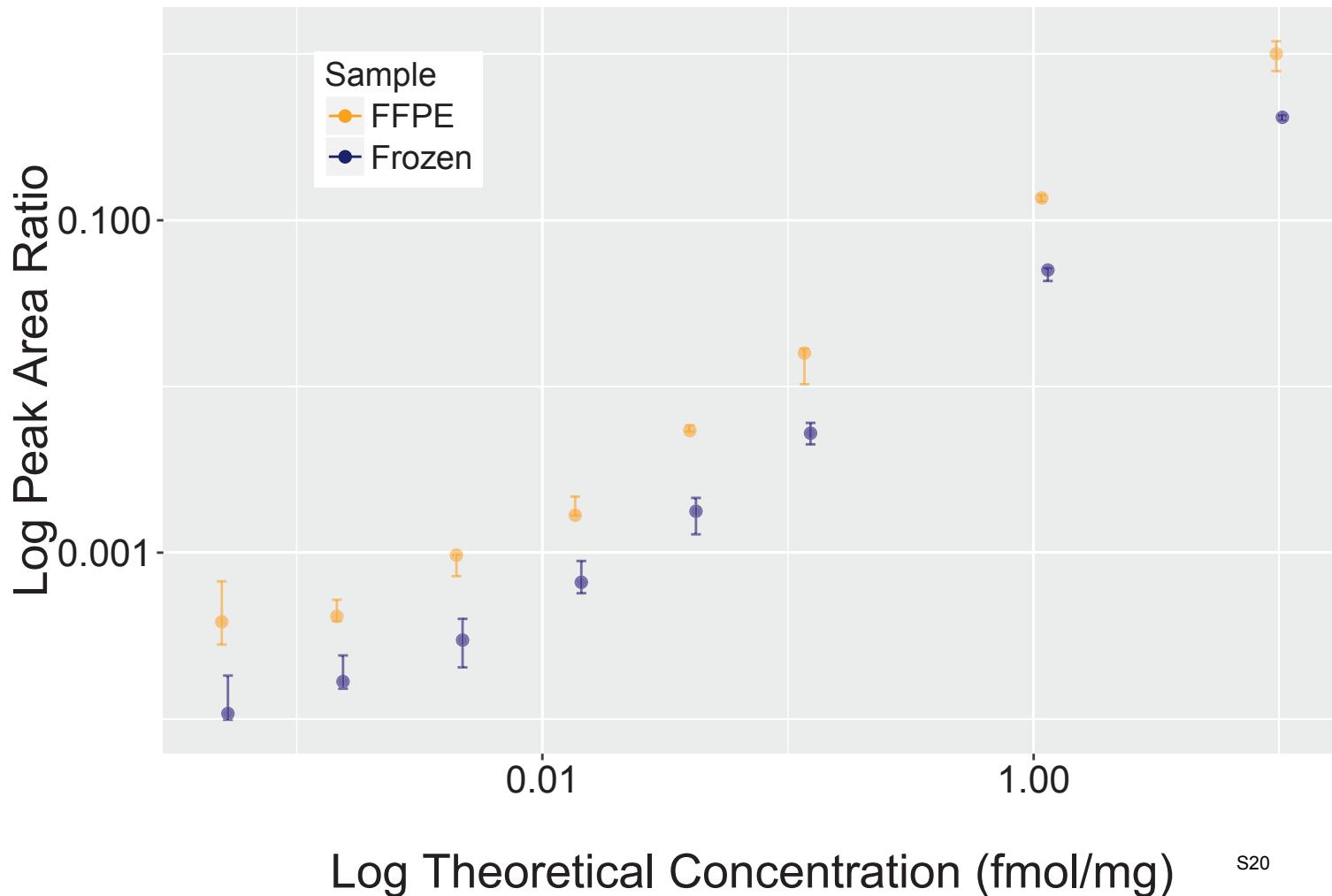
Analyte: sp|P62993|GRB2_HUMAN.FGNDVQHFK



Analyte: sp|O00762|UBE2C_HUMAN.GISAFPESDNLF

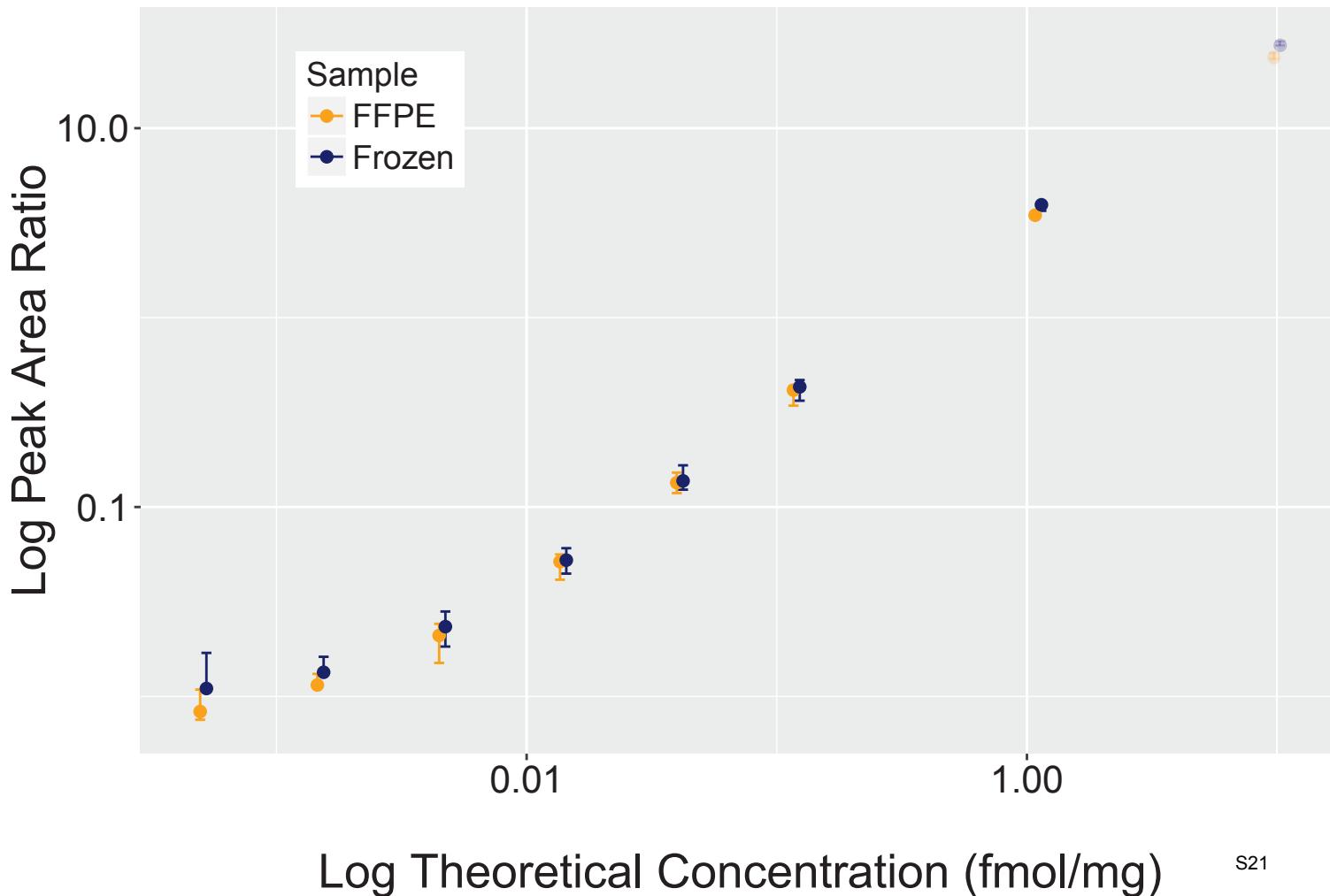


Analyte: sp|P32119|PRDX2_HUMAN.GLFIIDGK

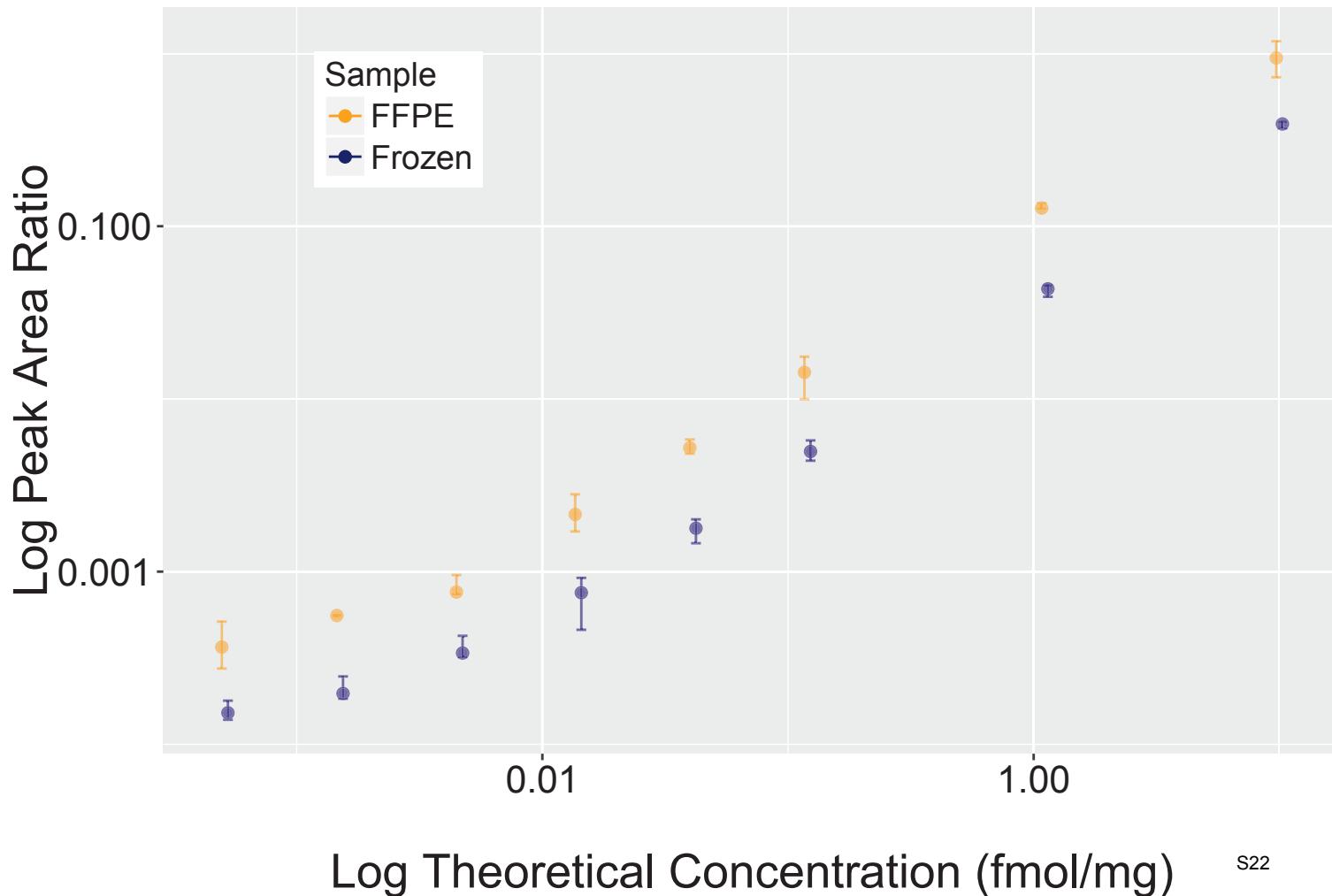


S20

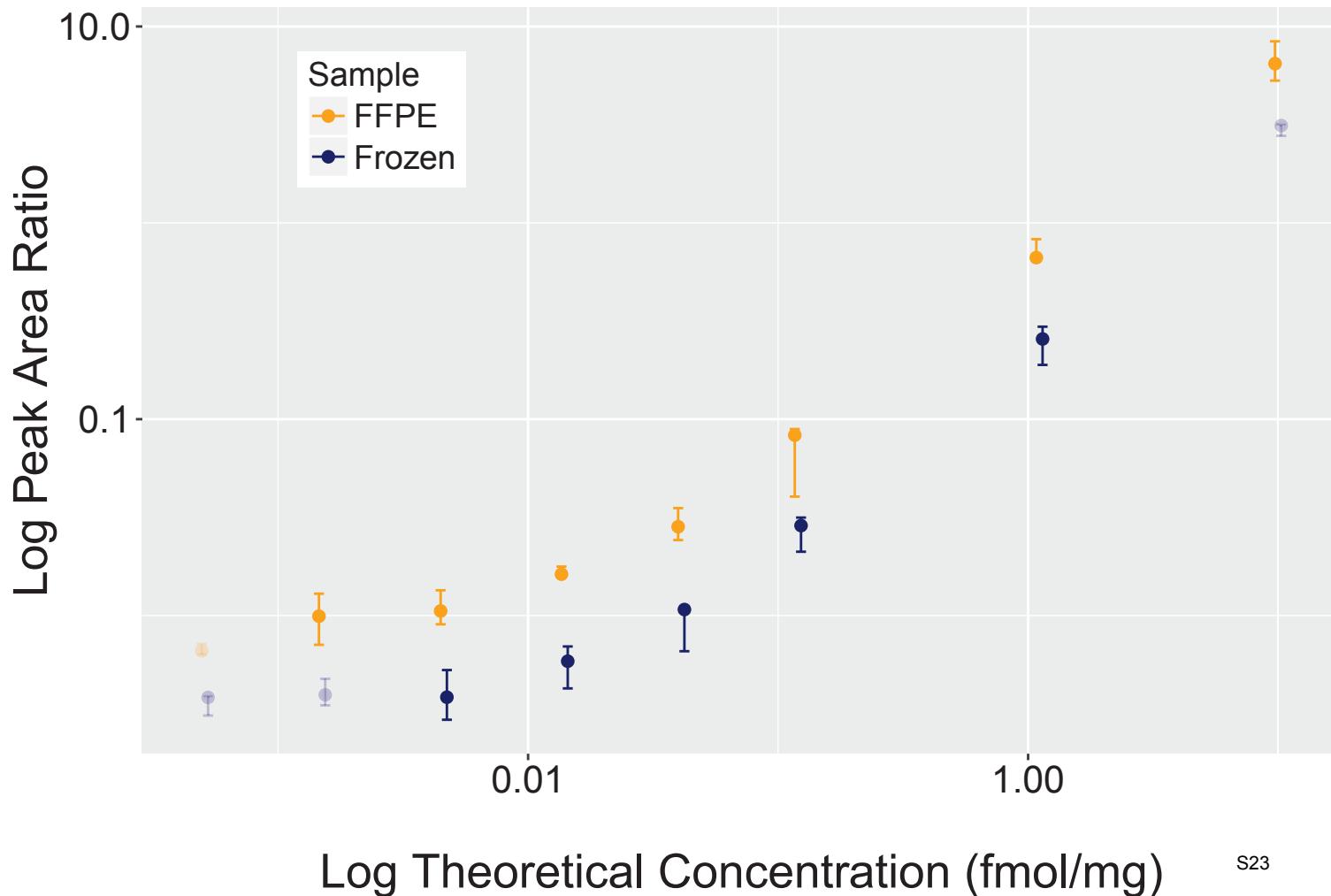
Analyte: sp|P04626|ERBB2_HUMAN.GLQSLPTHDPSP



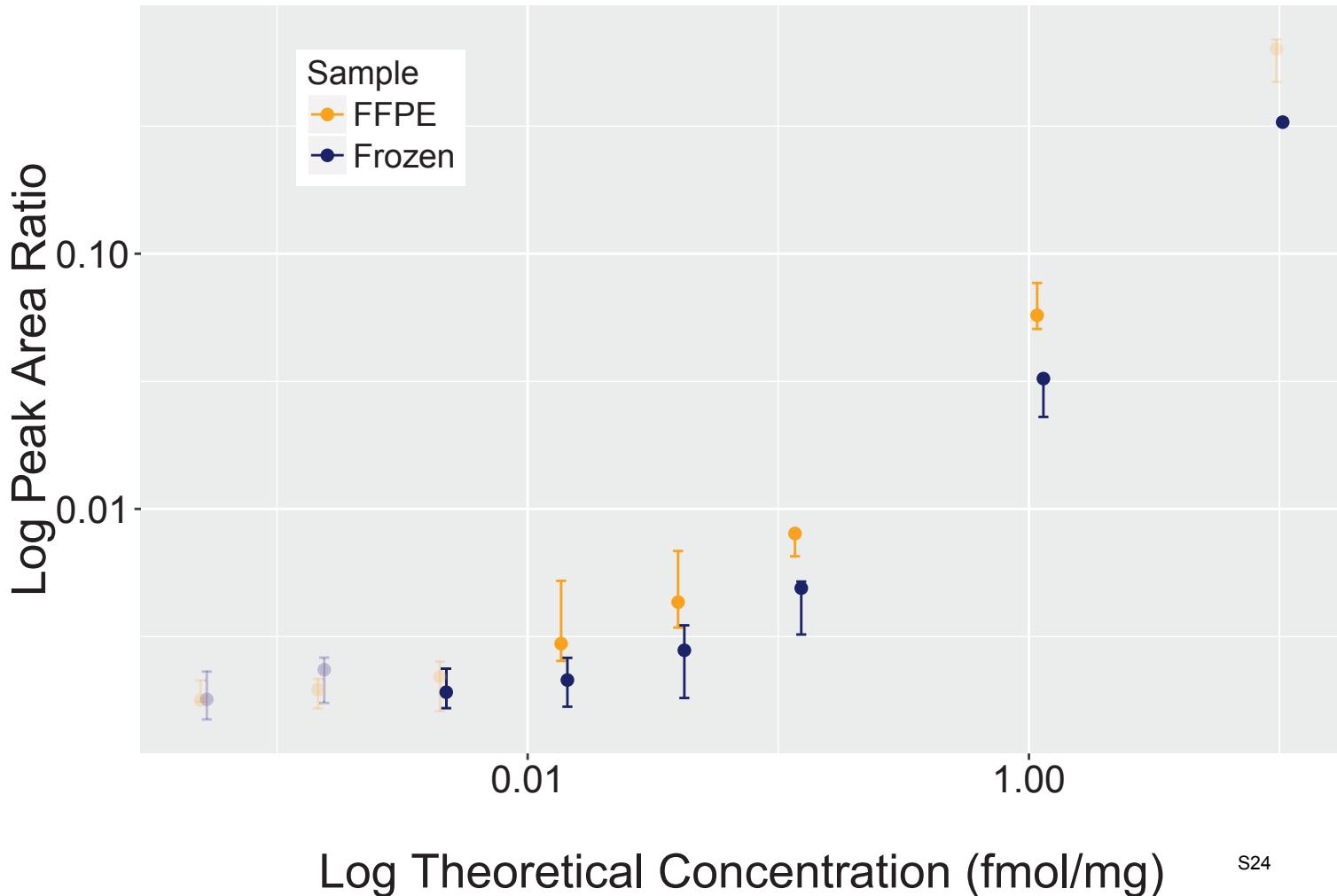
Analyte: sp|P27797|CALR_HUMAN.GLQTSQDAR



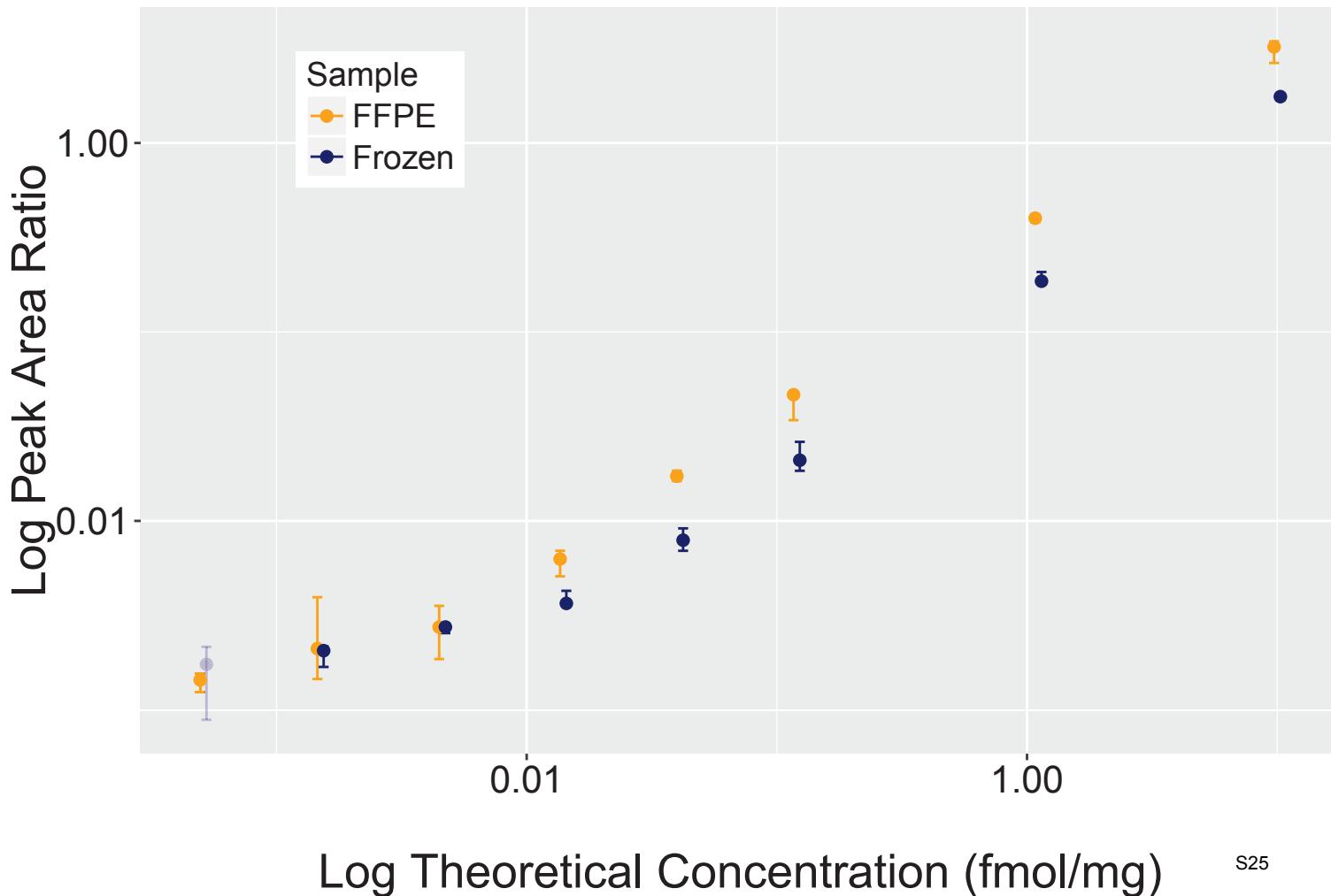
Analyte: sp|Q9NQW7|XPP1_HUMAN.GSLTFEPLTLVPIQ



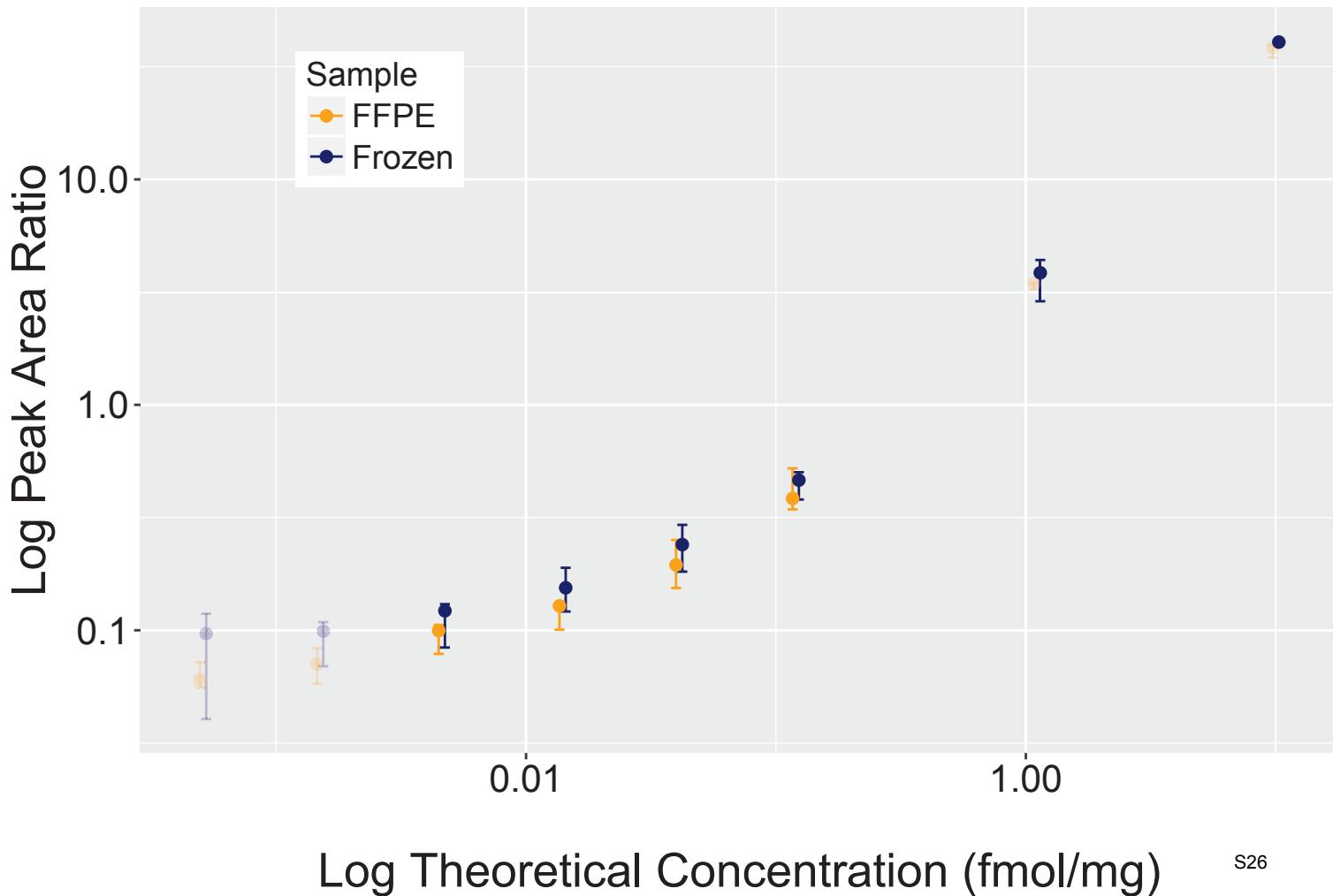
Analyte: sp|P04083|ANXA1_HUMAN.GVDEATIIDILTK



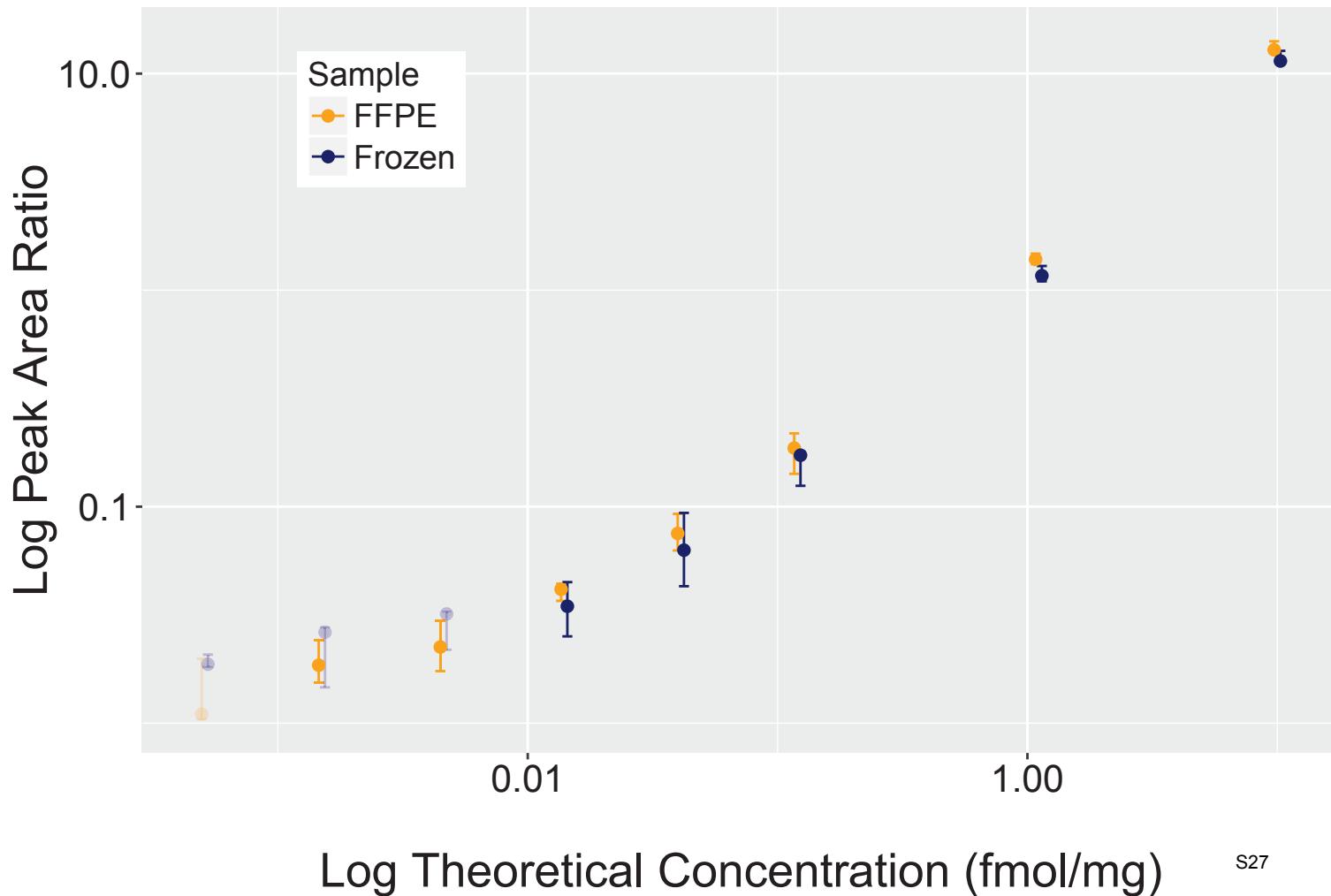
Analyte: sp|P54727|RD23B_HUMAN.IDIDPEETVK



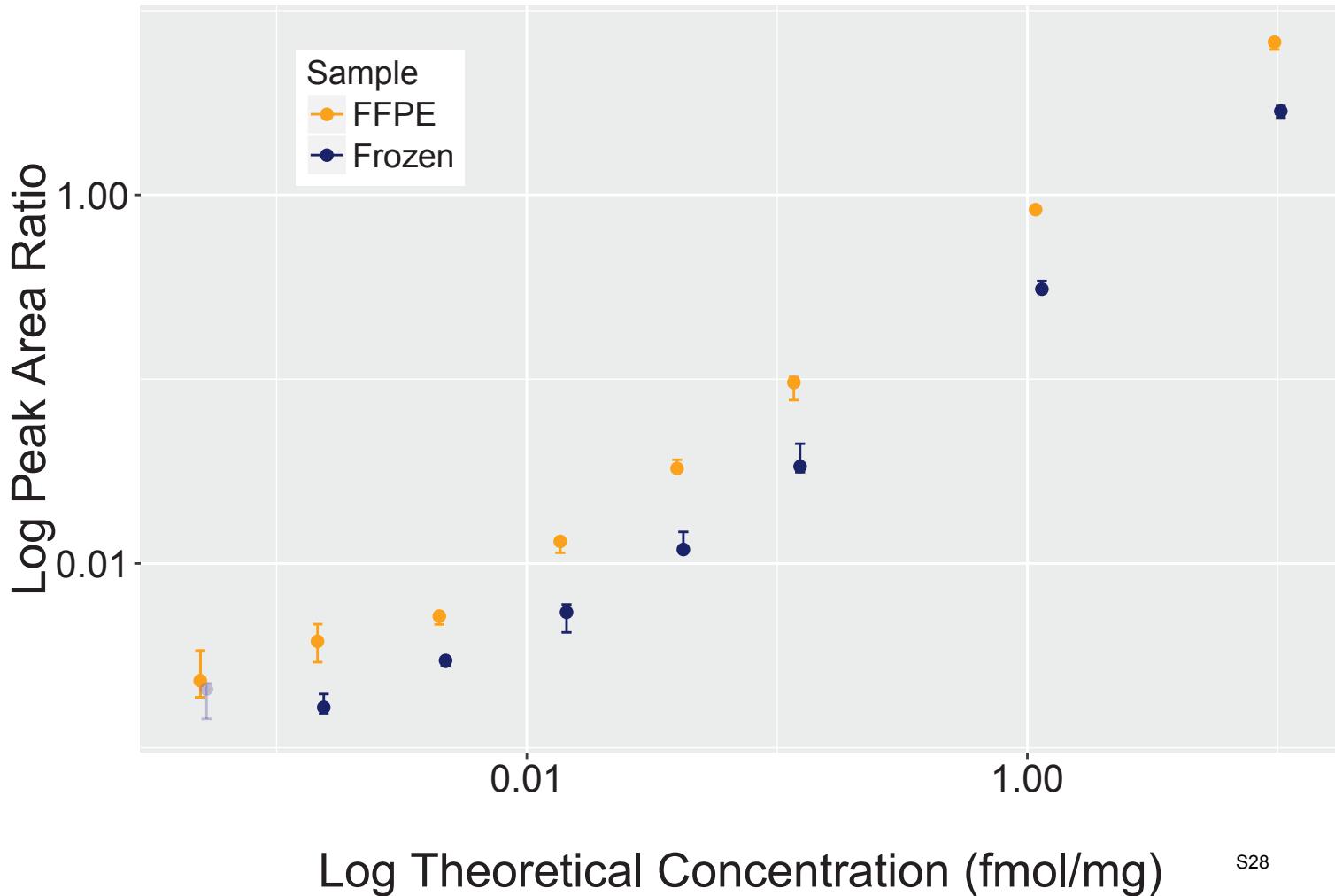
Analyte: sp|P31350|RIR2_HUMAN.IEQEFLTEALPVK



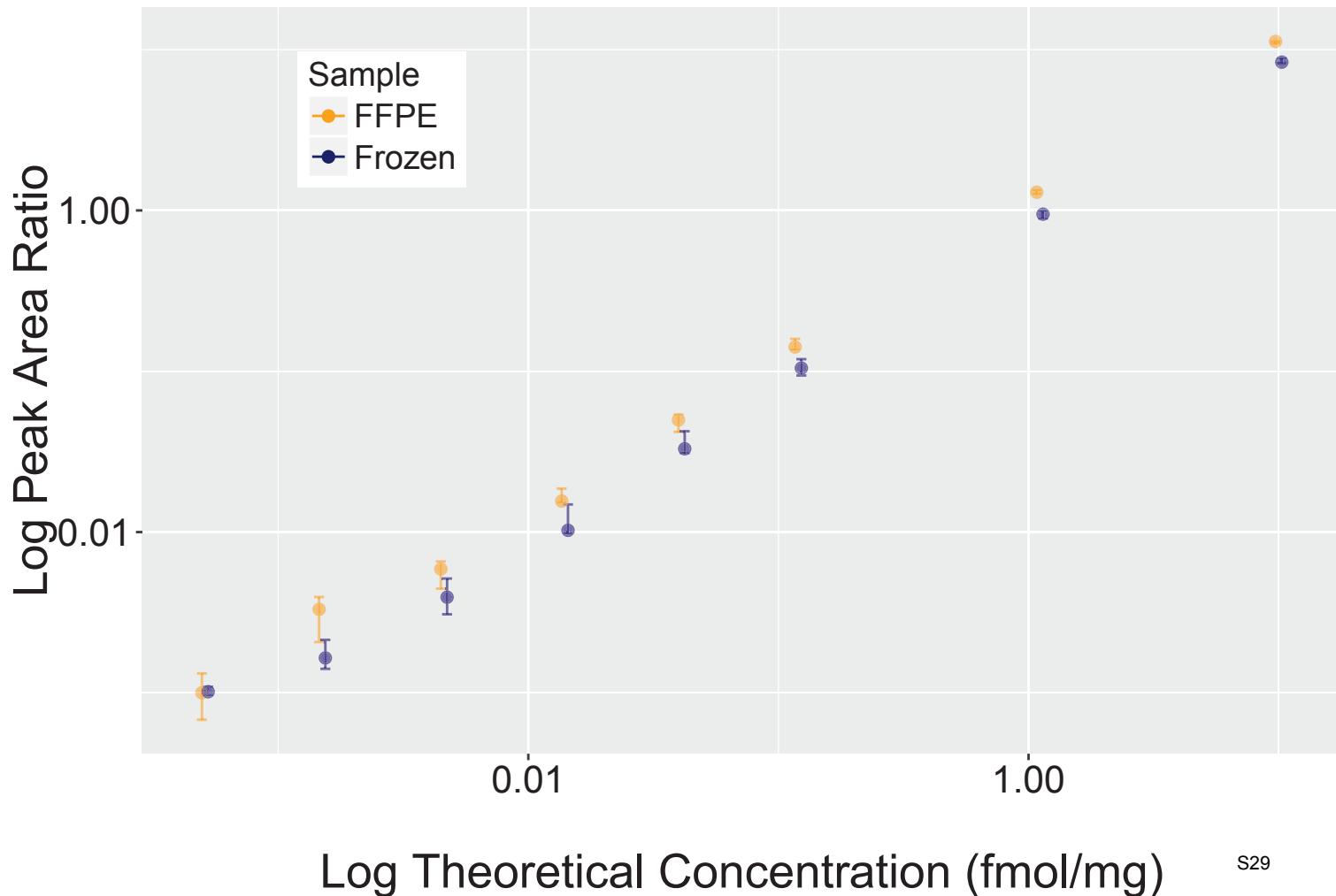
Analyte: sp|Q00653|NFKB2_HUMAN.IEVDLVTHSDPP



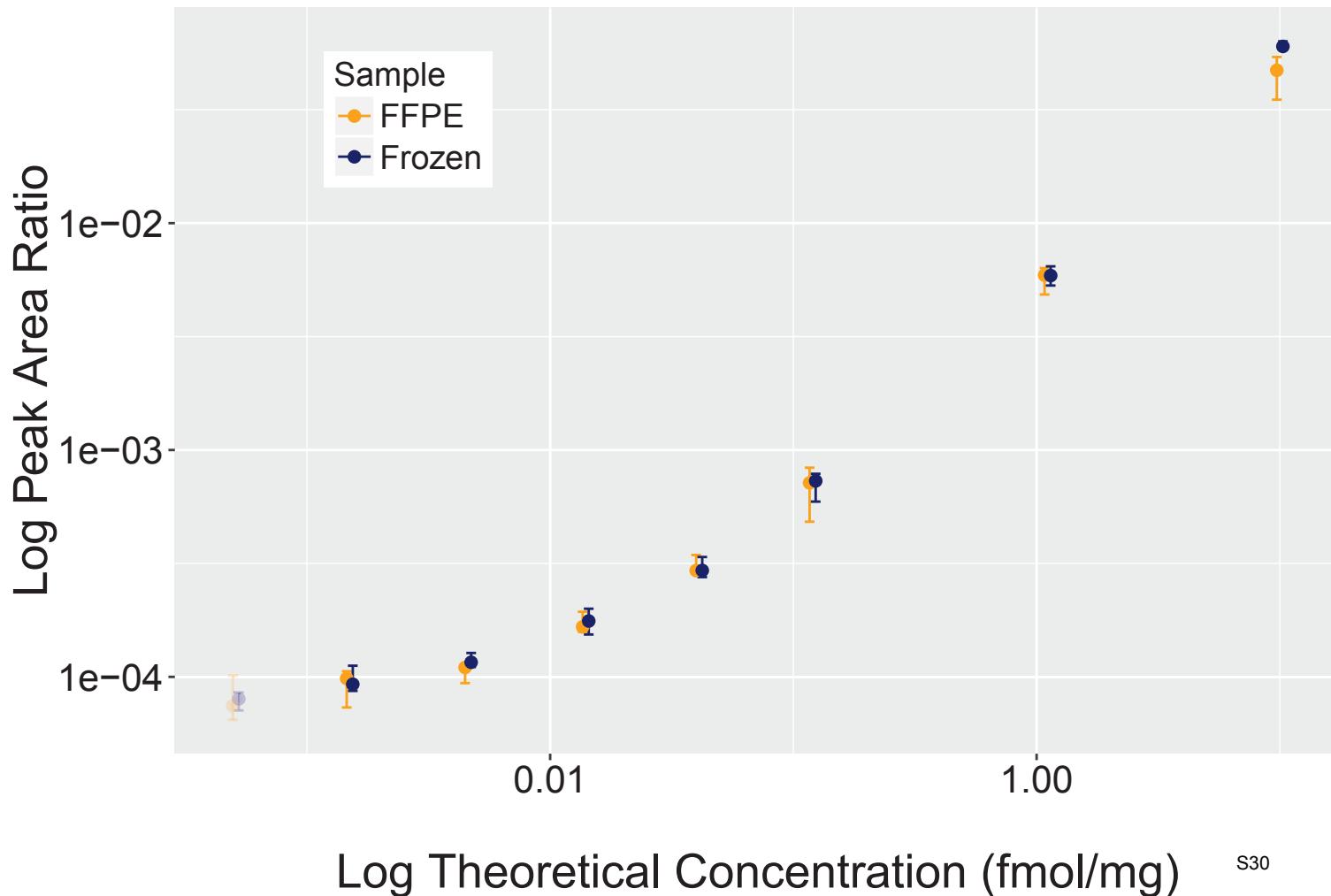
Analyte: sp|P54727|RD23B_HUMAN.ILNDDTALK



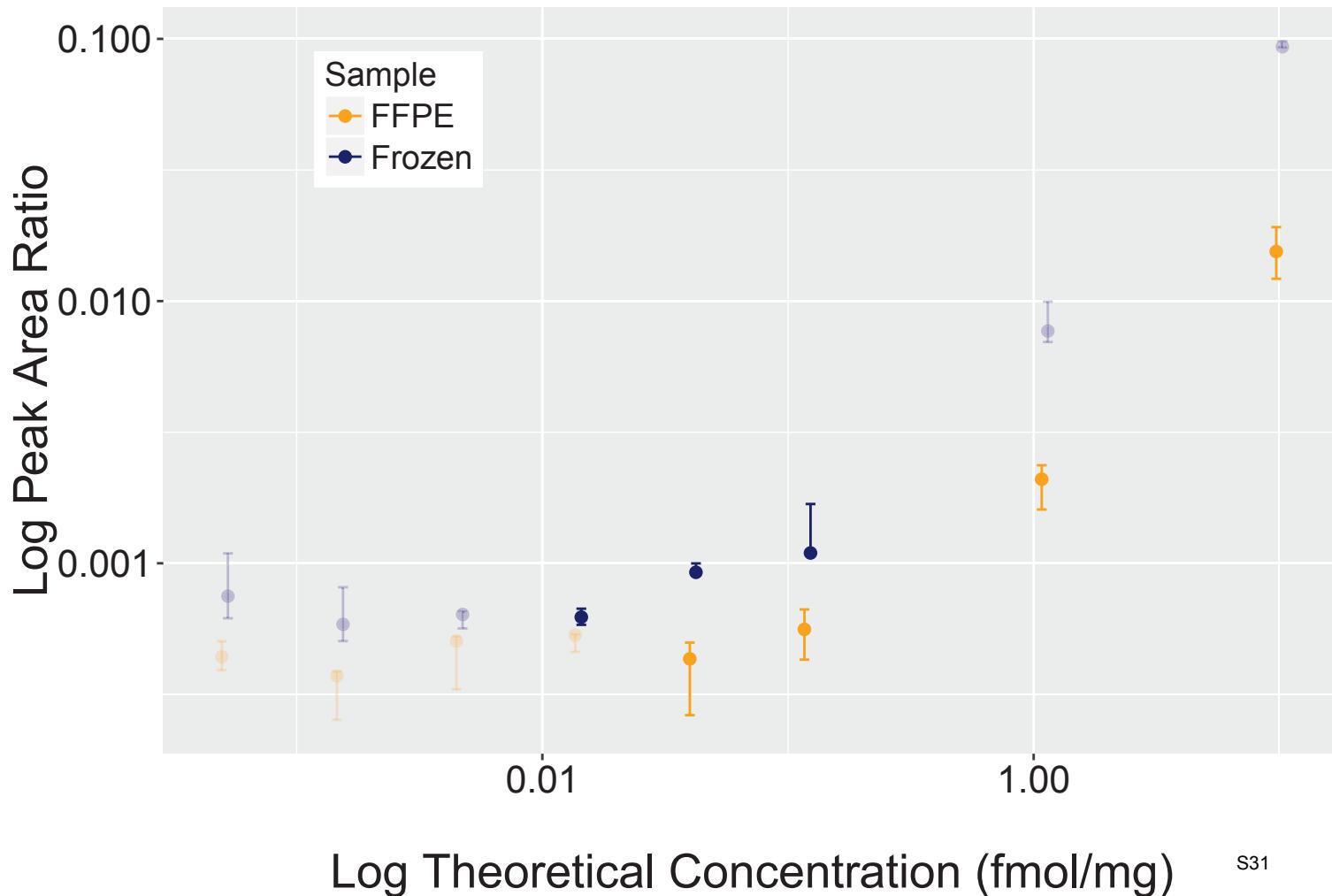
Analyte: sp|Q14116|IL18_HUMAN.ISTLSC[+57]ENK



Analyte: sp|P04792|HSPB1_HUMAN.LFDQAFGLPR

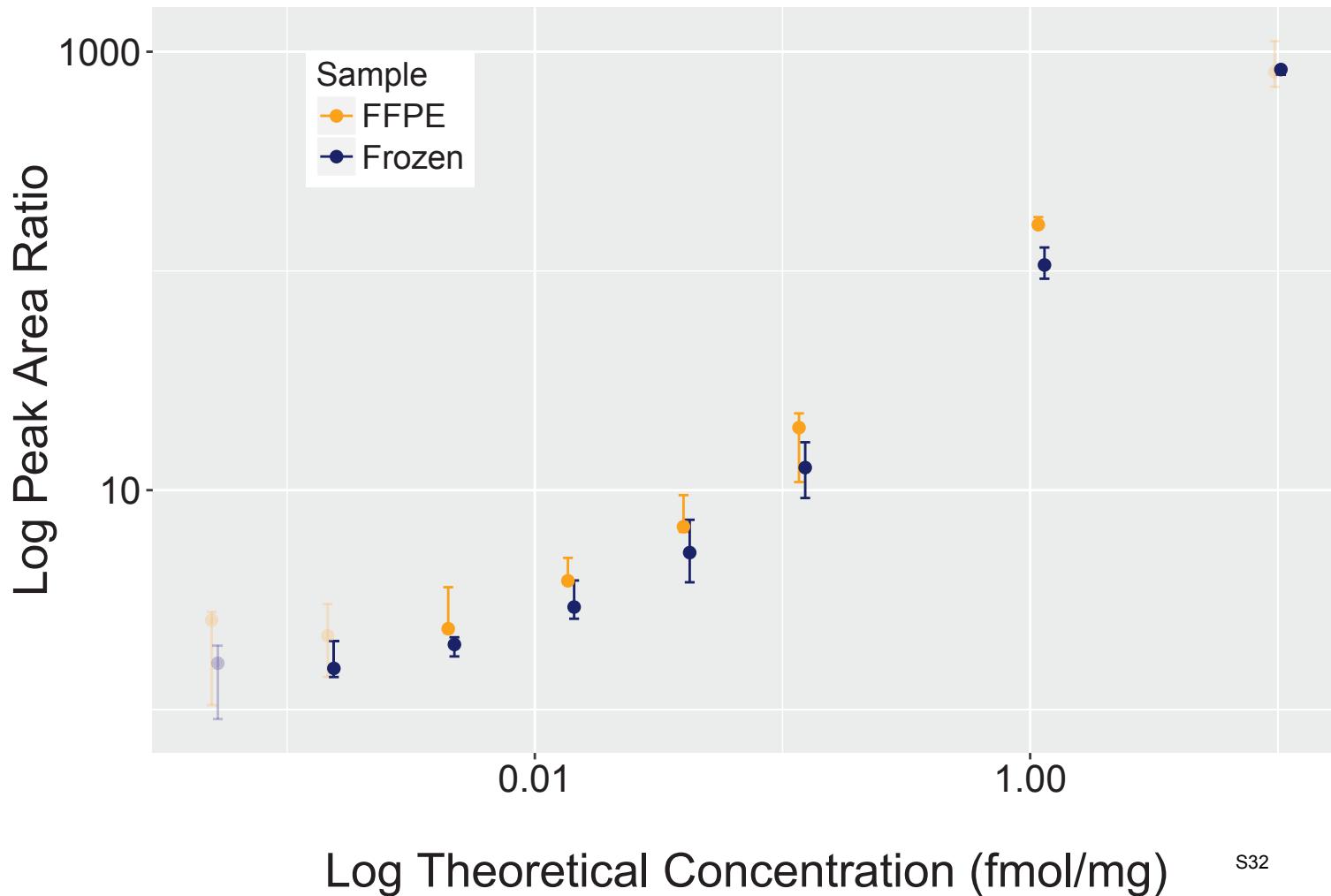


Analyte: sp|P02792|FRIL_HUMAN.LGGPEAGLGEYLFI

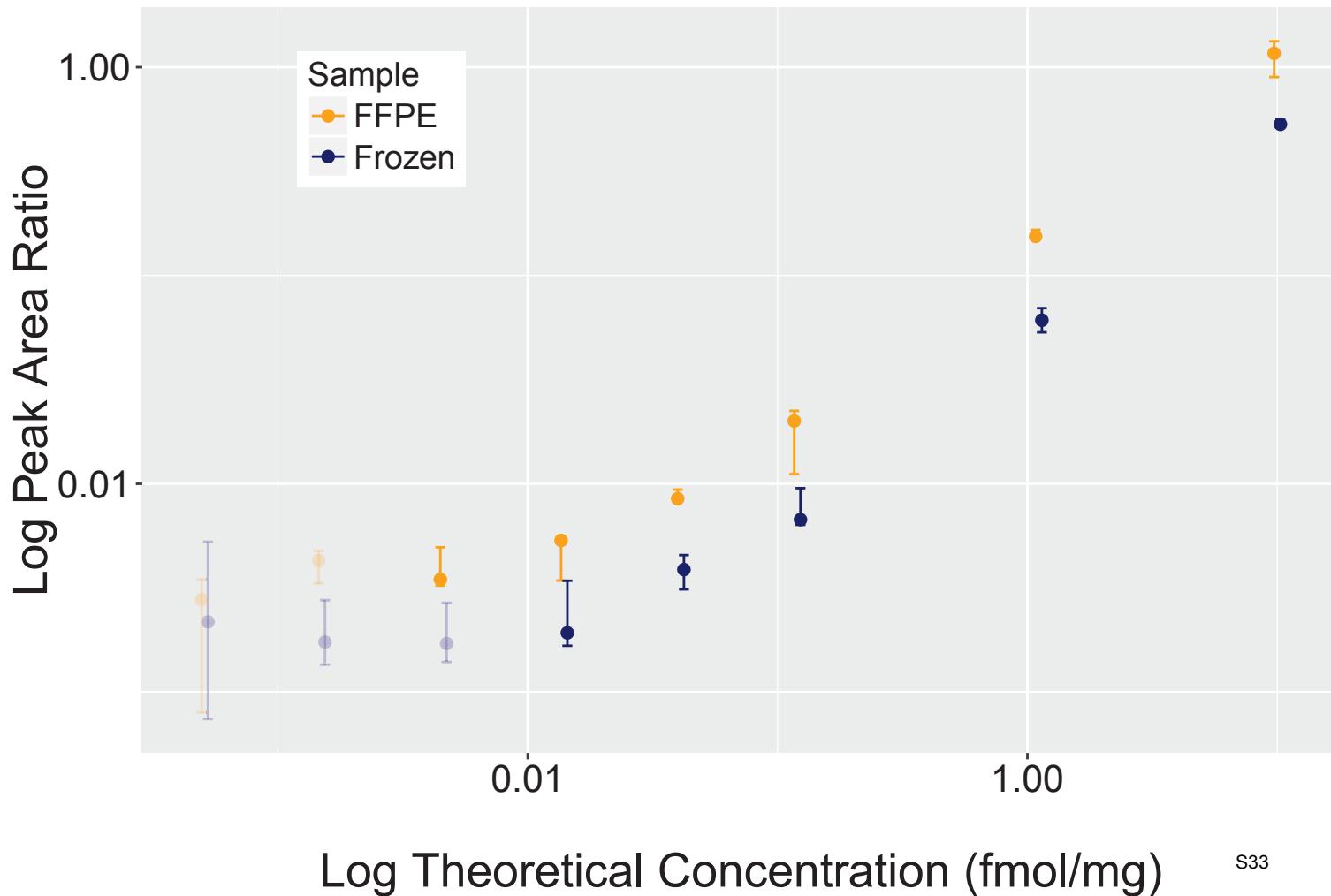


S³¹

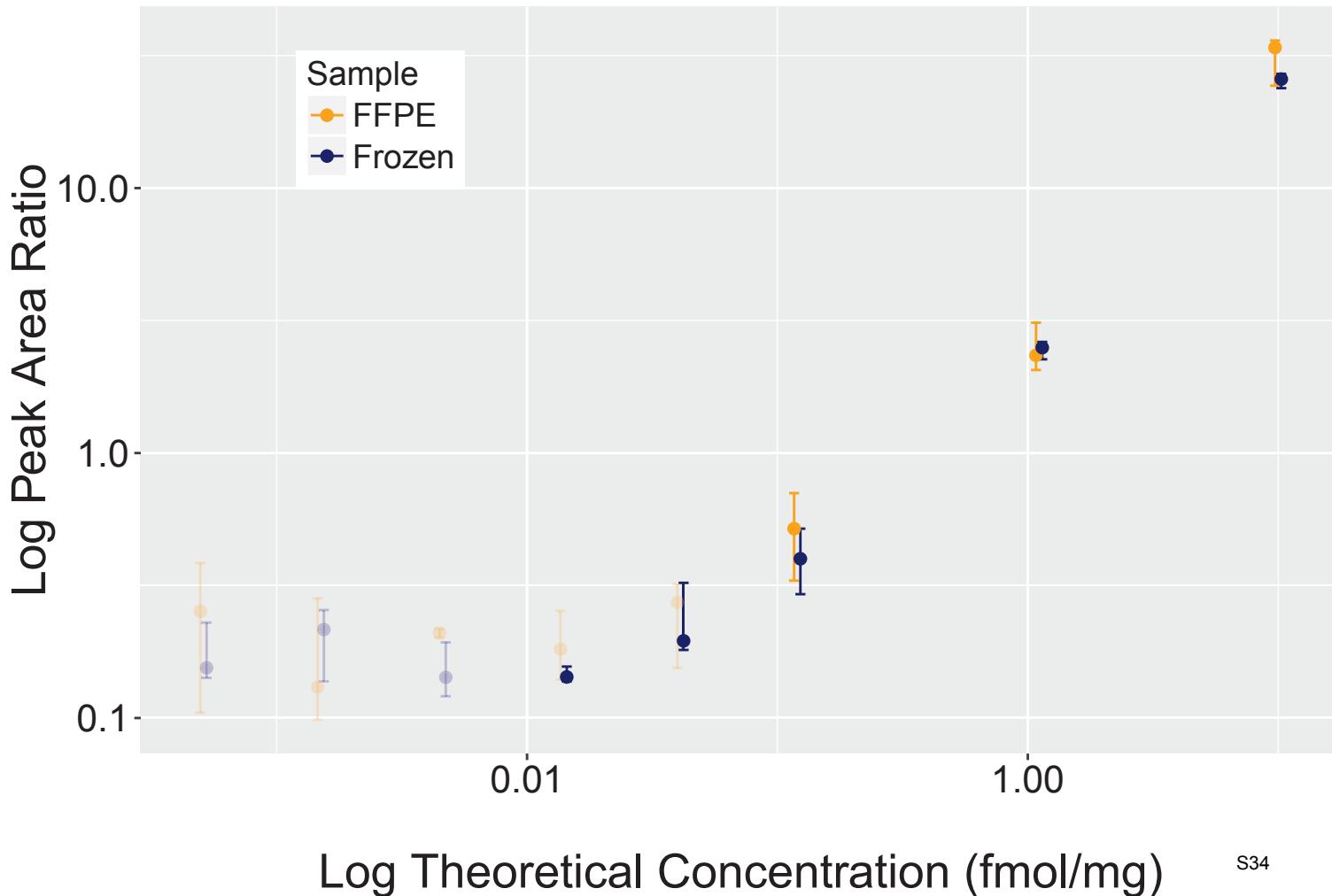
Analyte: sp|P03372|ESR1_HUMAN.LLFAPNLLLDR



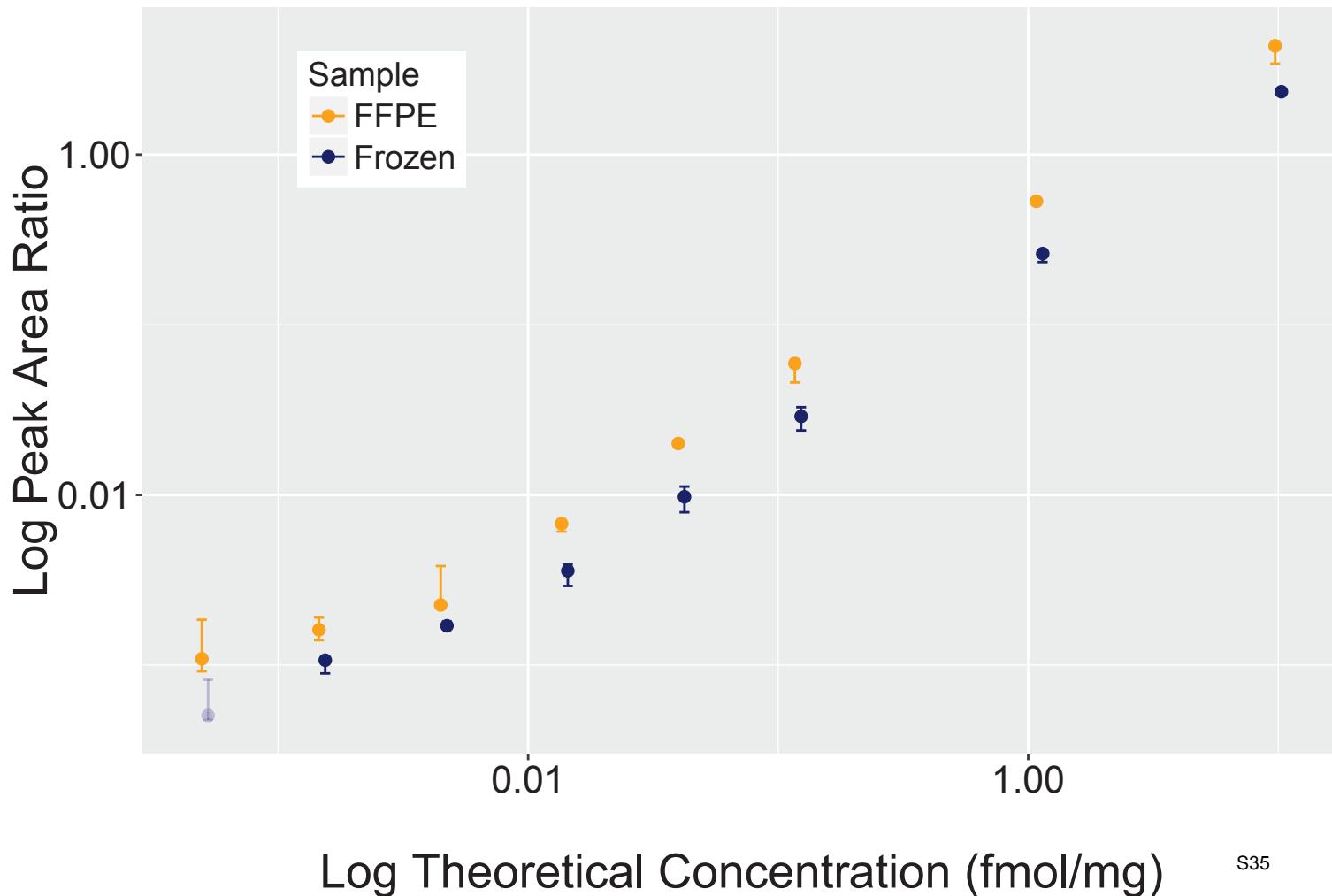
Analyte: sp|P32119|PRDX2_HUMAN.LSEDYGVLK



Analyte: sp|O00762|UBE2C_HUMAN.LSLEFPSGYPYN

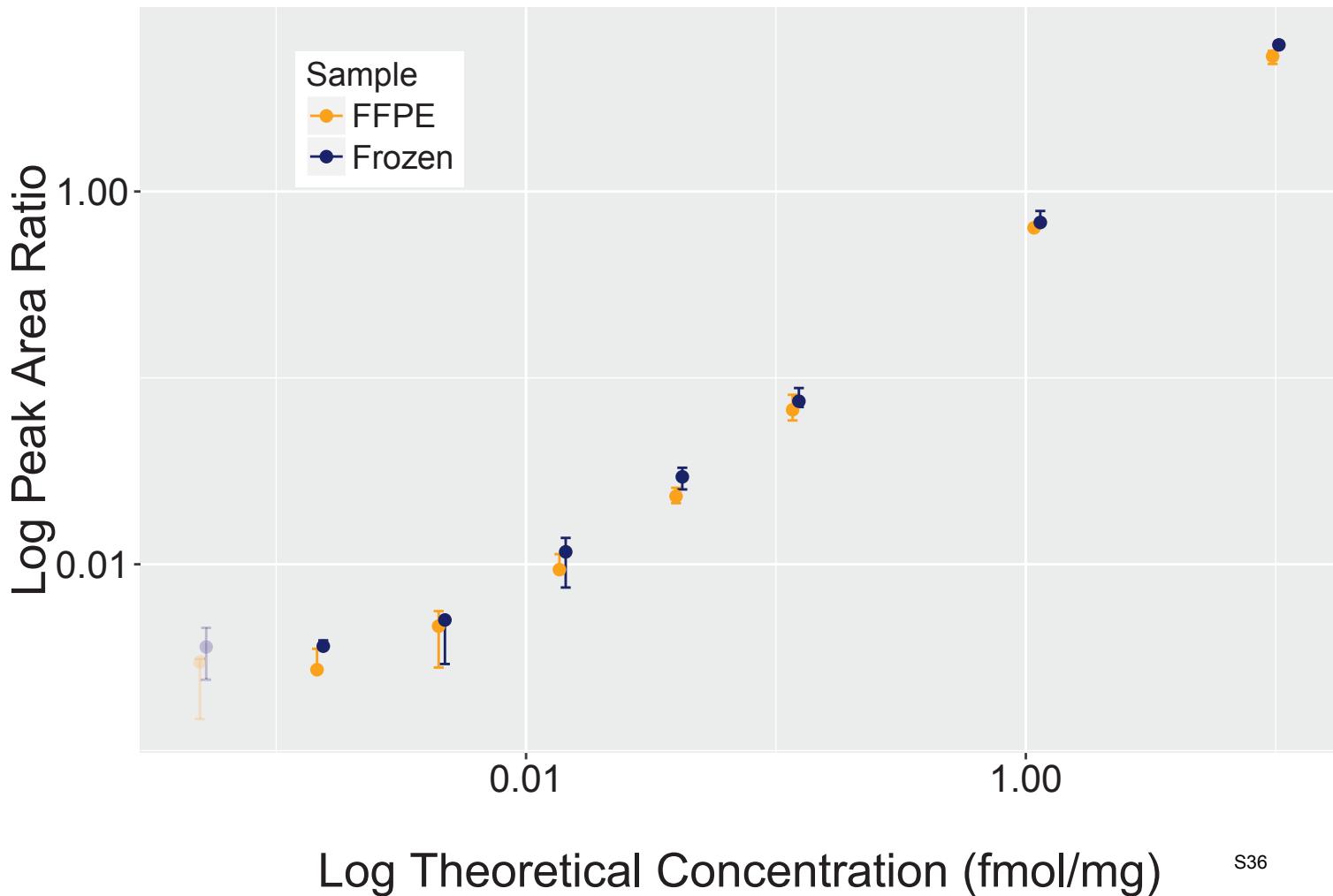


Analyte: sp|Q13162|PRDX4_HUMAN.LVQAFQYTDK

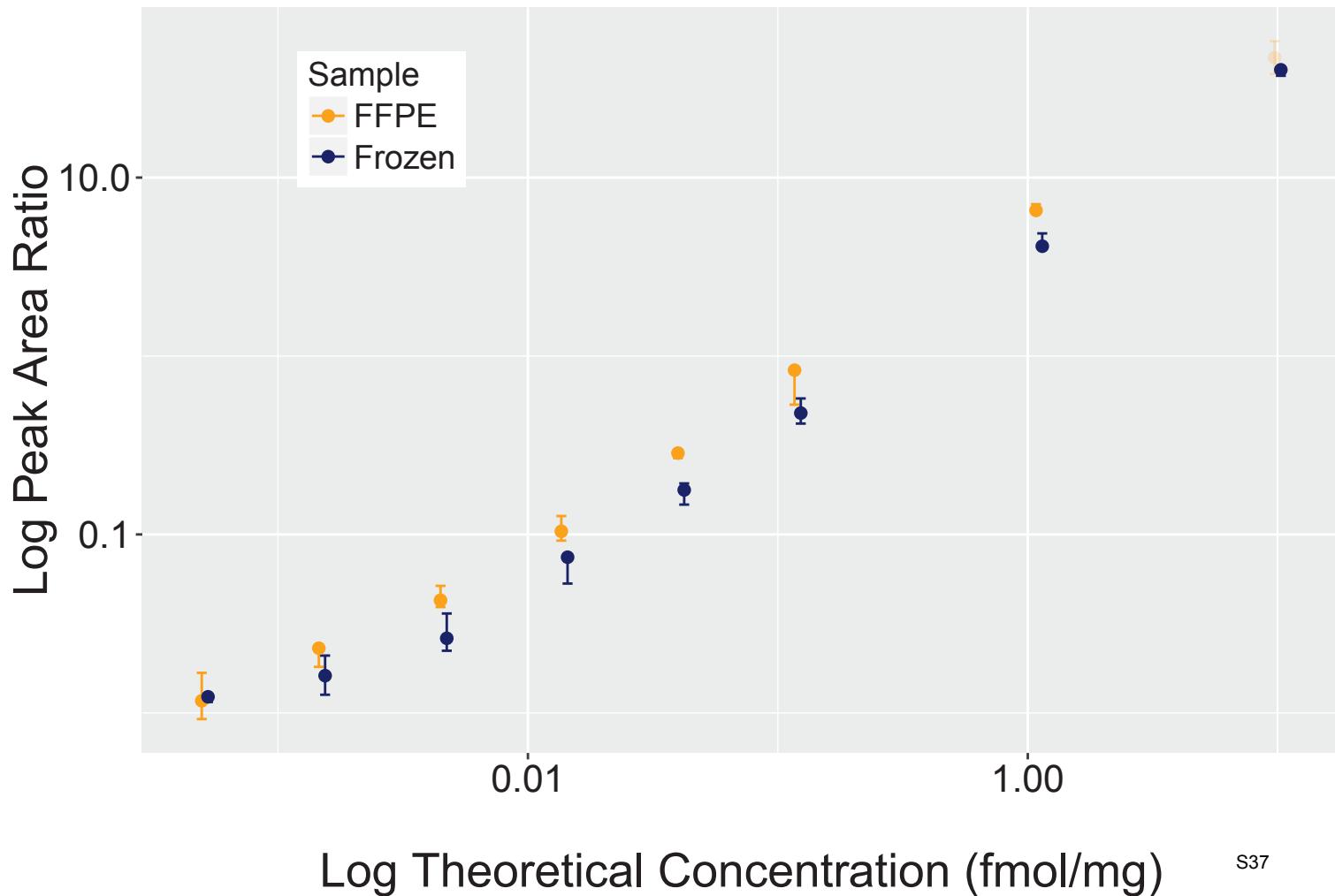


S³⁵

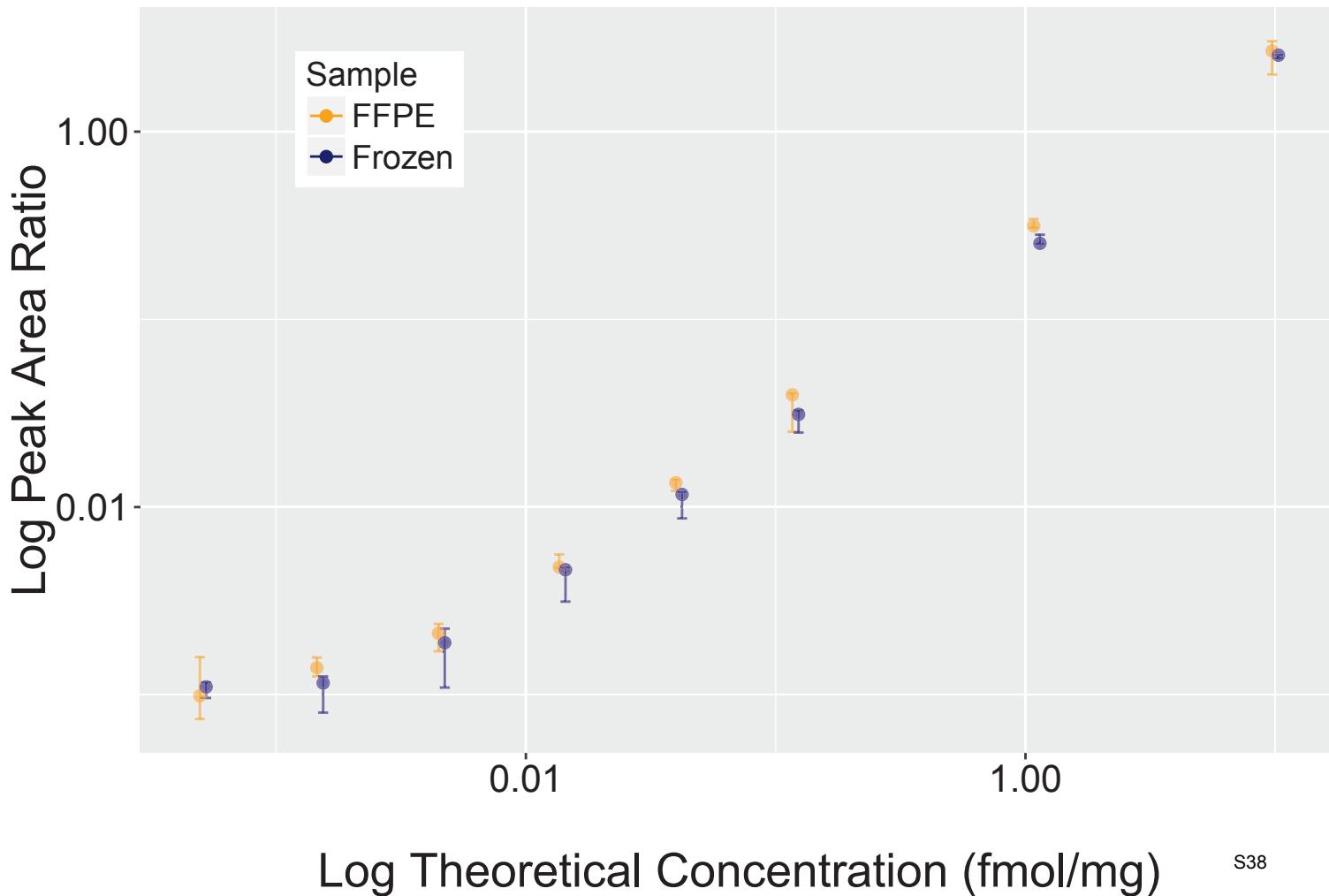
Analyte: sp|P12004|PCNA_HUMAN.LVQGSILK



Analyte: sp|P15941|MUC1_HUMAN.NYGQLDIFPAR

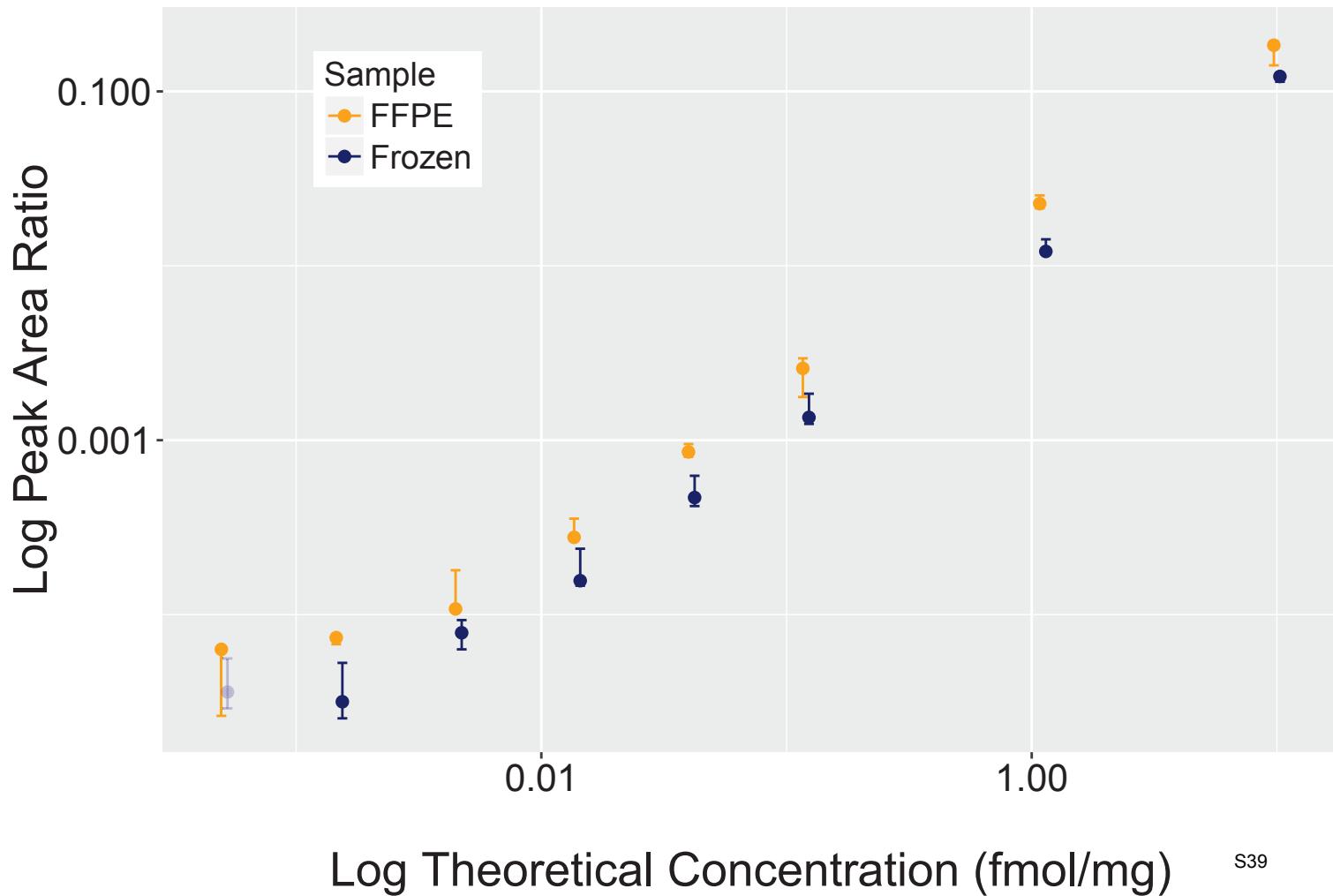


Analyte: sp|Q13162|PRDX4_HUMAN.QITLNDLPVGR

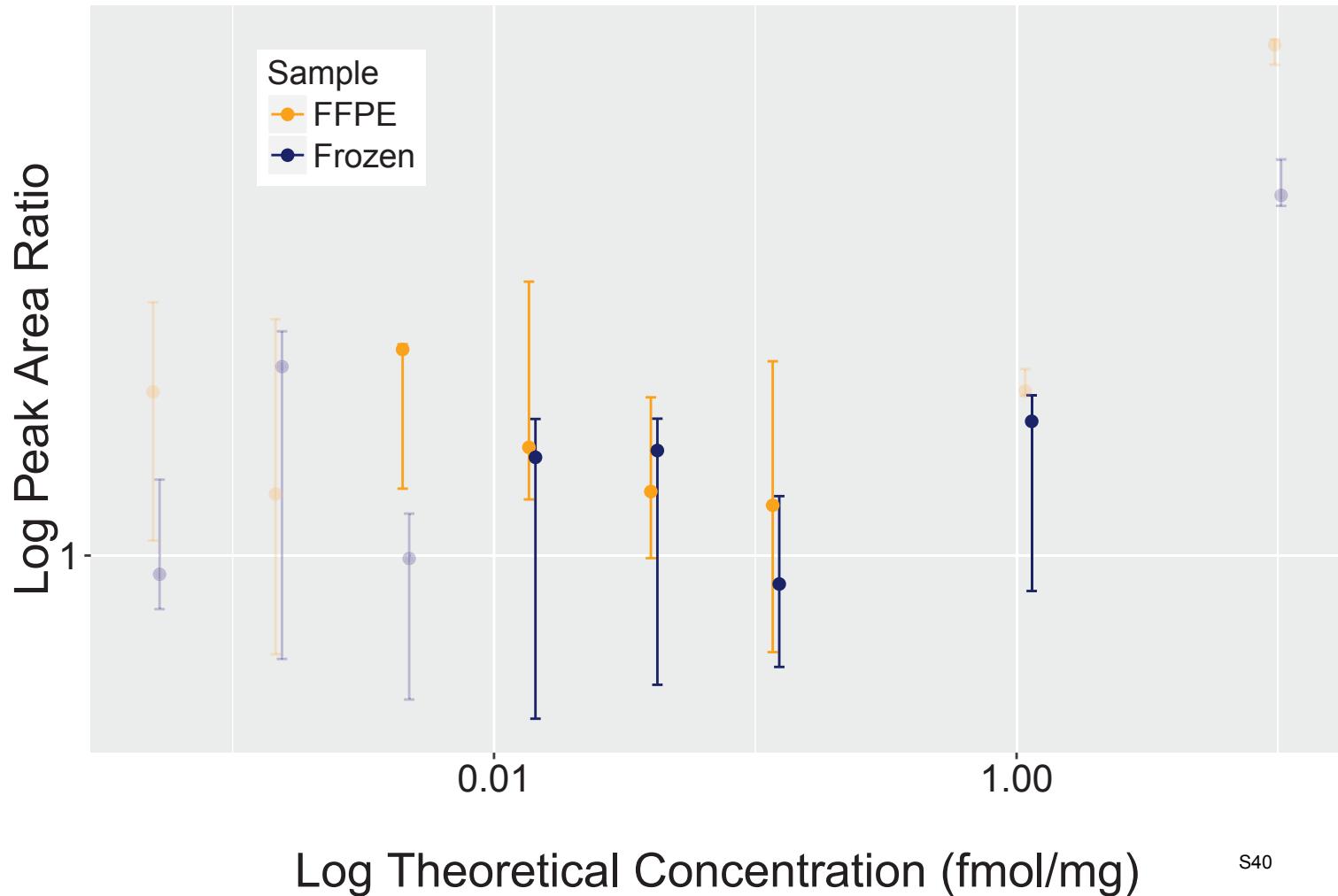


S³⁸

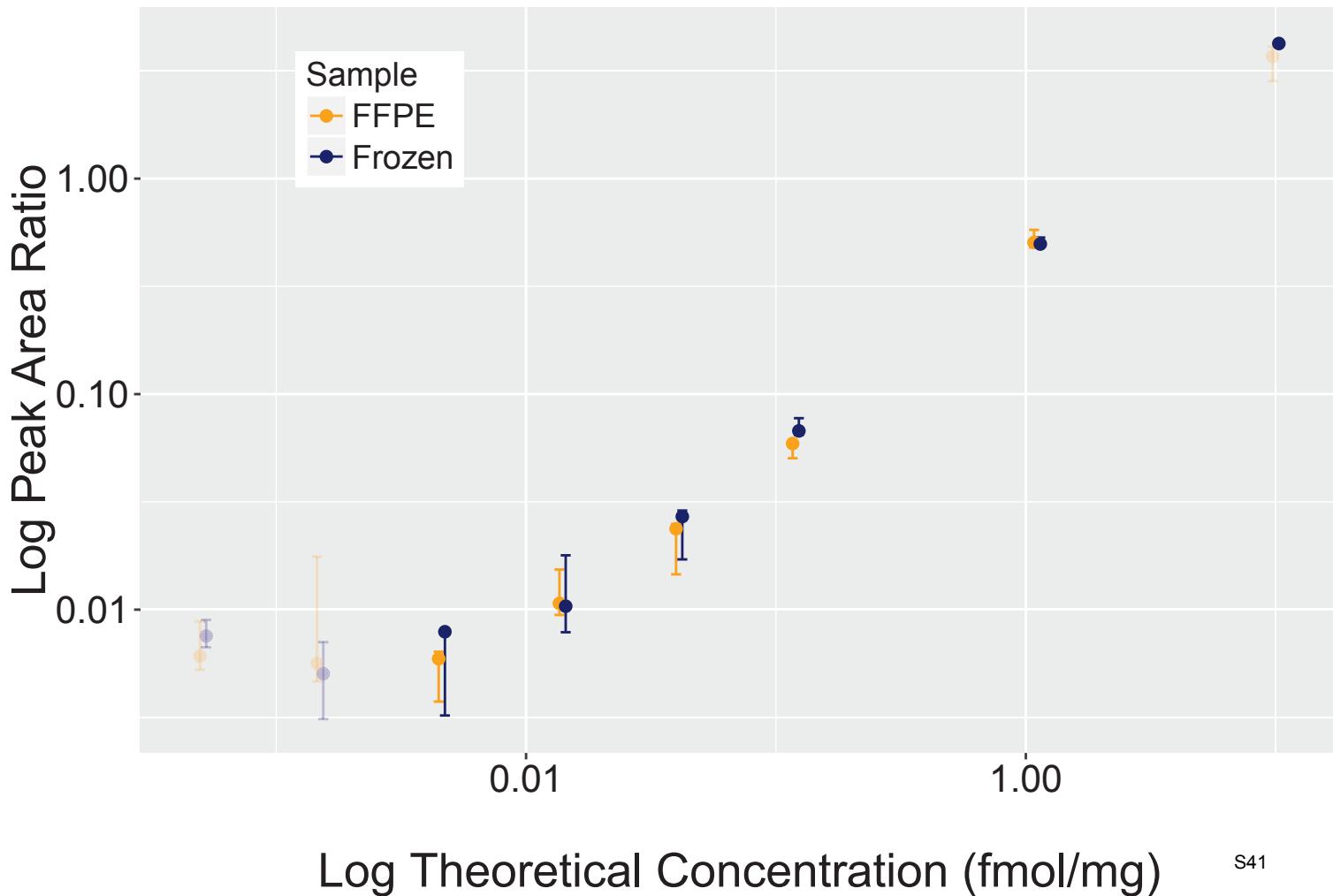
Analyte: sp|P09382|LEG1_HUMAN.SFVLNLGK



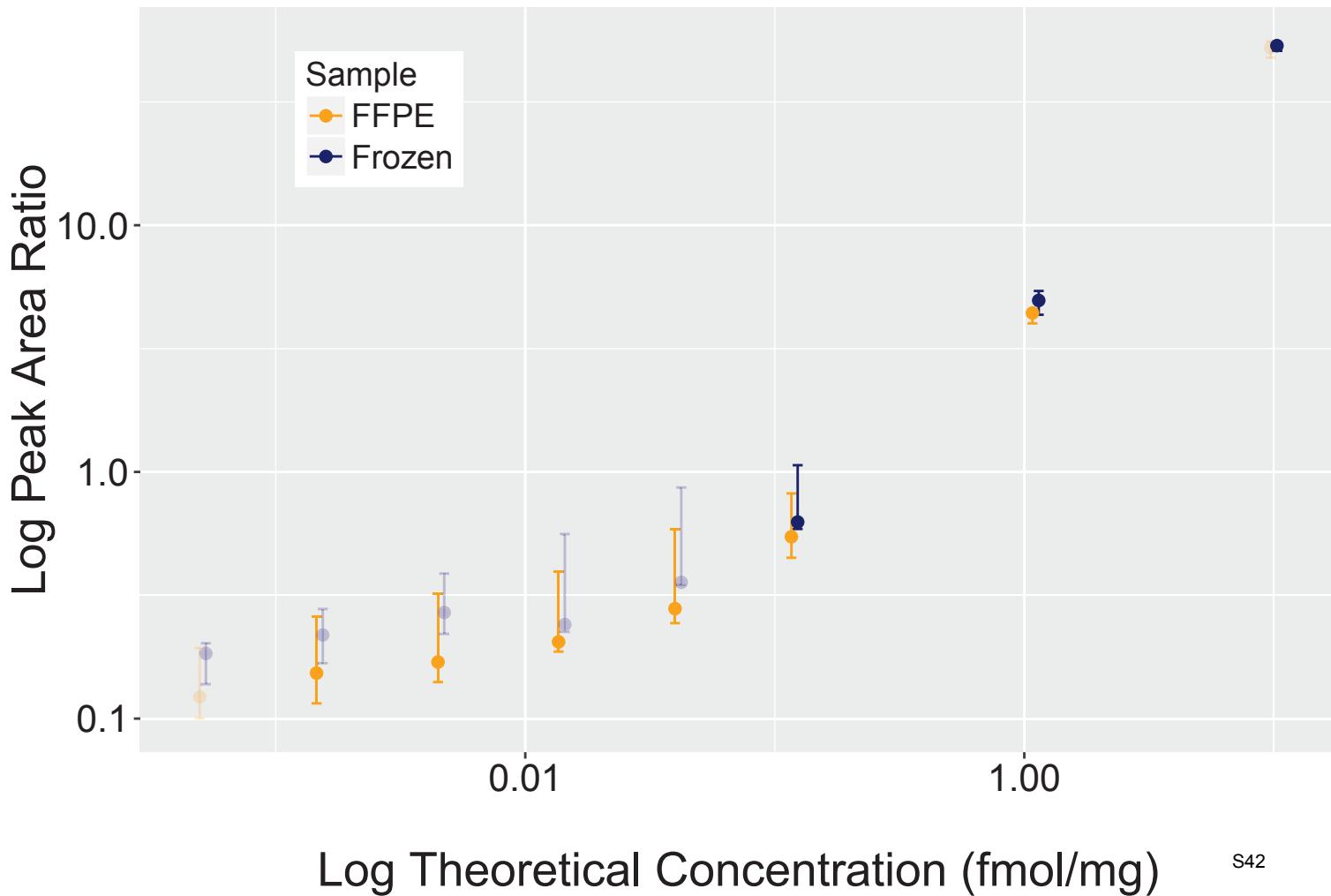
Analyte: sp|P15311|EZRI_HUMAN.SGYLSSER



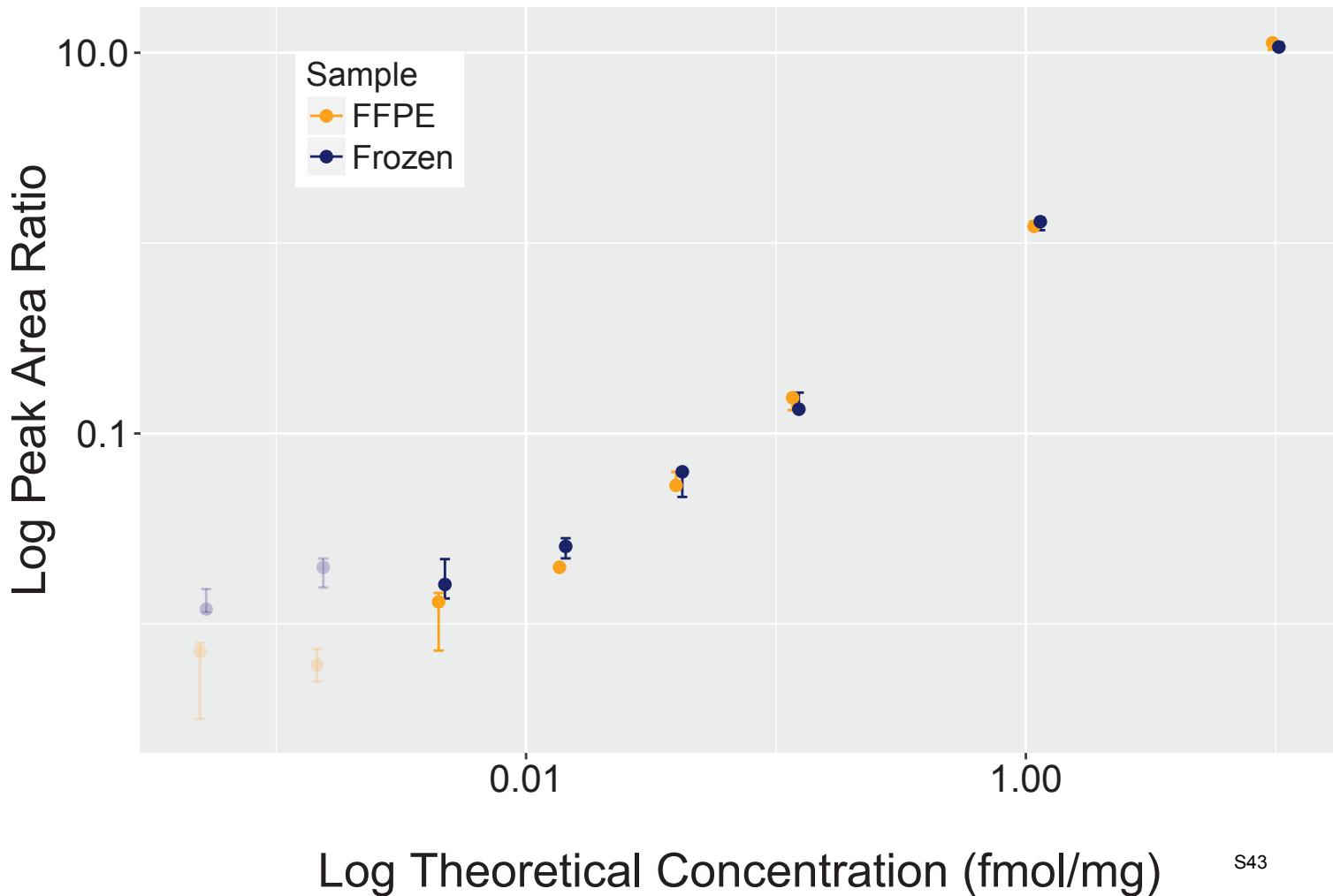
Analyte: sp|P39748|FEN1_HUMAN.SIEEIVR



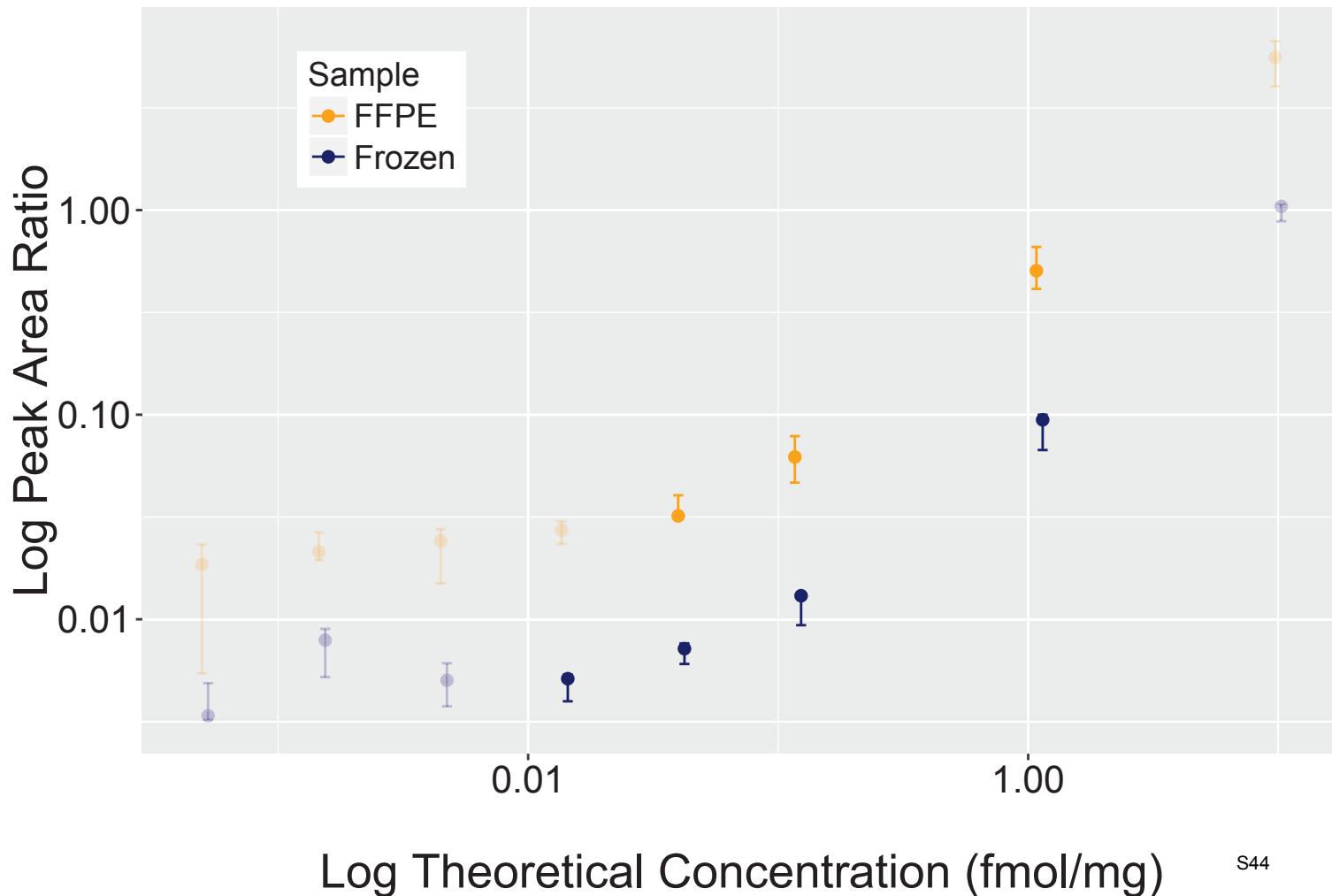
Analyte: sp|P01222|TSHB_HUMAN.SYLVGFSV



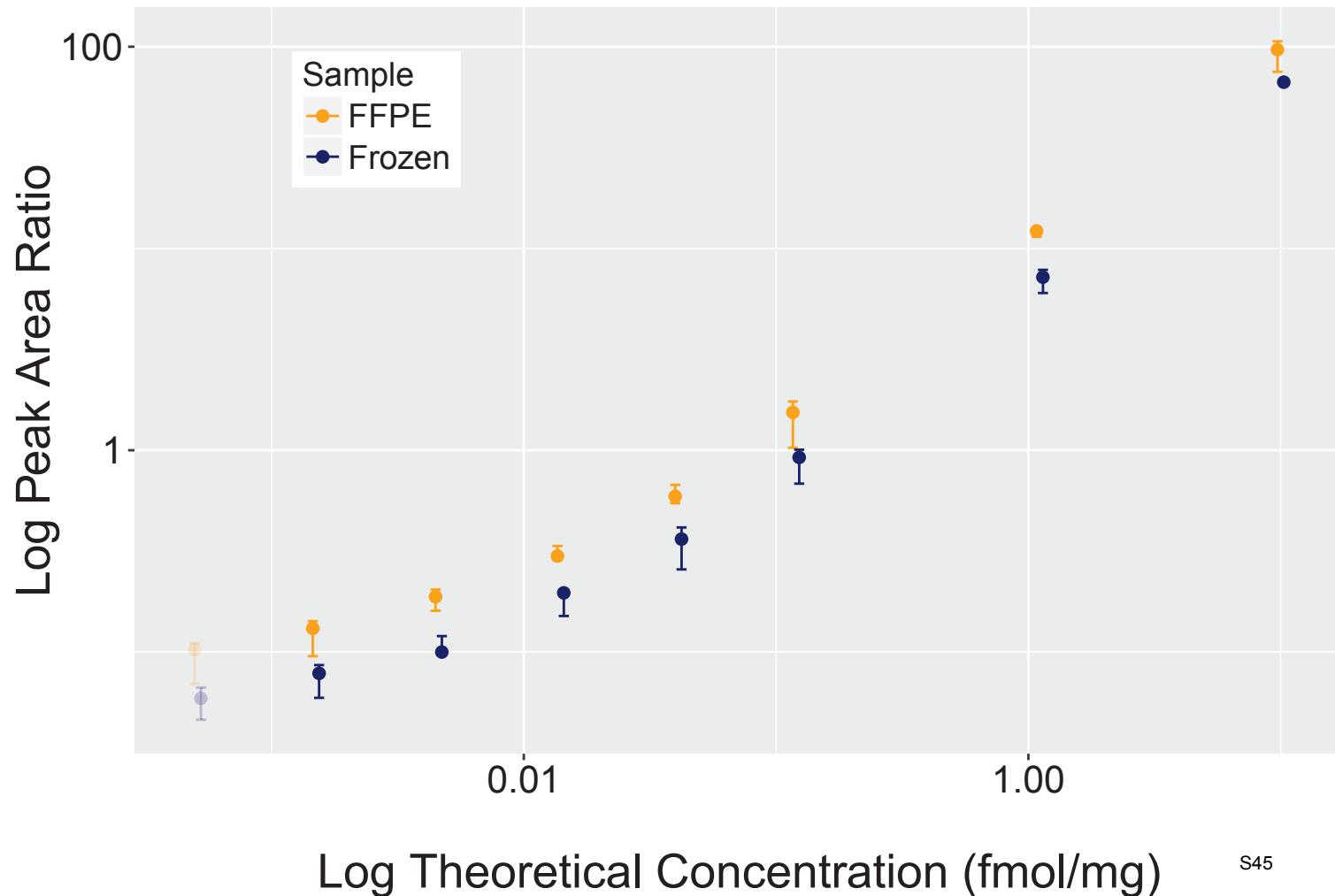
Analyte: sp|P16070|CD44_HUMAN.TFIPVTSAK



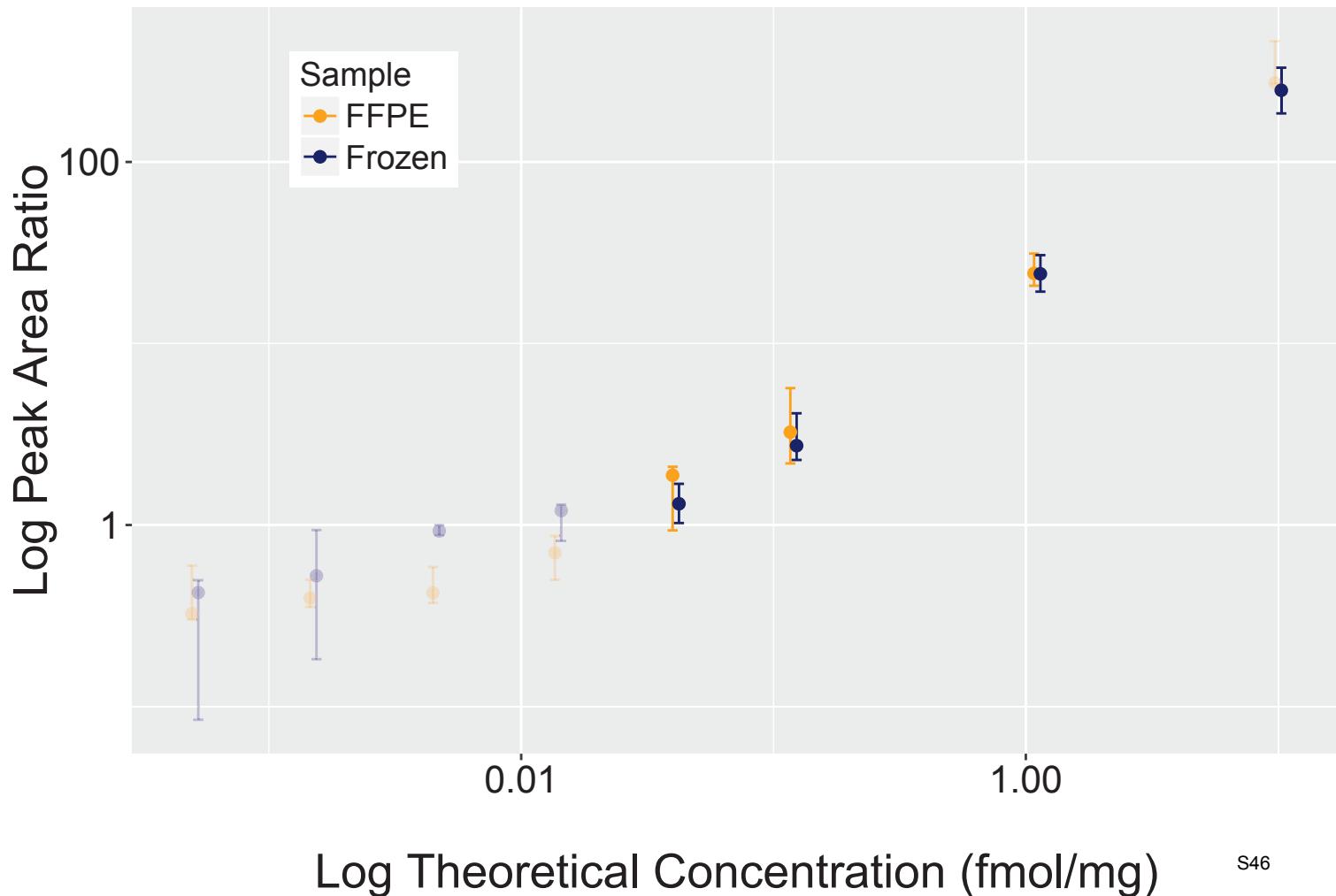
Analyte: sp|Q9NQW7|XPP1_HUMAN.TLSLDEVYLIDSGA



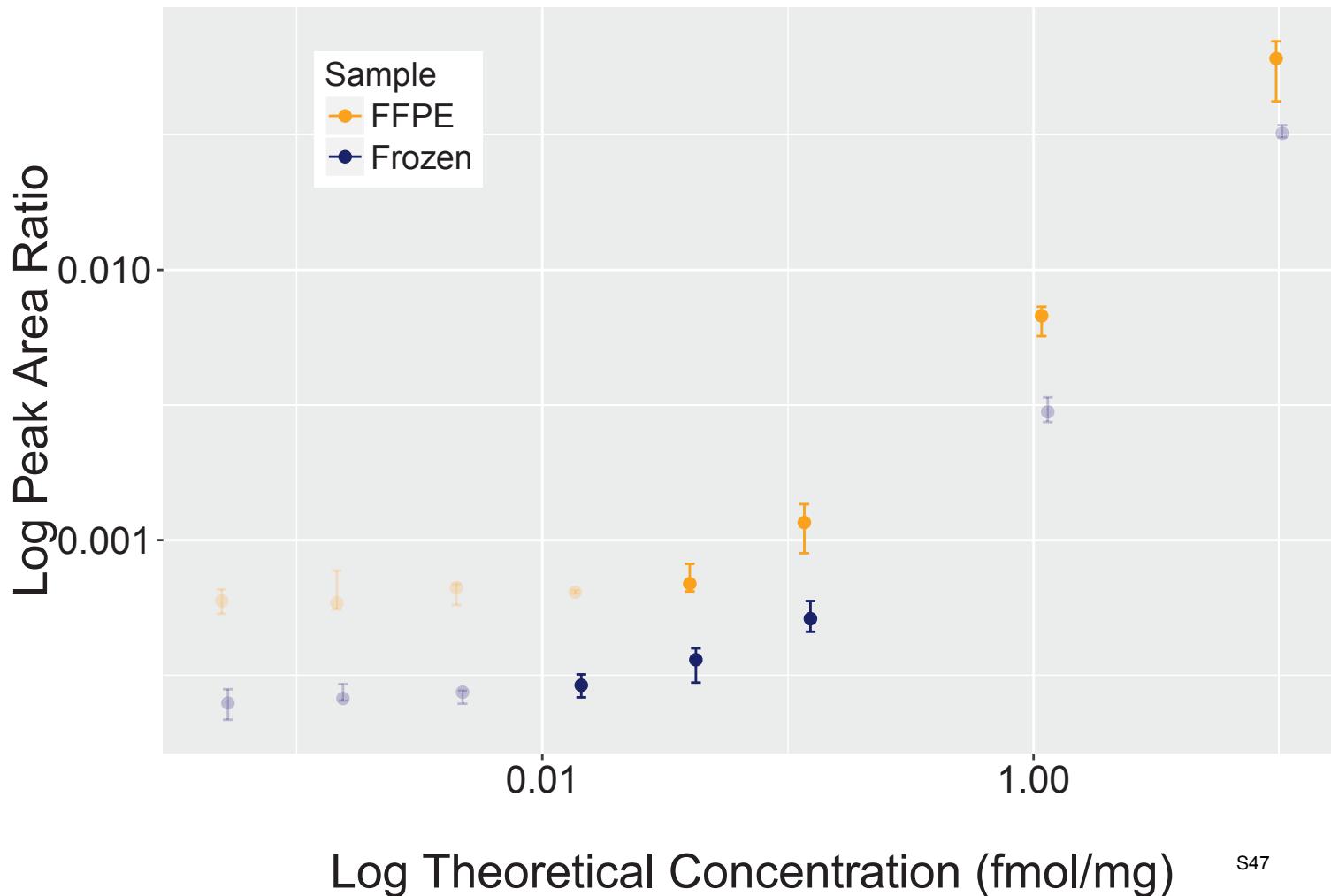
Analyte: sp|O76070|SYUG_HUMAN.TVEEAENIAVTSGV



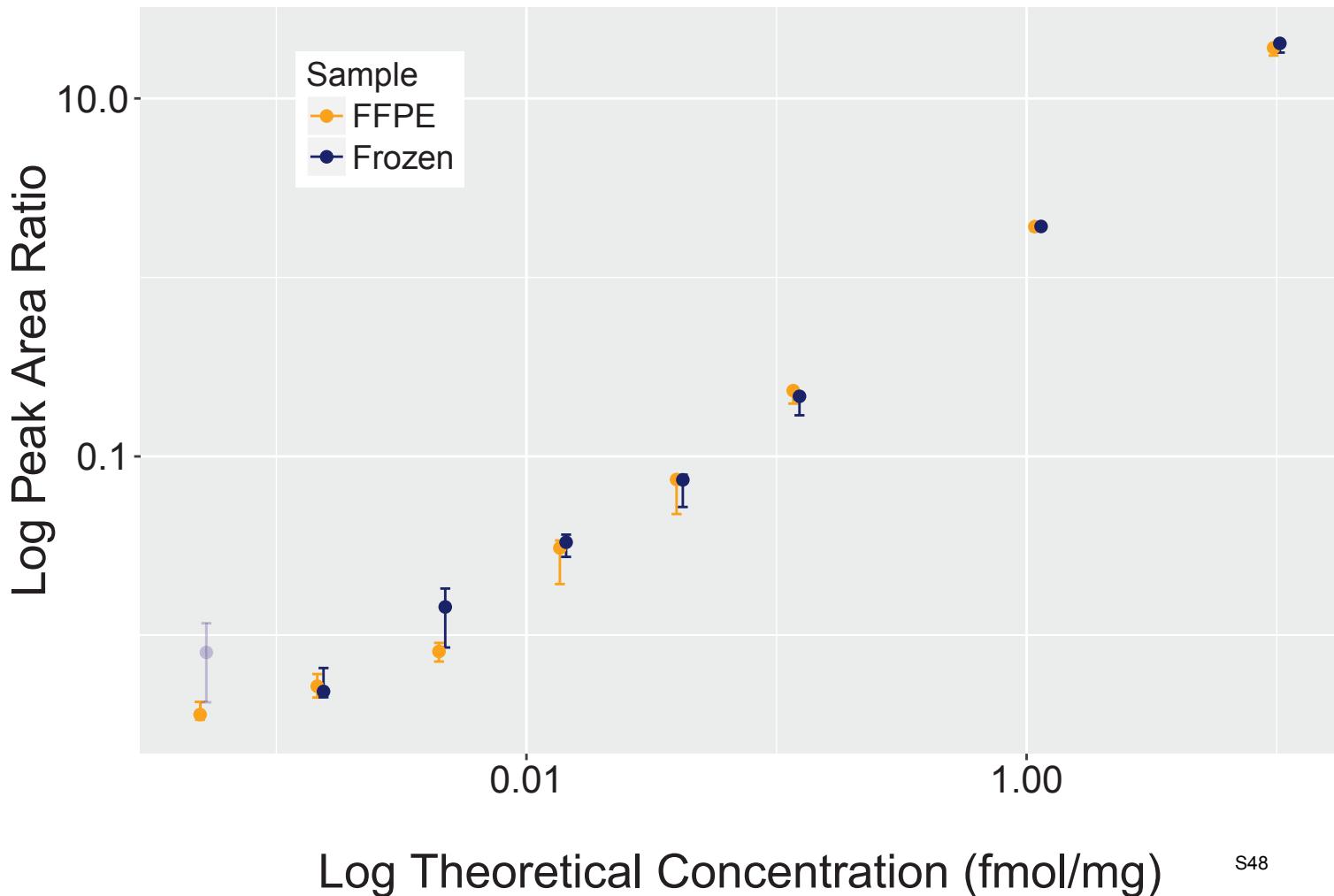
nalyte: sp|P01233|CGHB_HUMAN.VLQGVLPALPQVVC[+5]



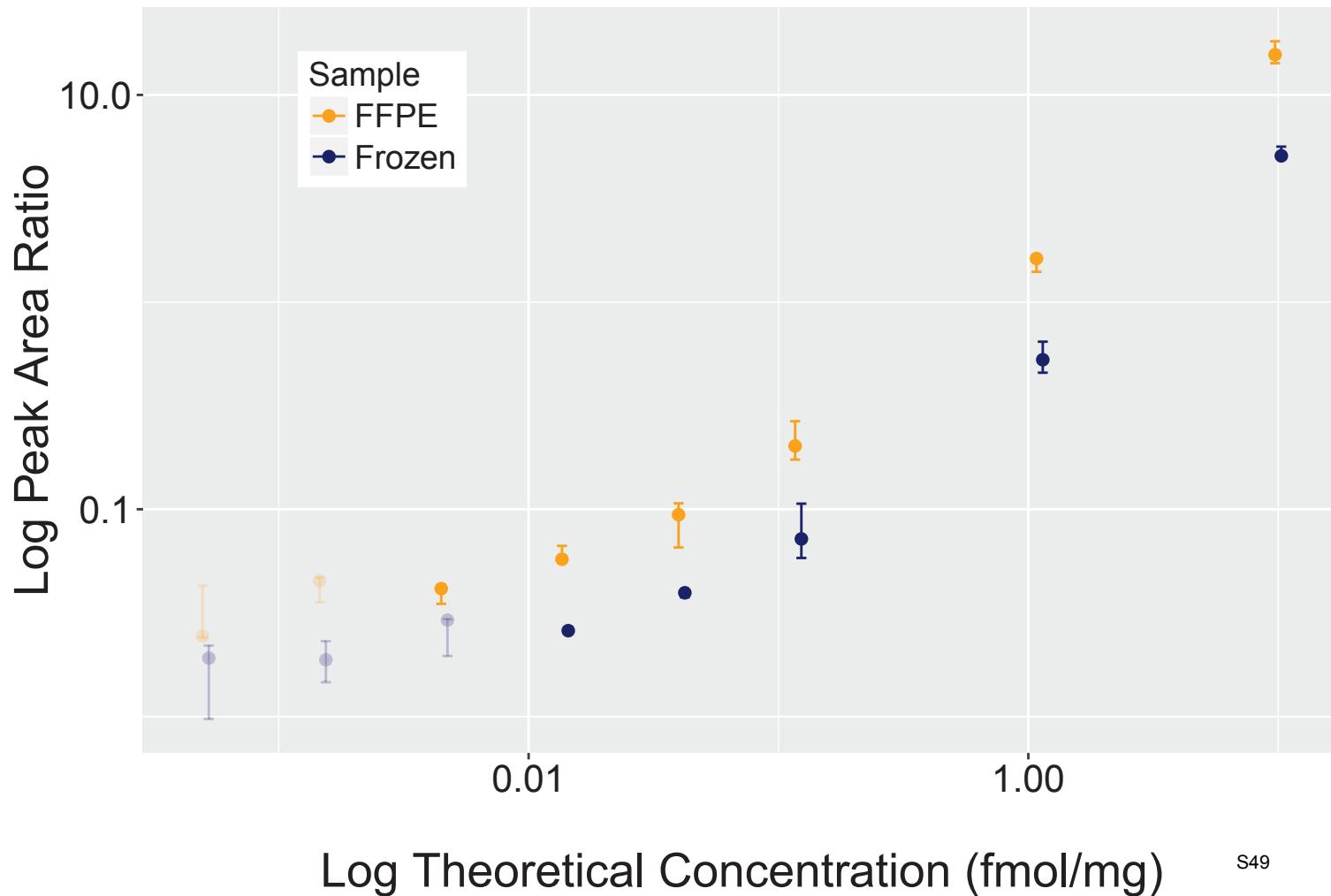
Analyte: sp|P04792|HSPB1_HUMAN.VSLDVNHFAPDEL



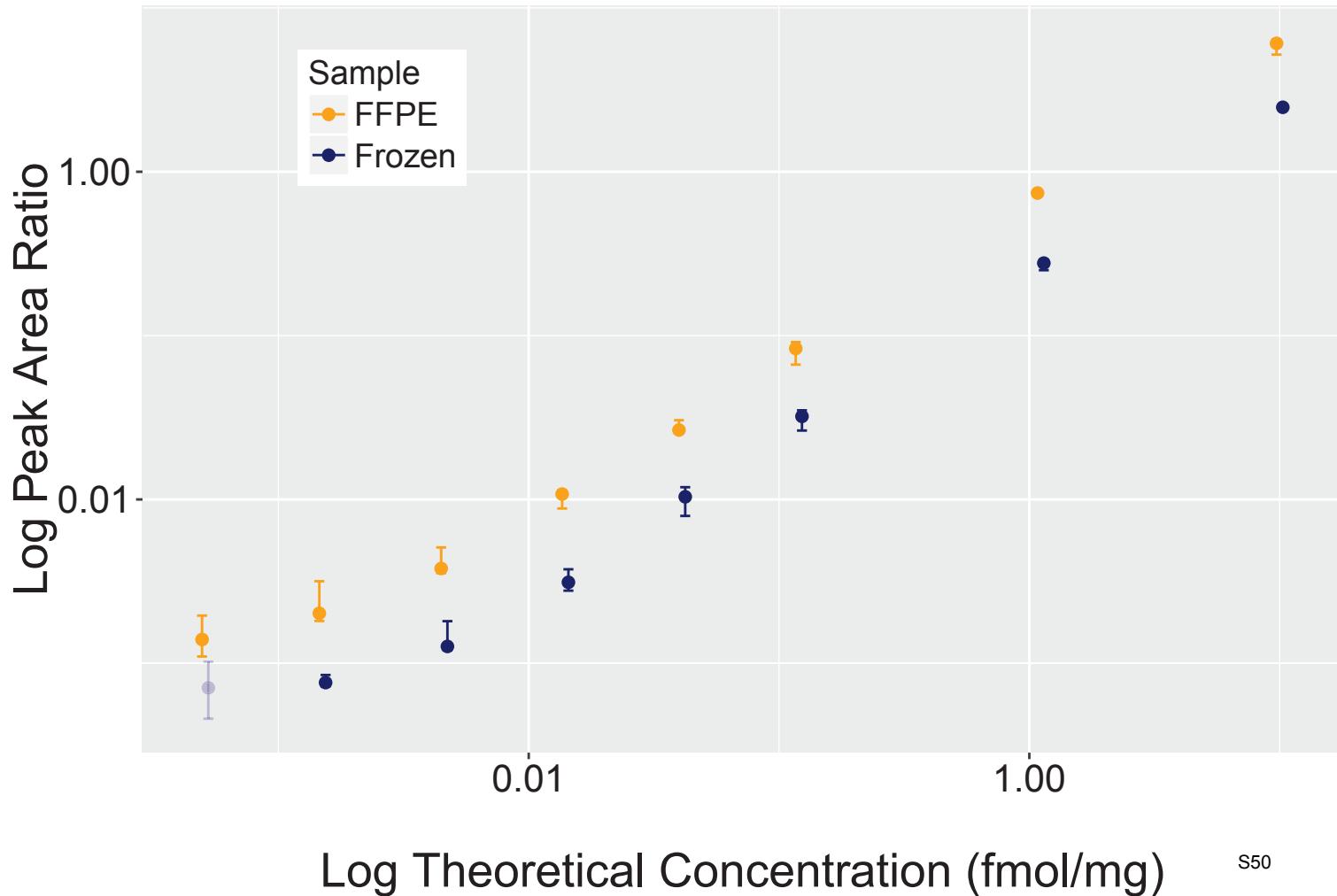
Analyte: sp|P01222|TSHB_HUMAN.YALSQDVC[+57]TY



Analyte: sp|P09211|GSTP1_HUMAN.YISLIYTNYEAGI

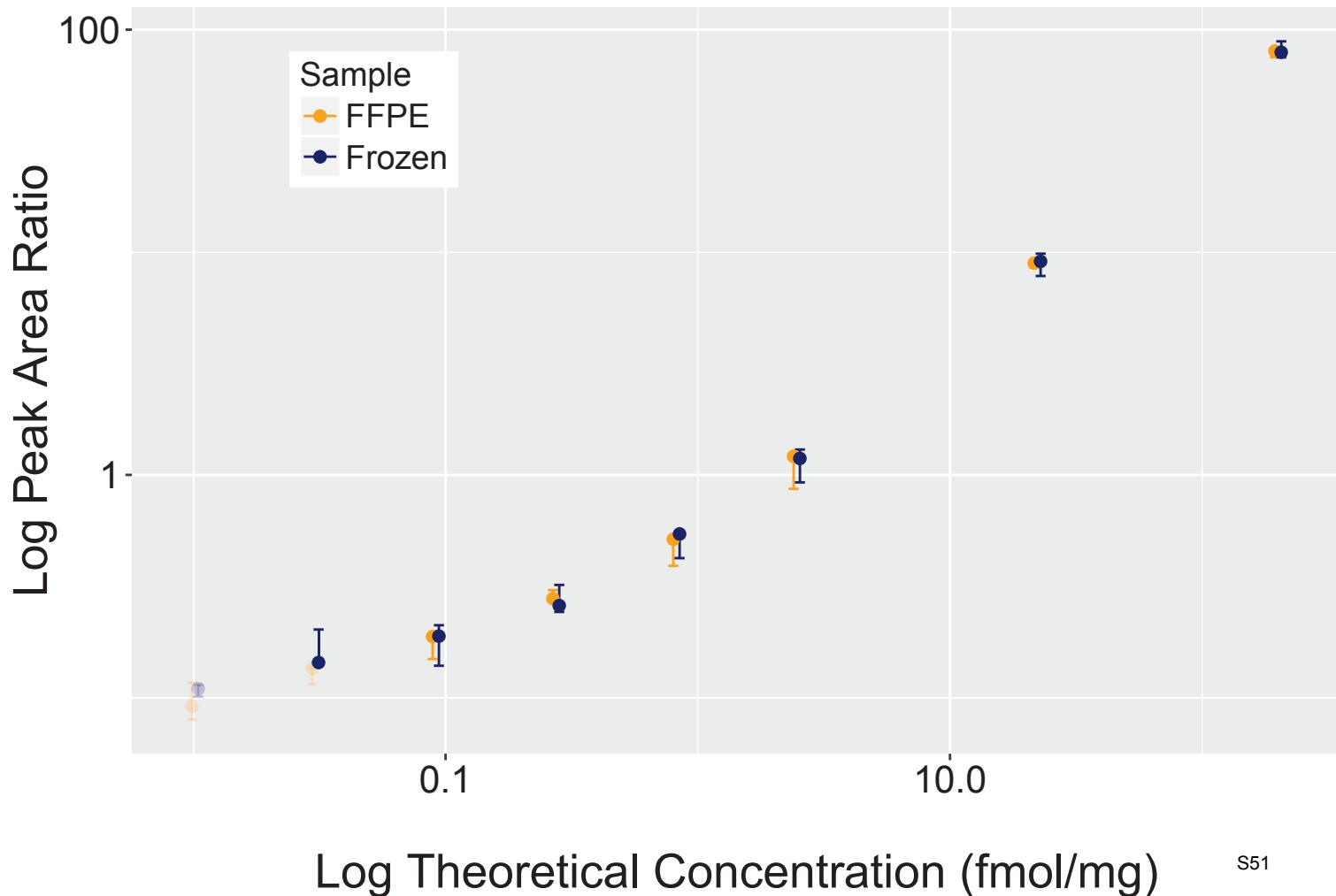


Analyte: sp|Q16658|FSCN1_HUMAN.YLAPSGPSGTL

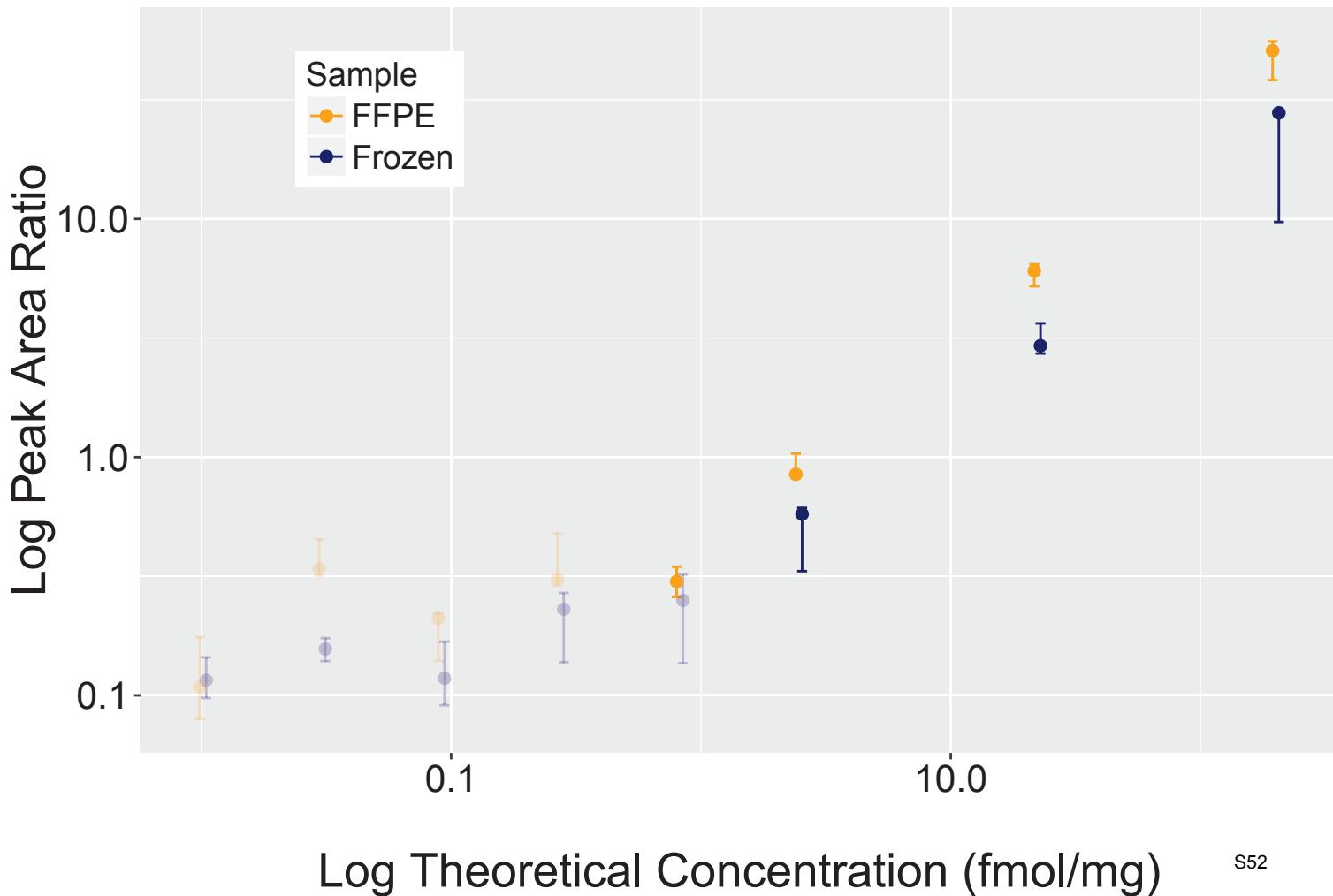


S50

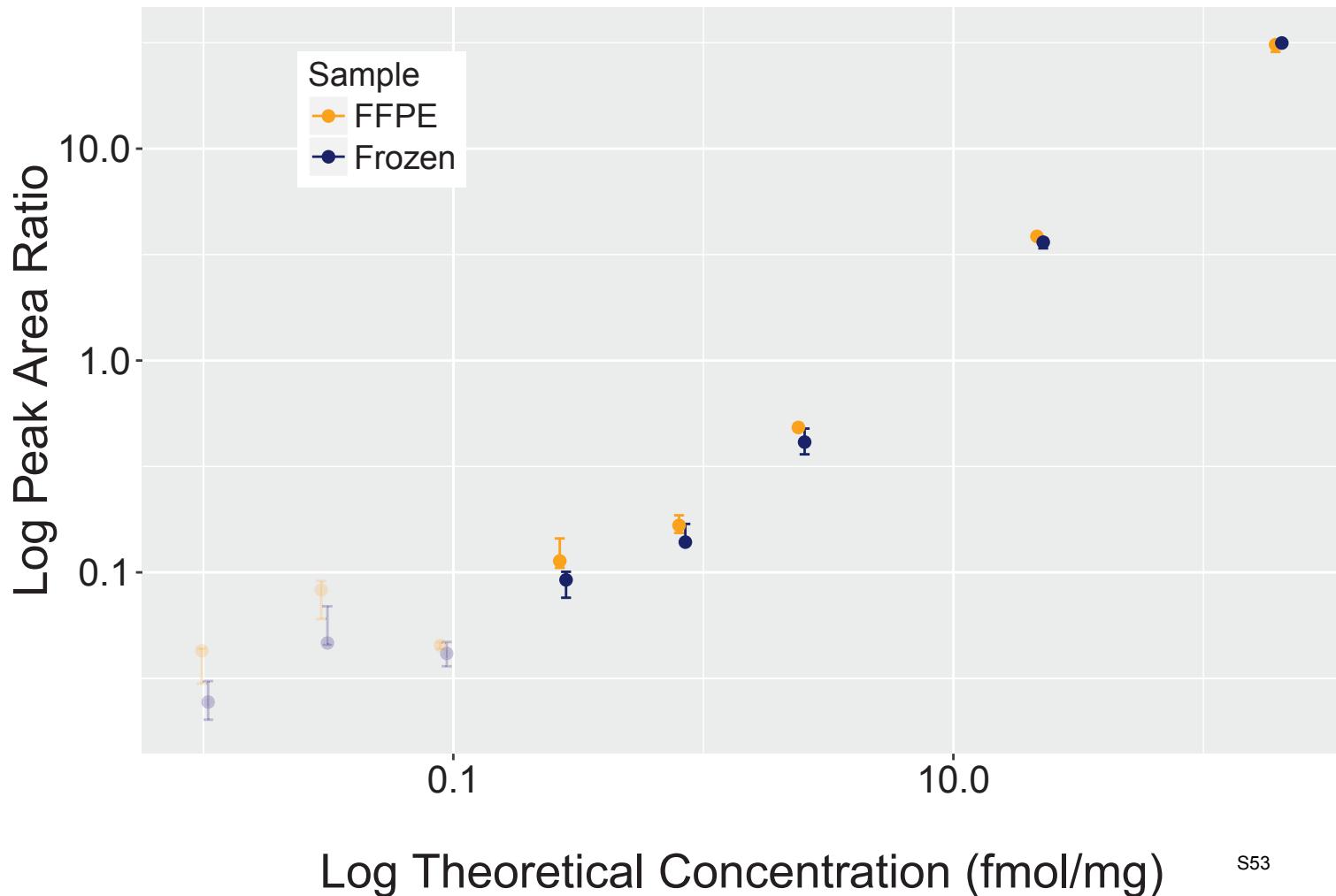
Analyte: CAD.AAFALGGLGSGFASNR



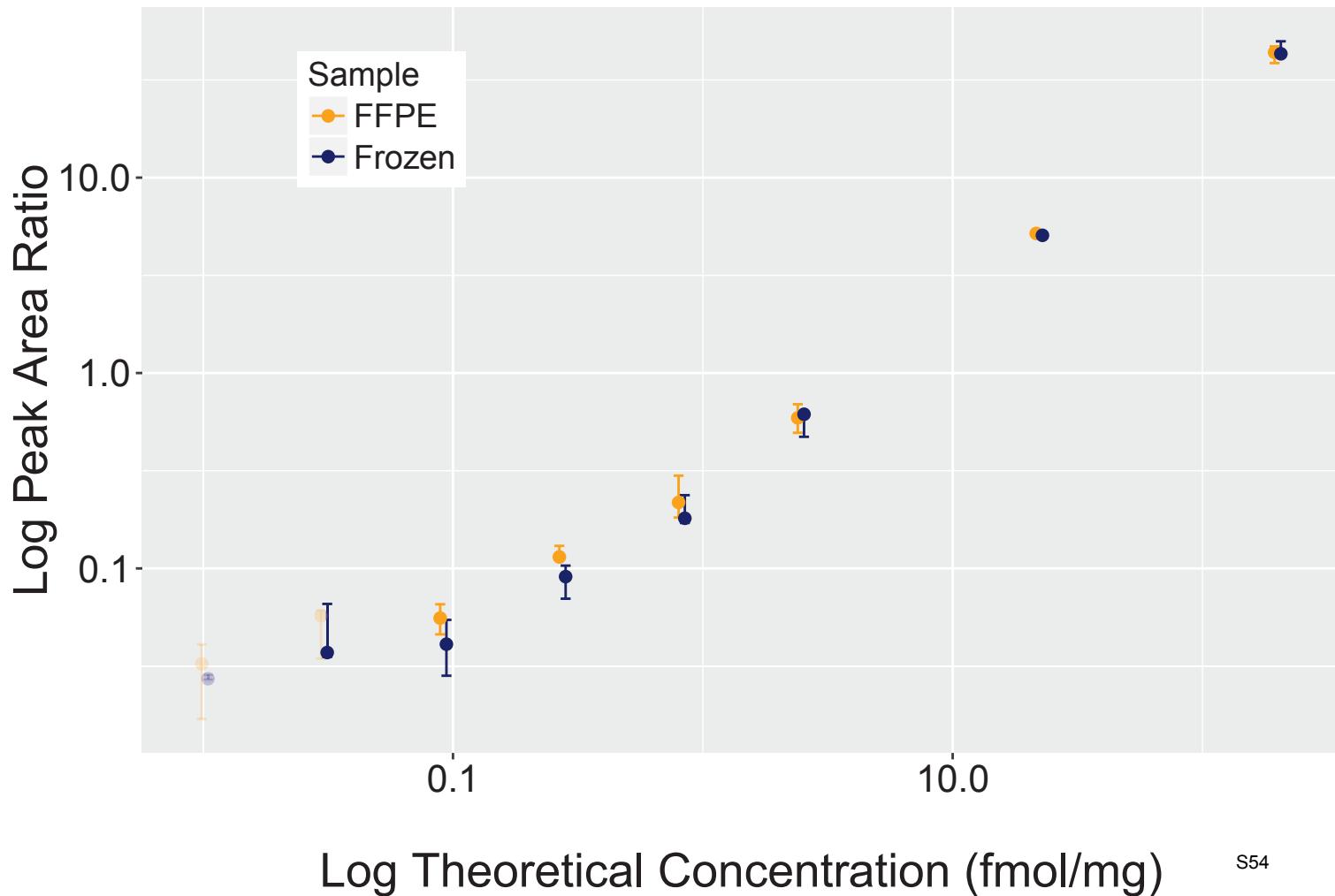
Analyte: SDHA-AAFGLSEAGFNTAC[+57]VTK



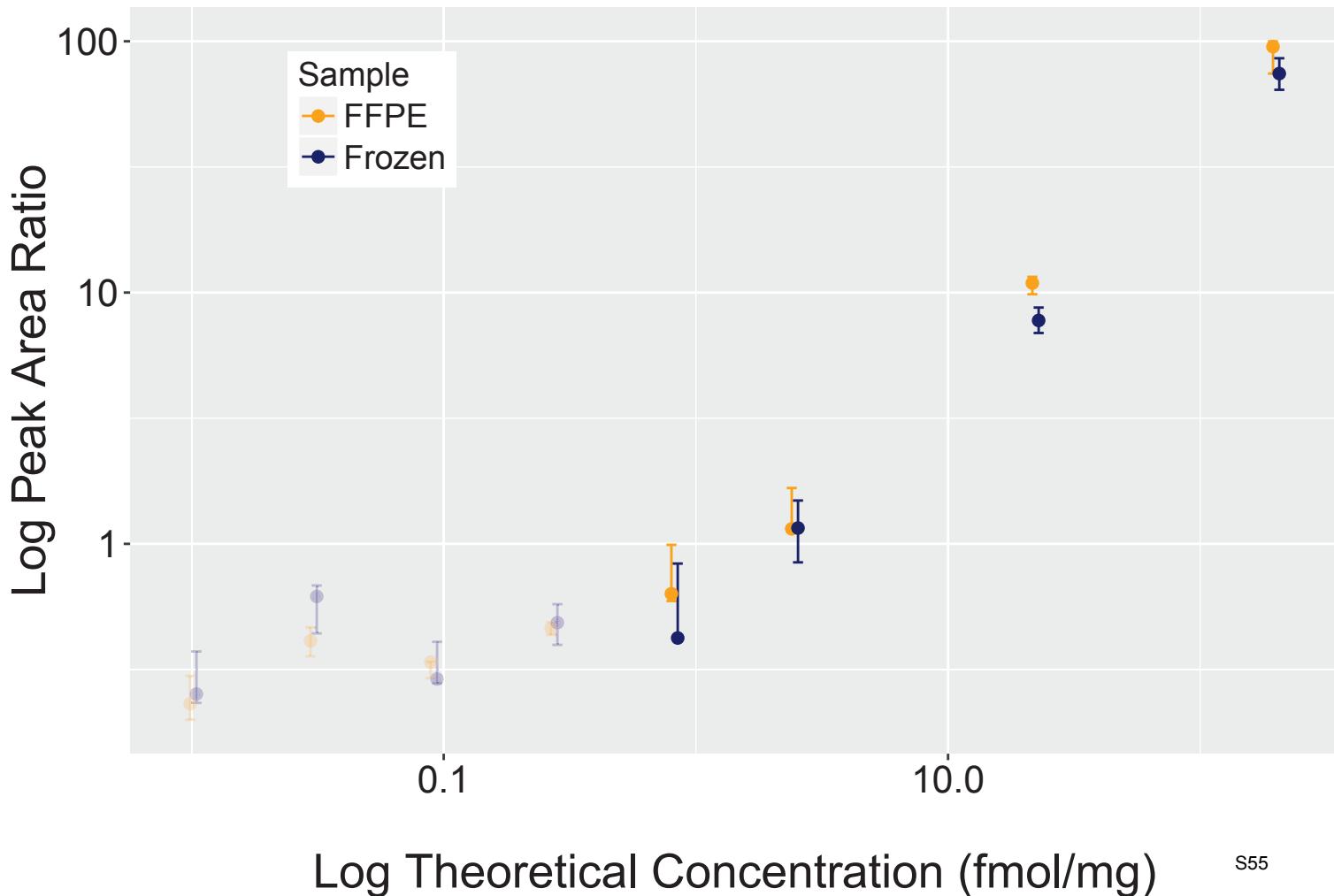
Analyte: HRSP12.AAGC[+57]DFTNVVK



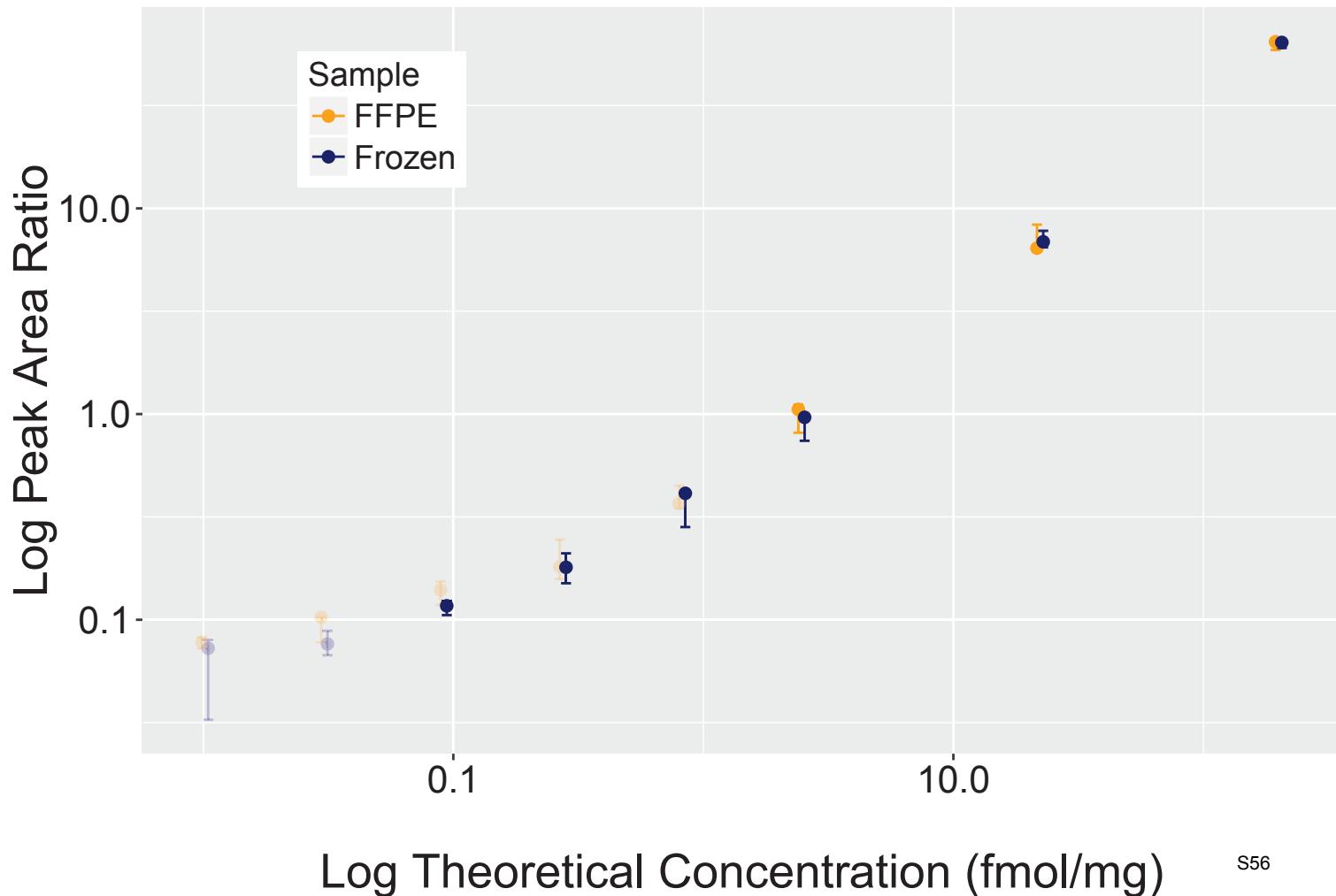
Analyte: BAG3.AAPSTAPAEATPPKPGGEAEAPPK



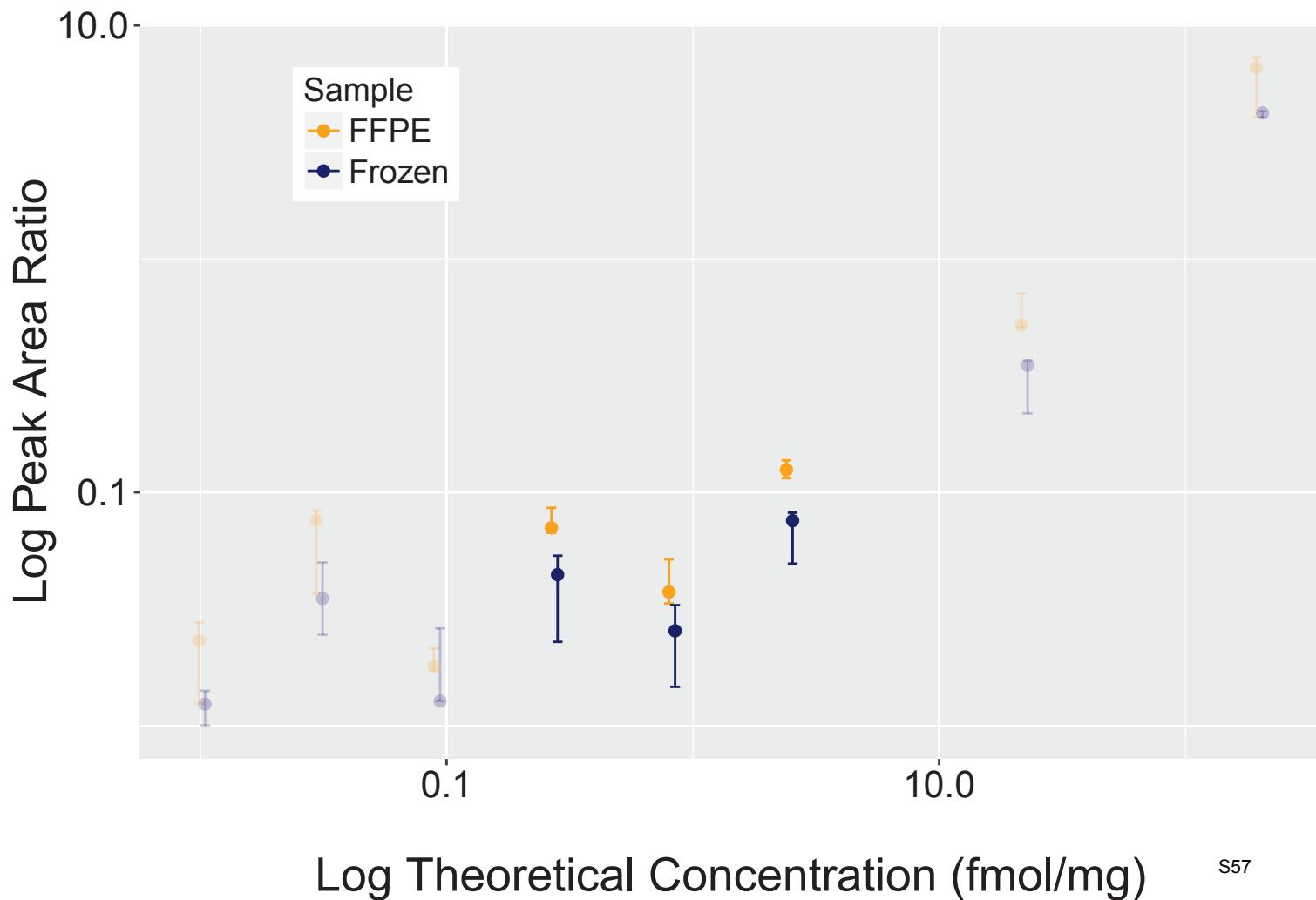
Analyte: ACOT7.AASAFFTYVSLSQEGR



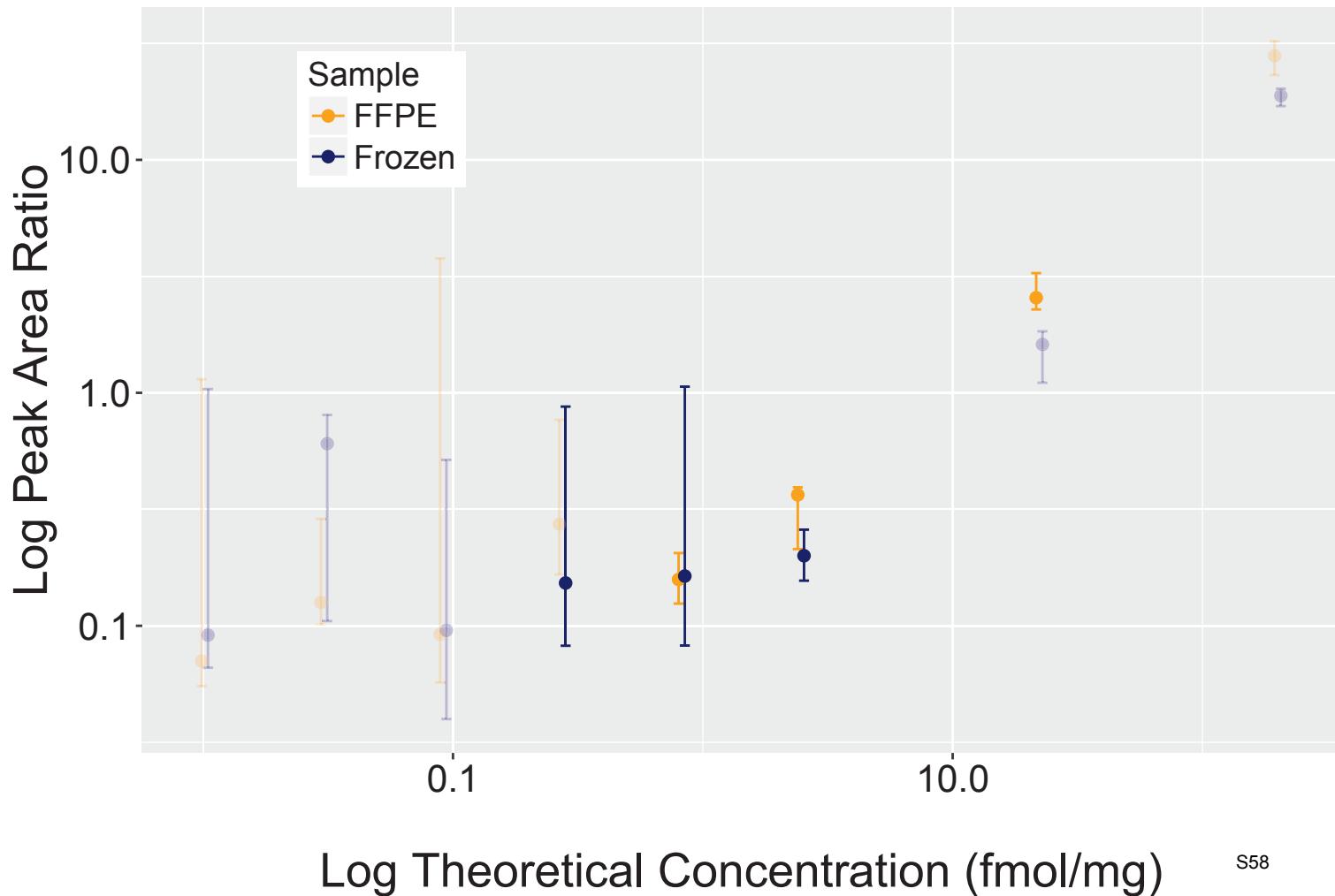
Analyte: MBOAT7.AASLEYDYETIR



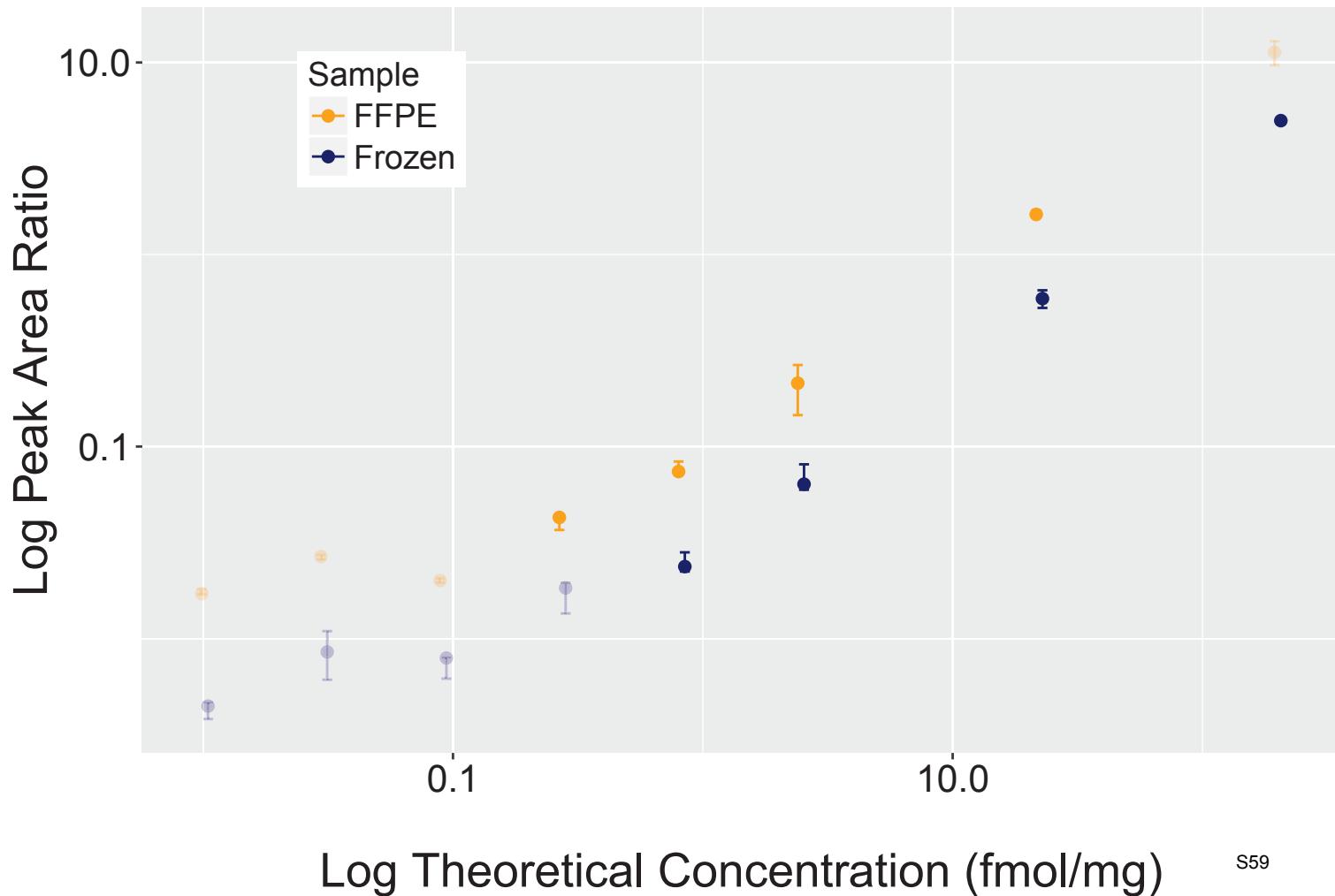
Analyte: HSPD1-AAVEEGIVLGGGC[+57]ALLR



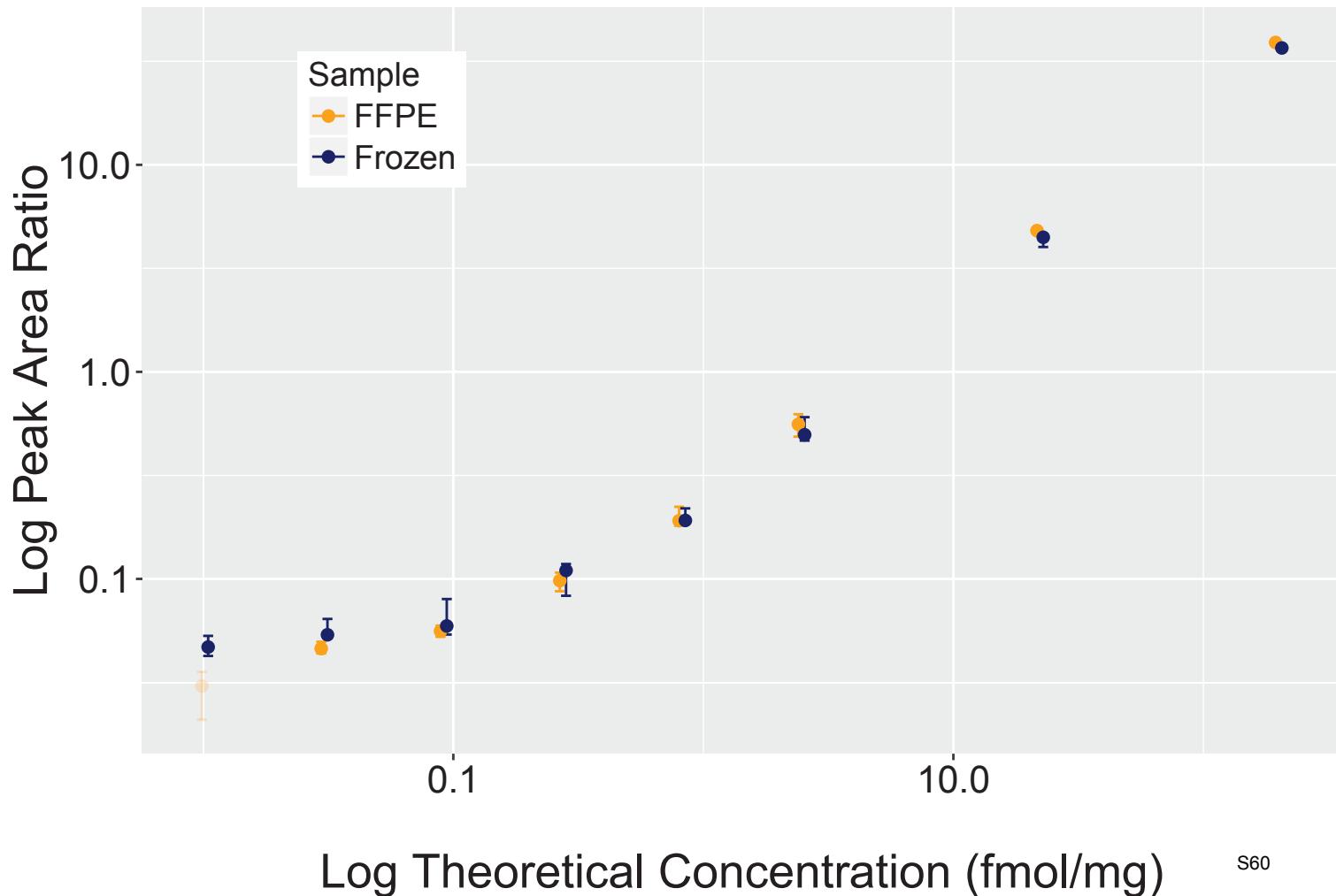
Analyte: PSMD1-AAVESLGFILFR



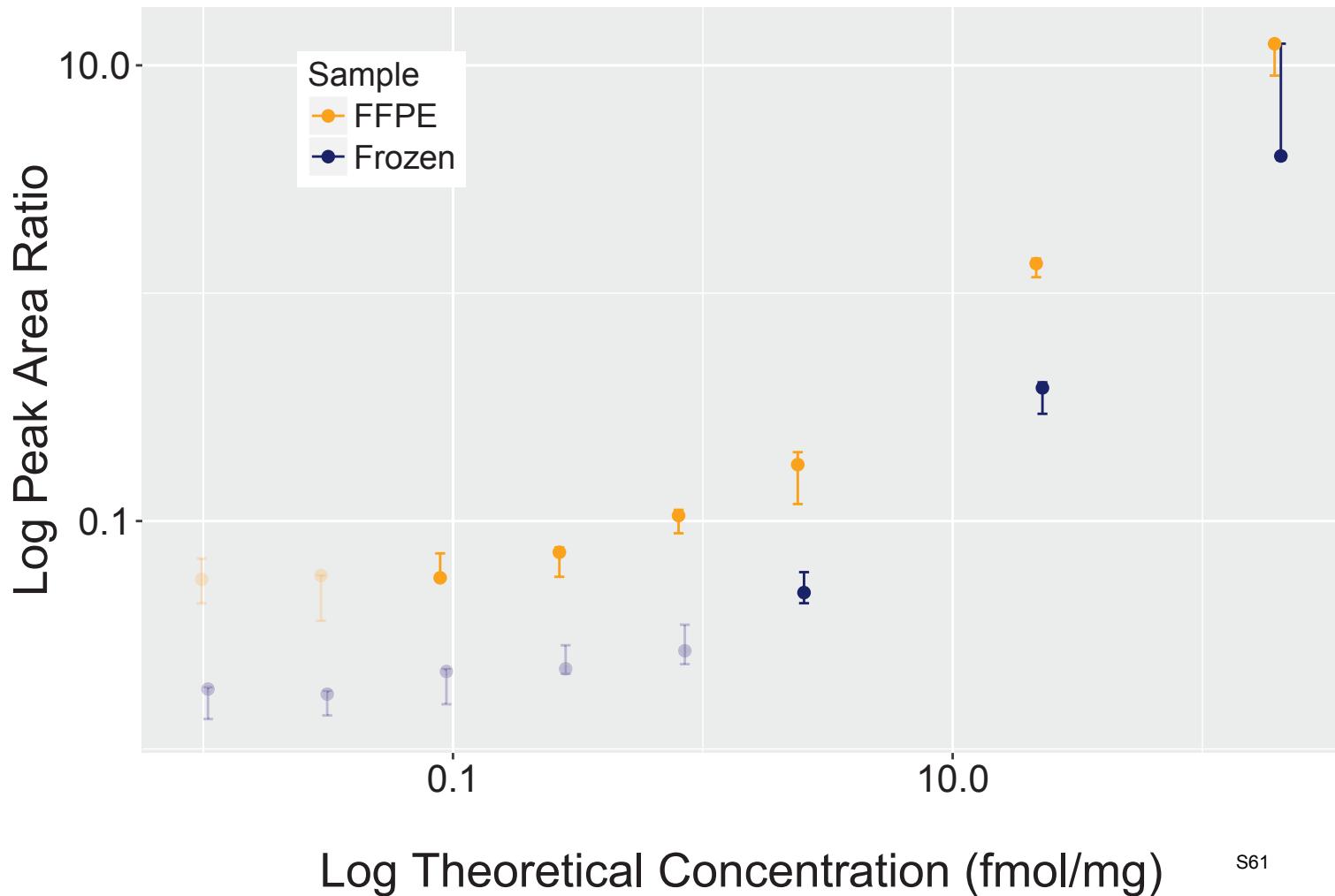
Analyte: LMNA.AAYEAELGNDAR



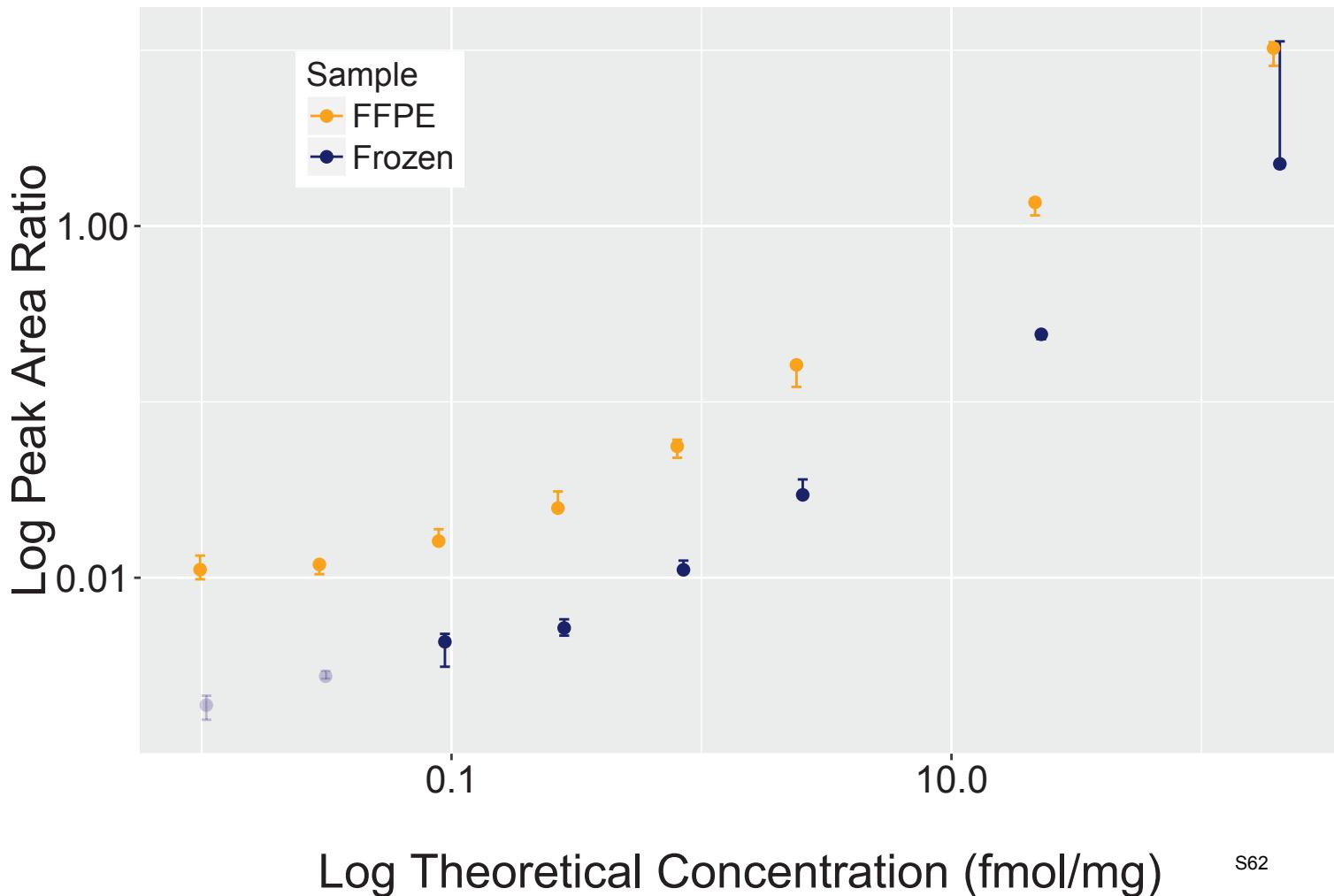
Analyte: HRSP12.AAYQVAALPK



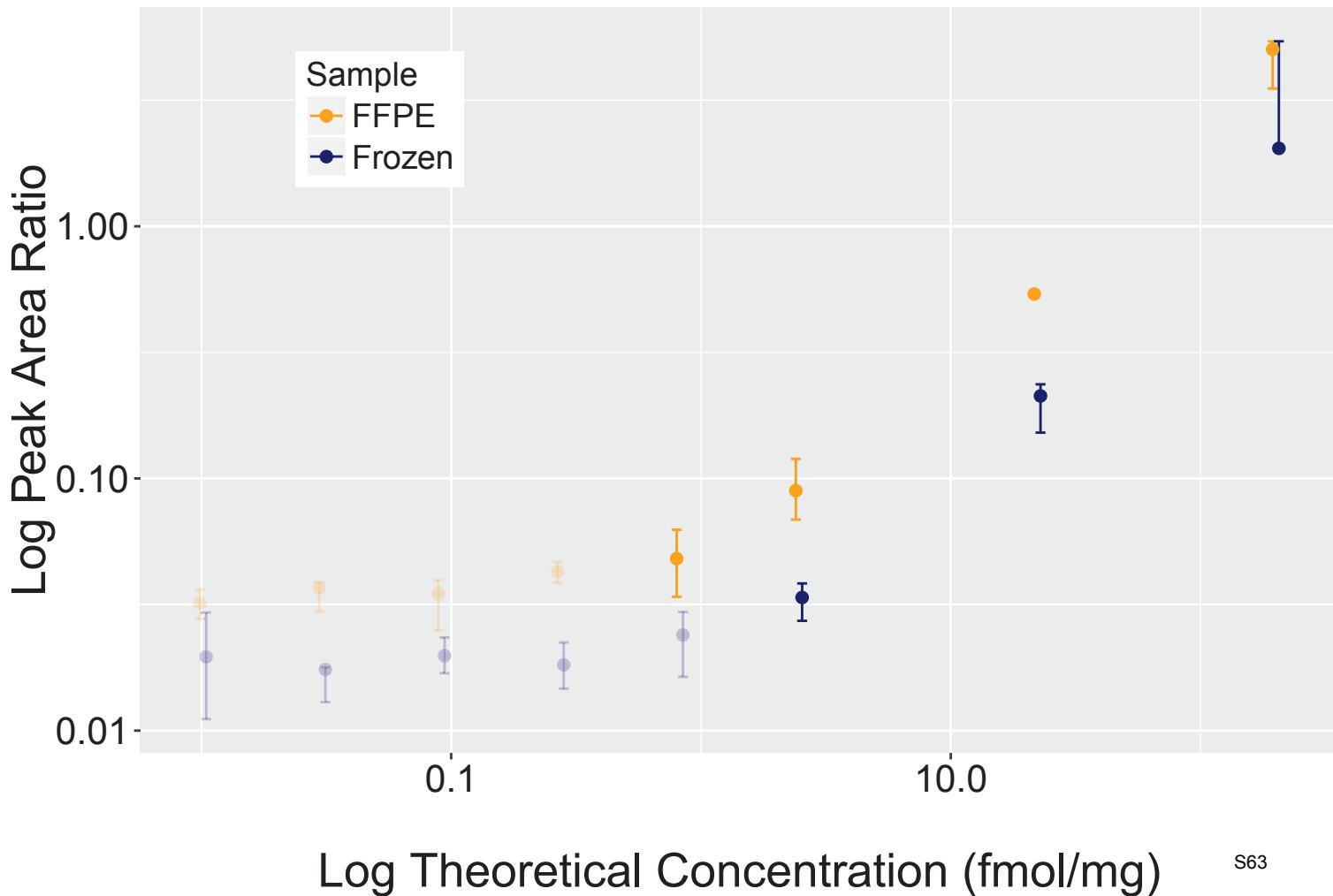
Analyte: PGK1.AC[+57]ANPAAGSVILLENLR



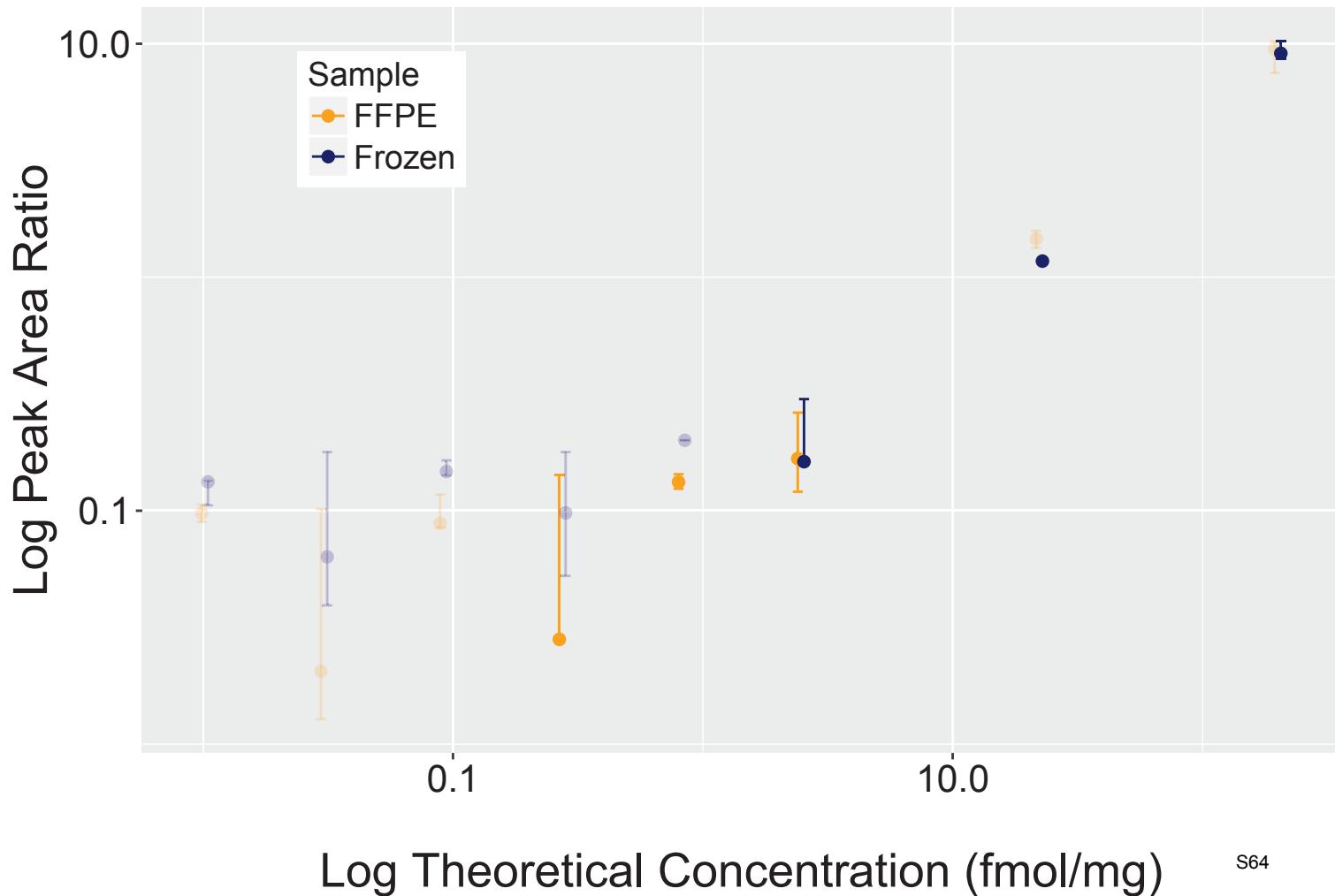
Analyte: ALDOA.ADDGRPFPQVIK



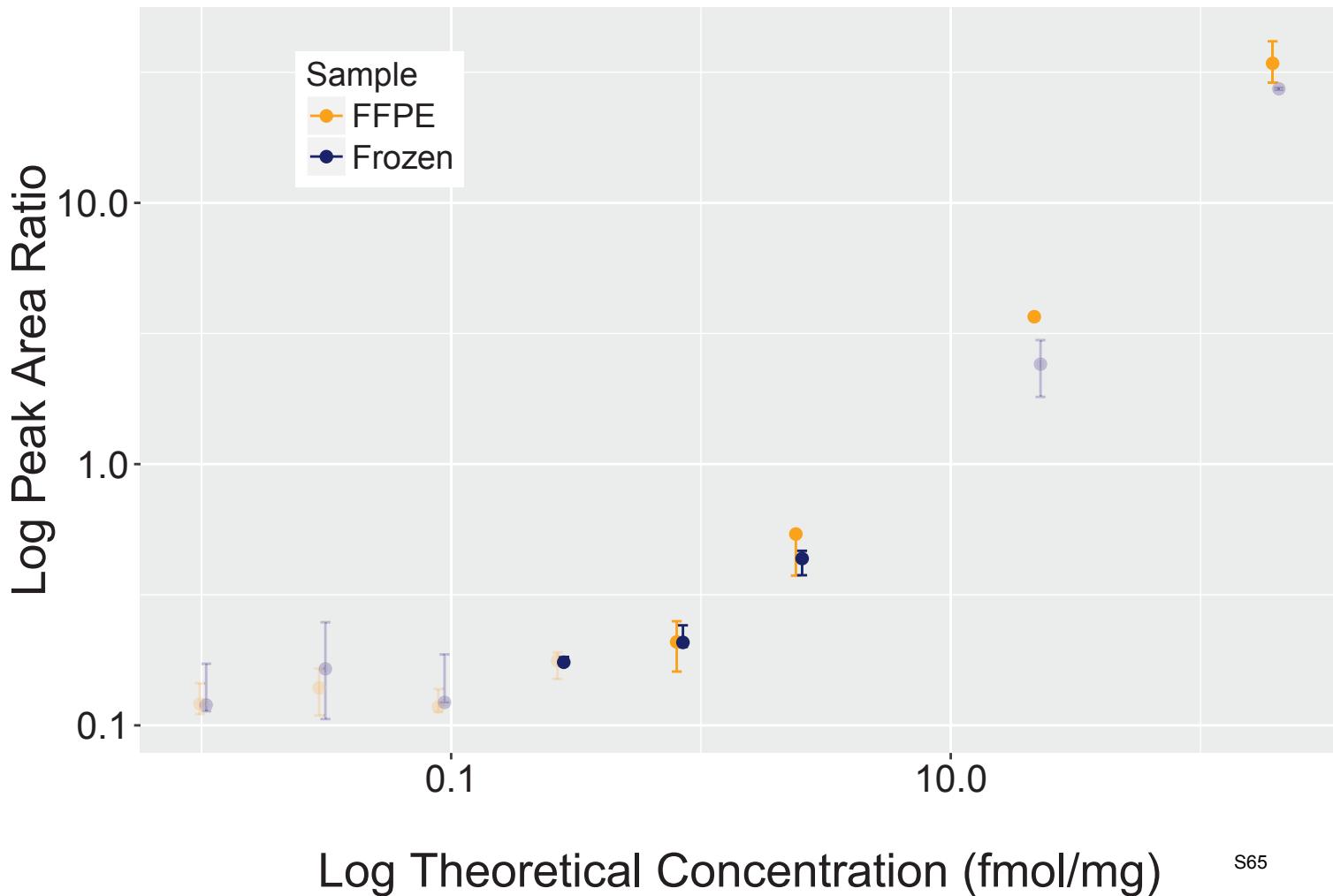
Analyte: ANXA2.AEDGSVIDYELIDQDAR



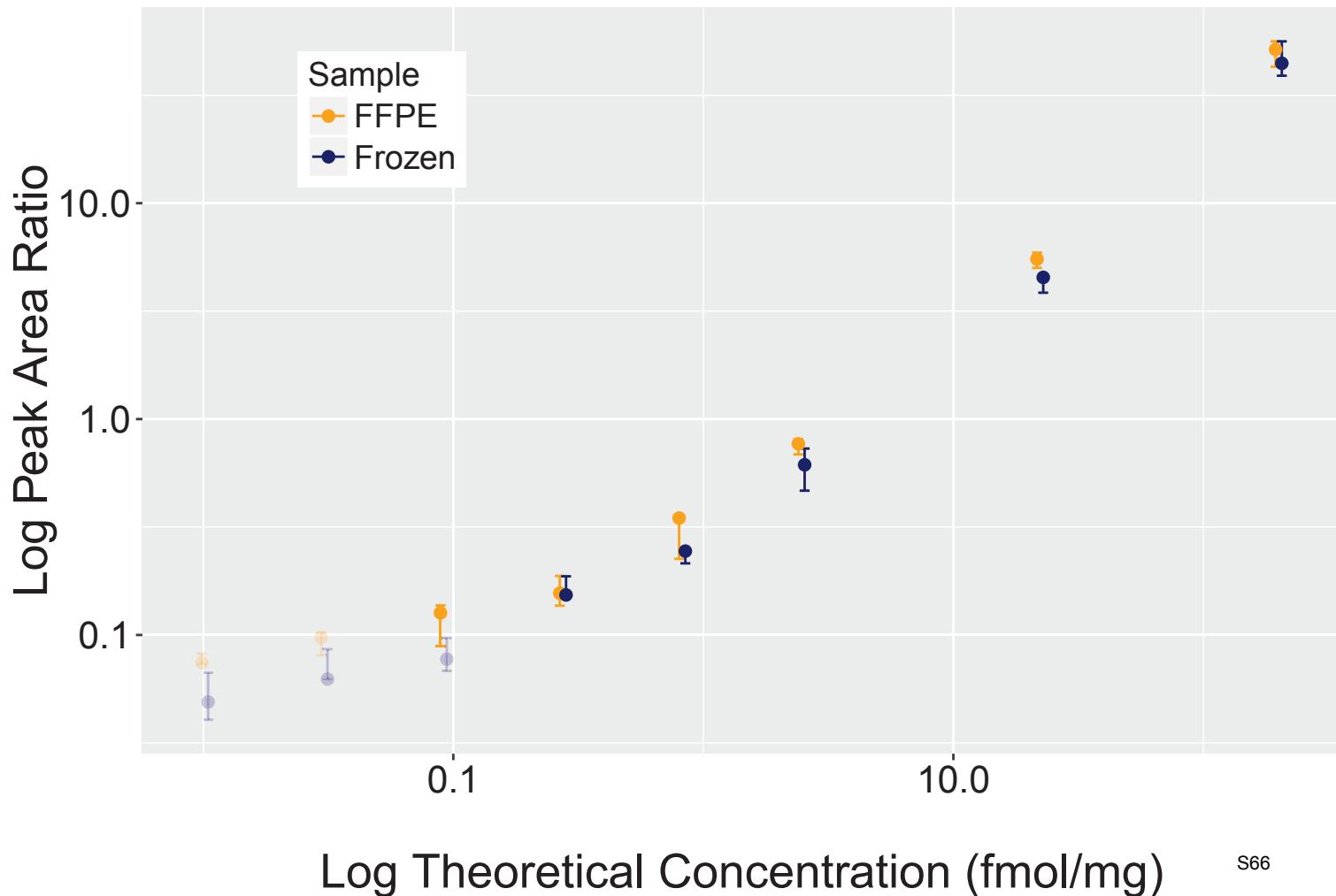
Analyte: TPM4.AEGDVAALNR



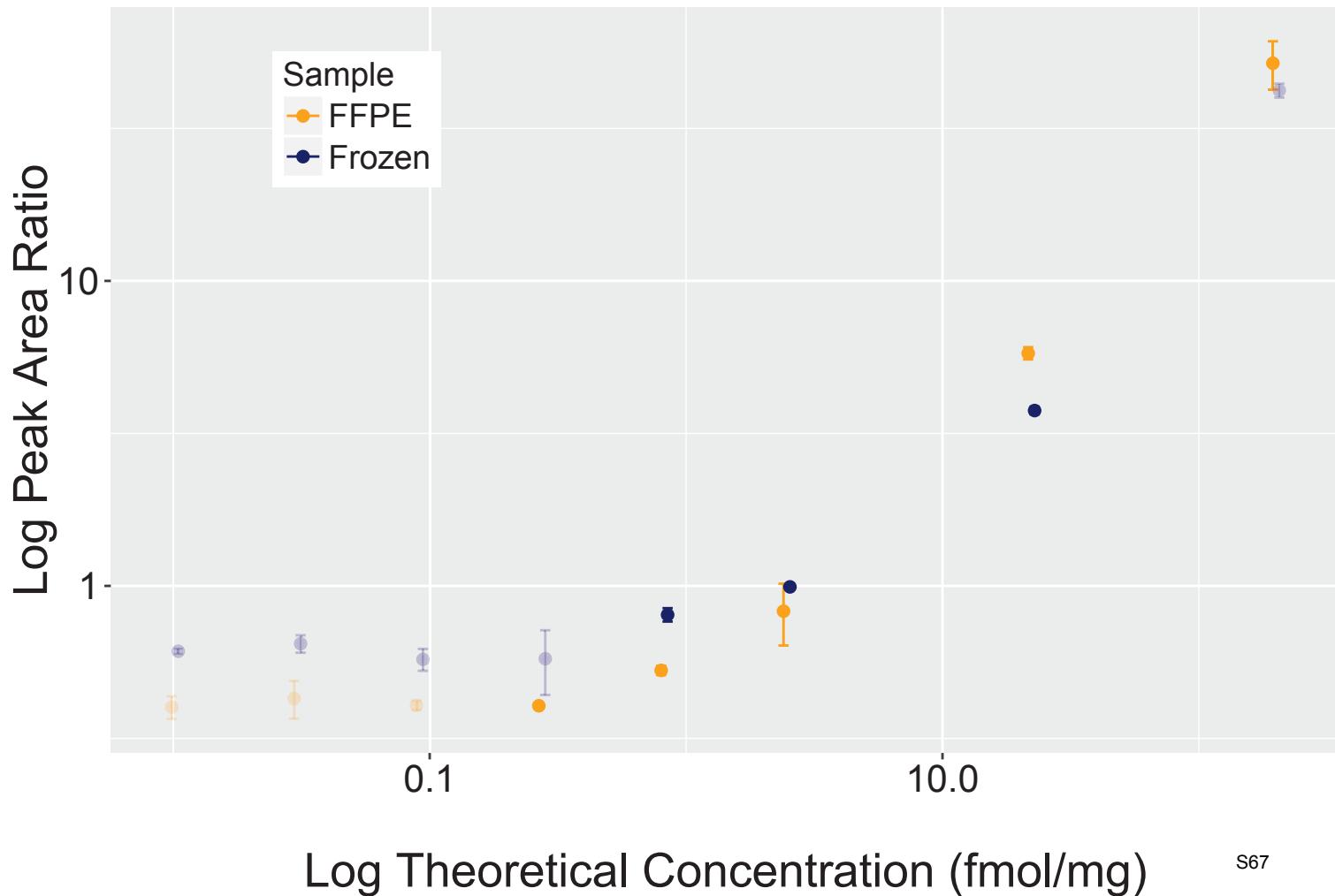
Analyte: ACTR3.AEPEDHYFLLTEPPLNTPENR



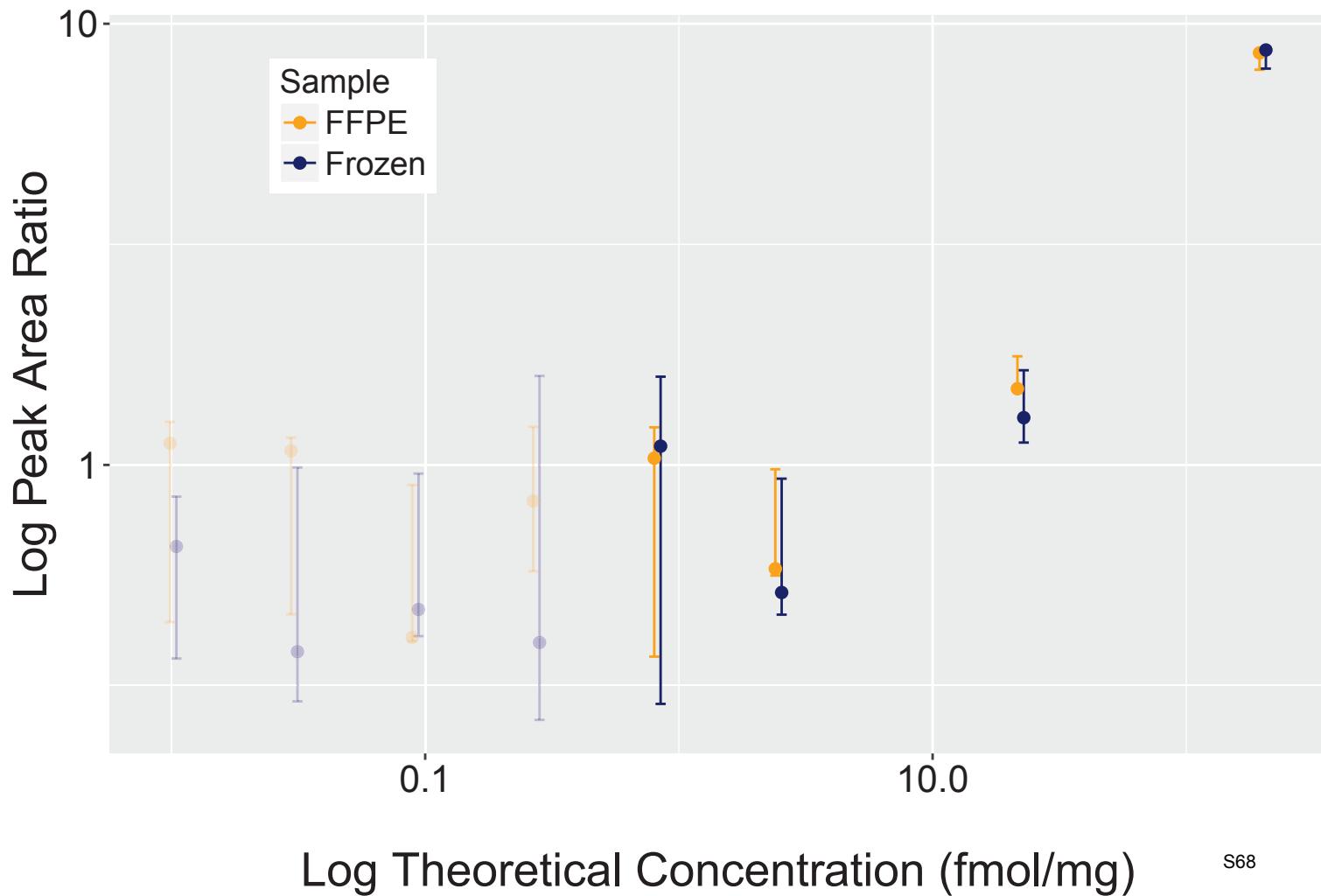
Analyte: STOML2.AEQINQAAAGEASAVLAK



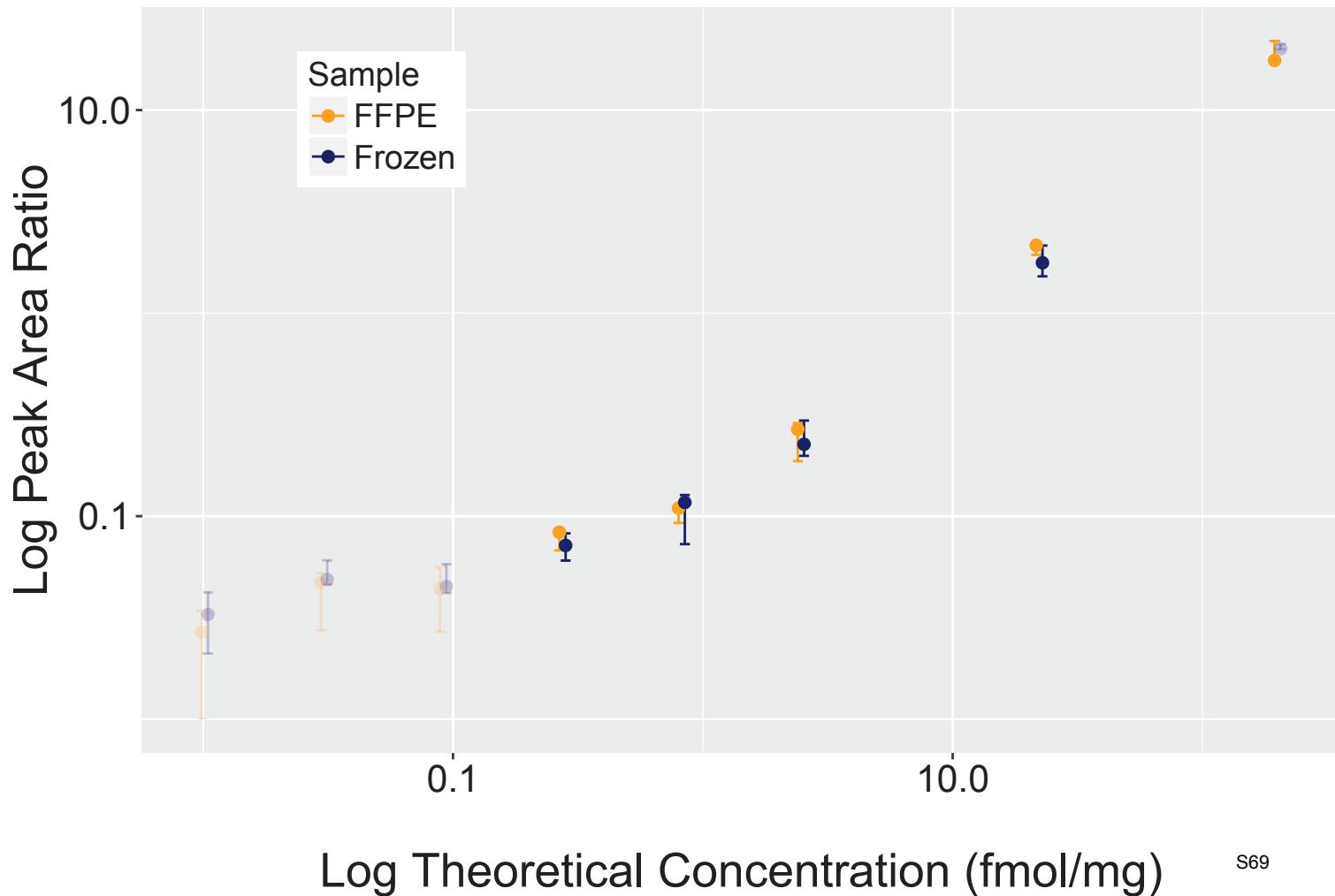
Analyte: MARS.AEVLISTVGPEDC[+57]VVPFLTRPK



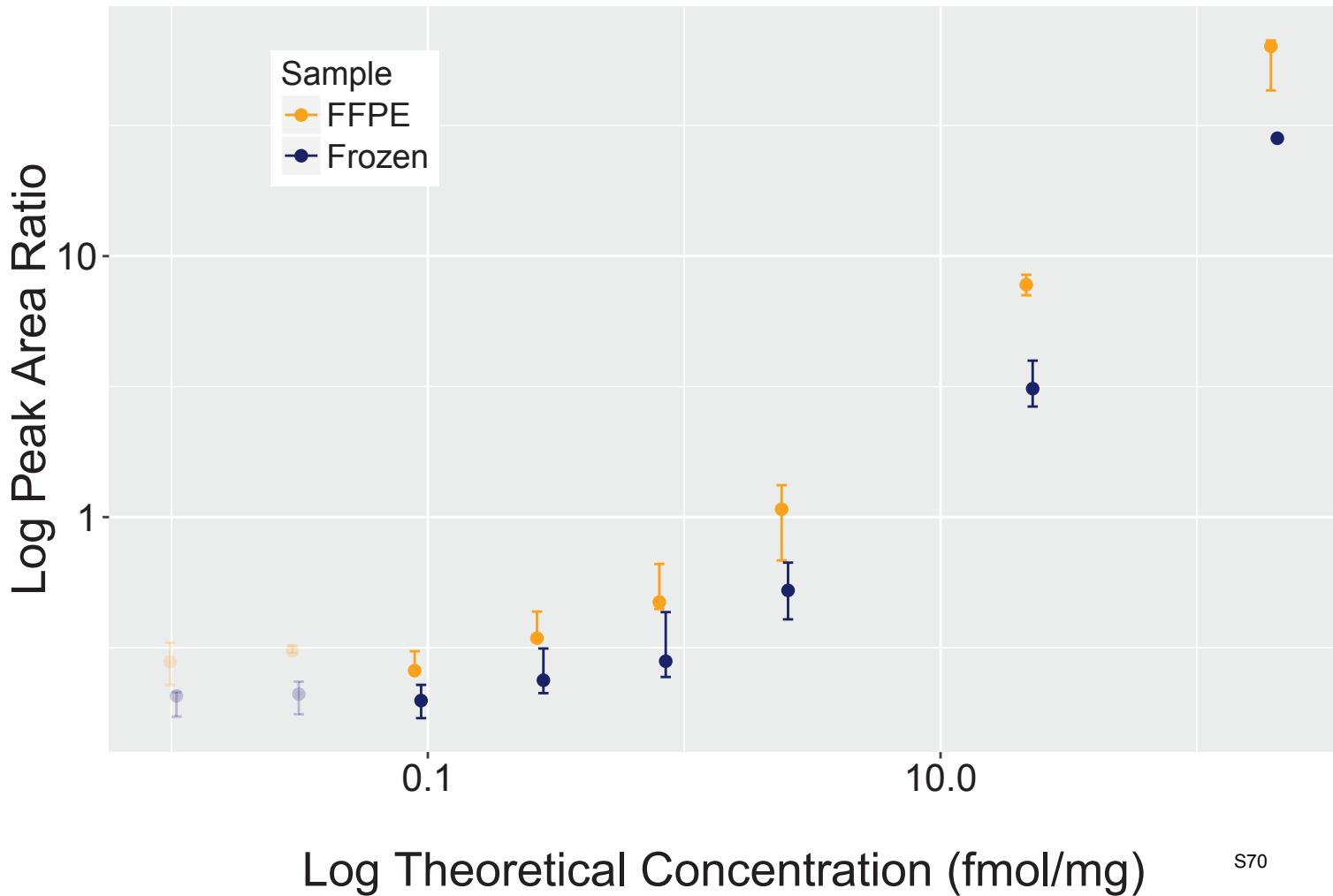
Analyte: ITGA6.AFIDVTAAAENIR



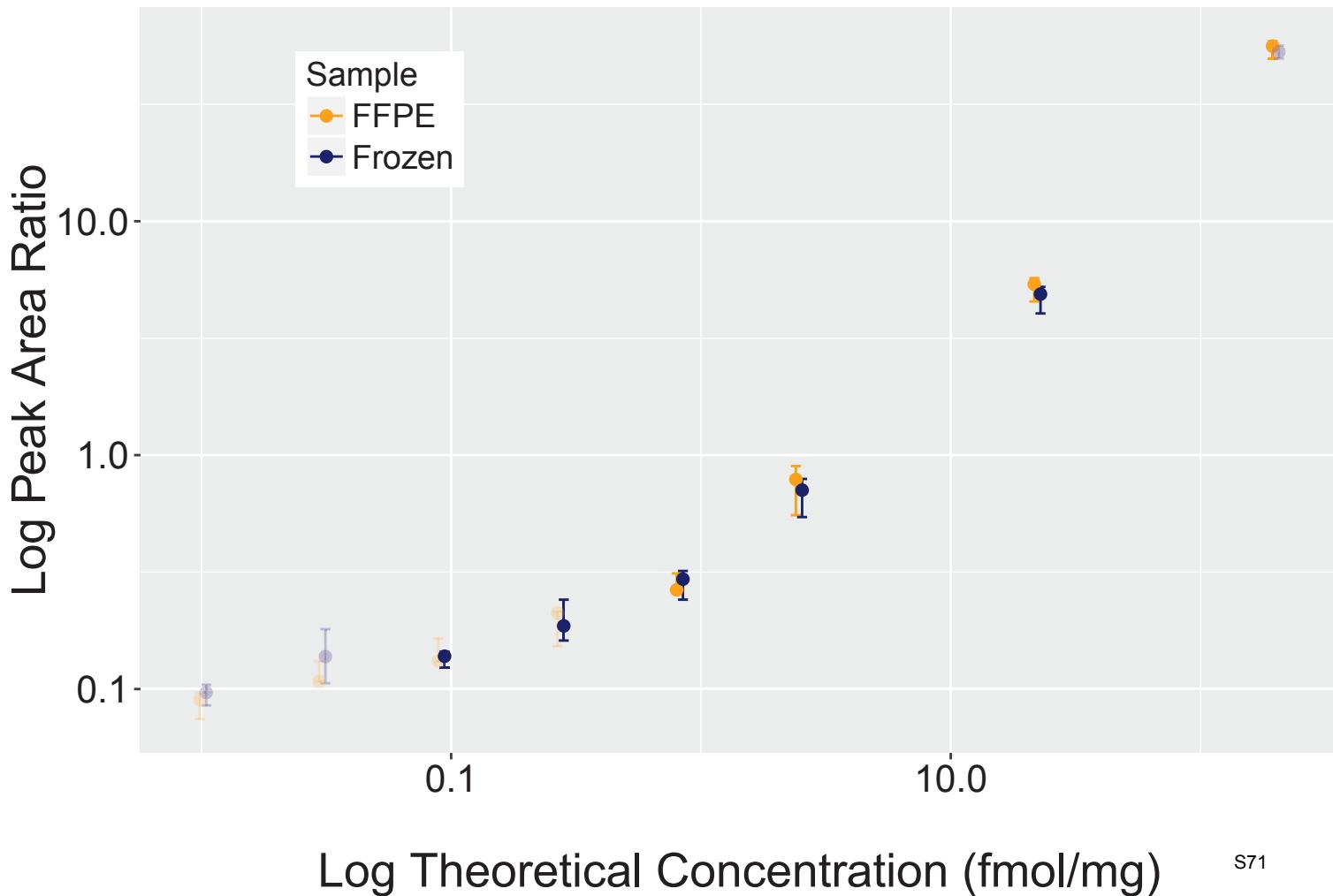
Analyte: HNRNPM.AFITNIPFDVK



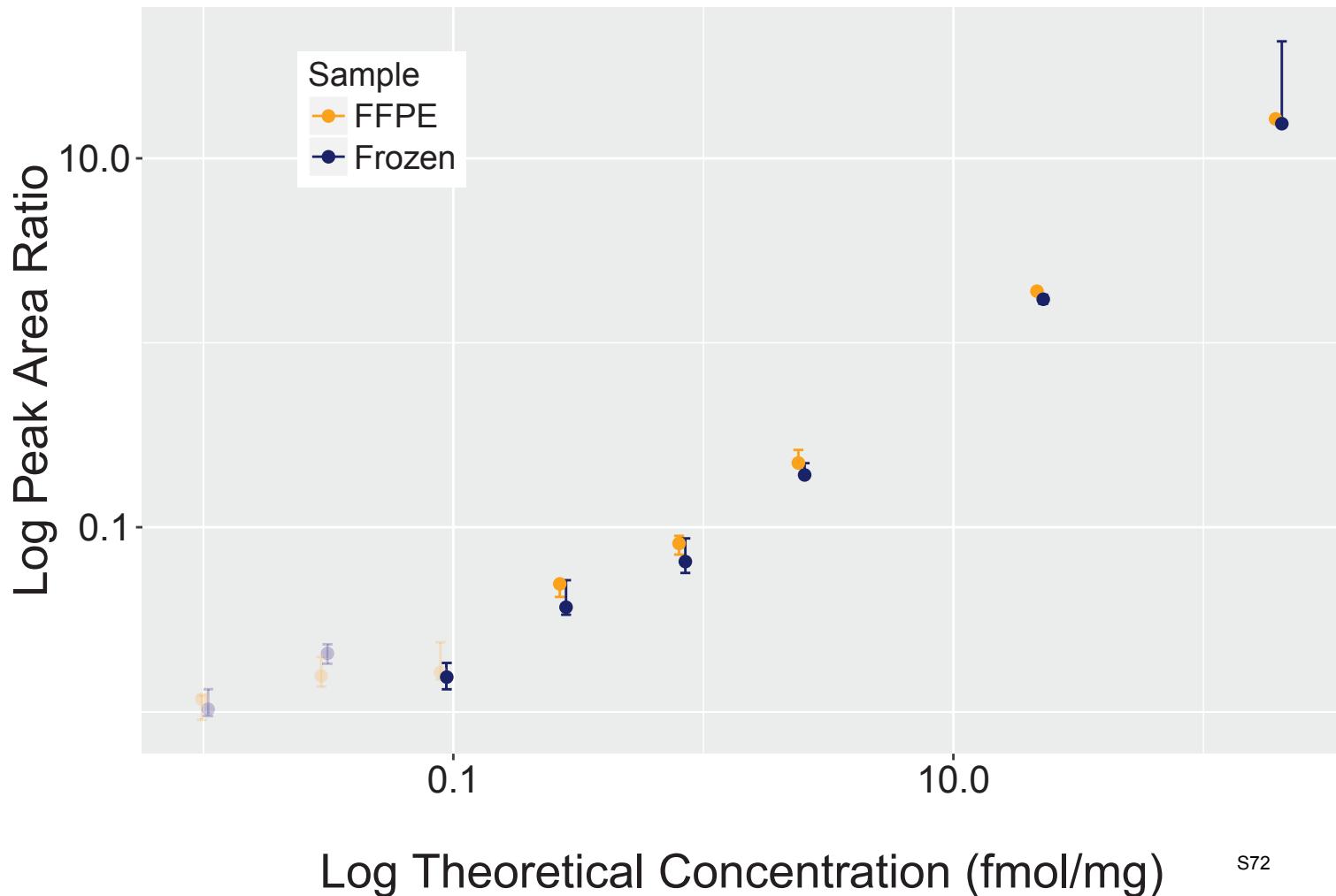
Analyte: GSTP1.AFLASPEYVNLPINGNGK



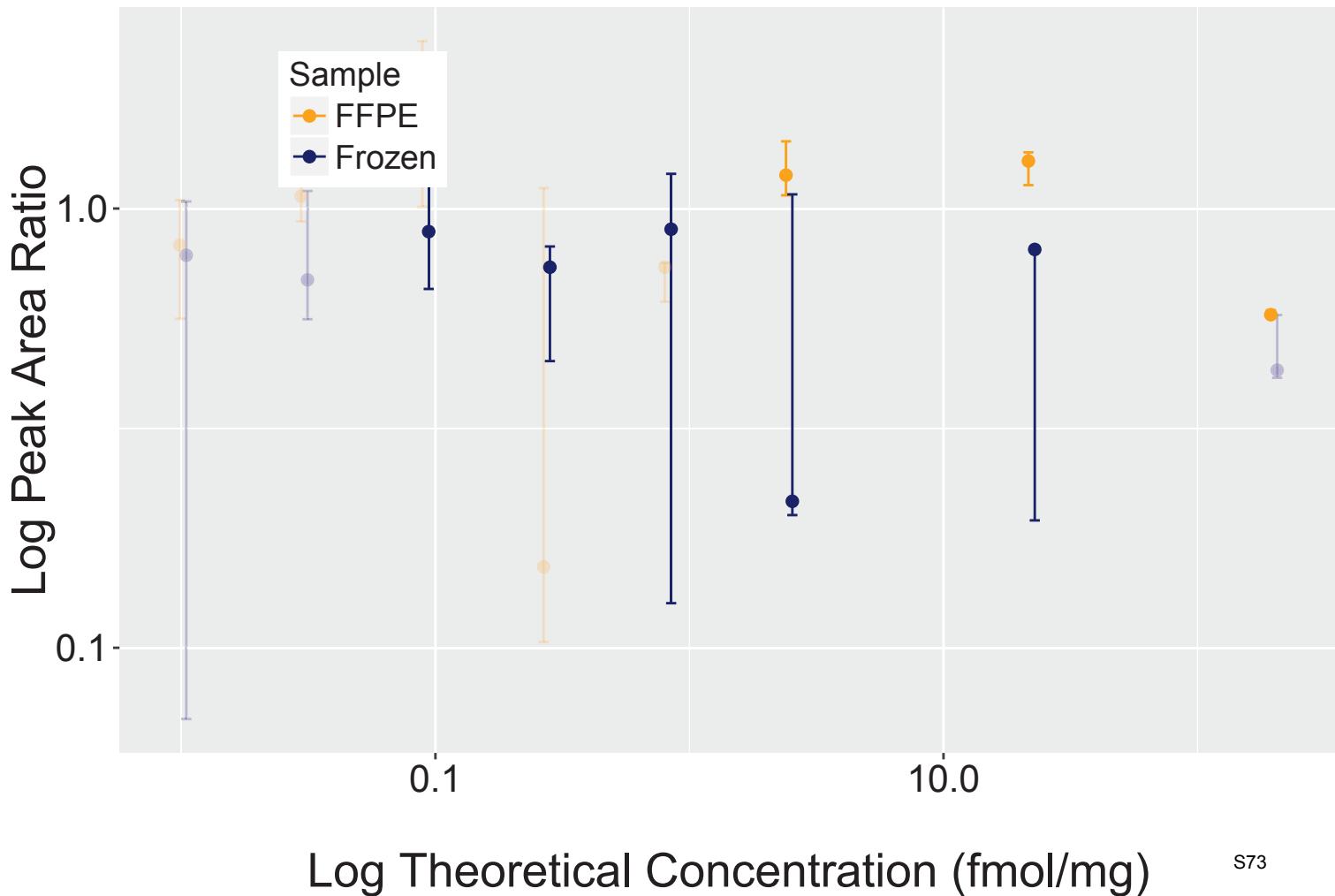
Analyte: TRAP1.AFLDALQNQAEASSK



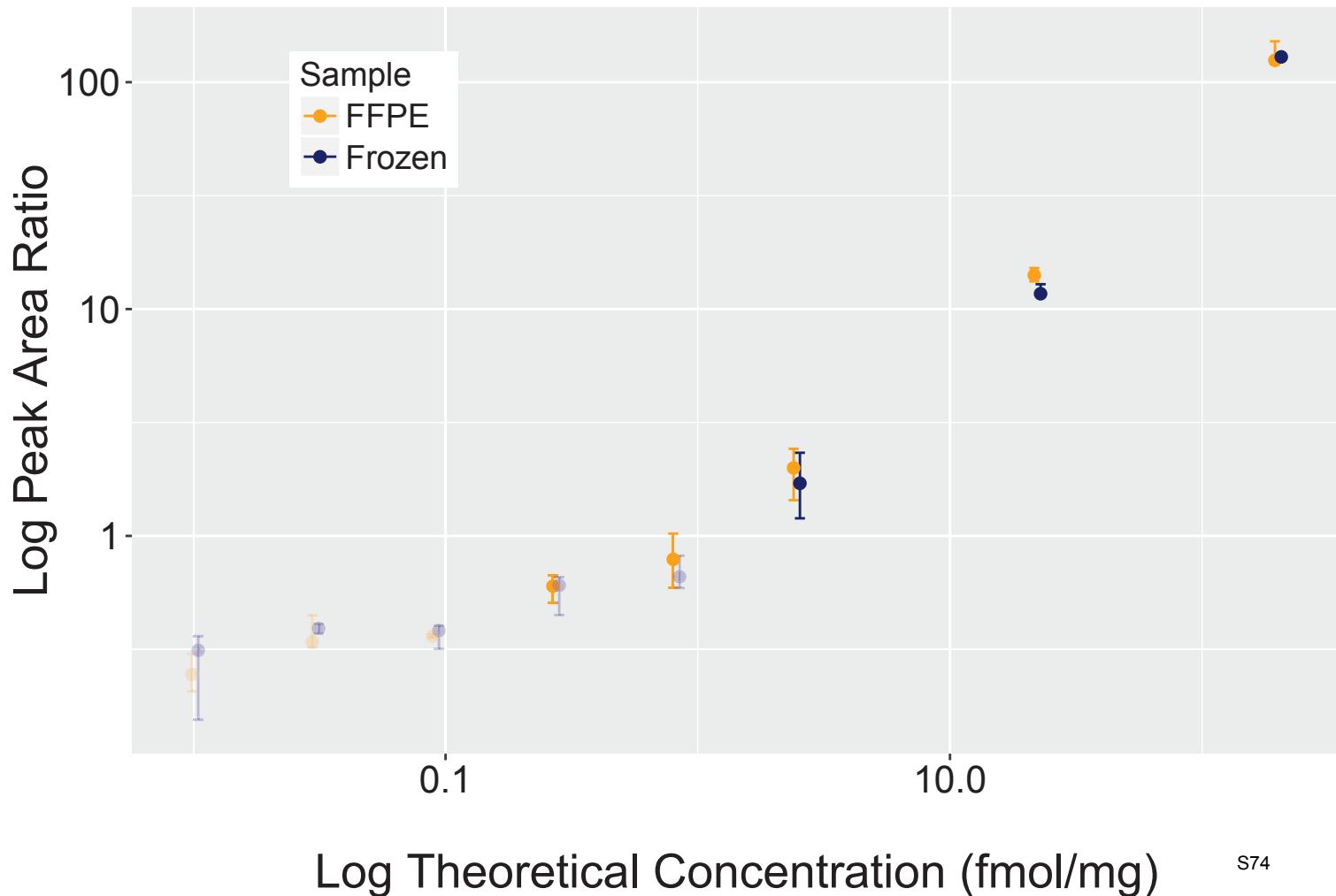
Analyte: ESD.AFSGYLGTDQSK



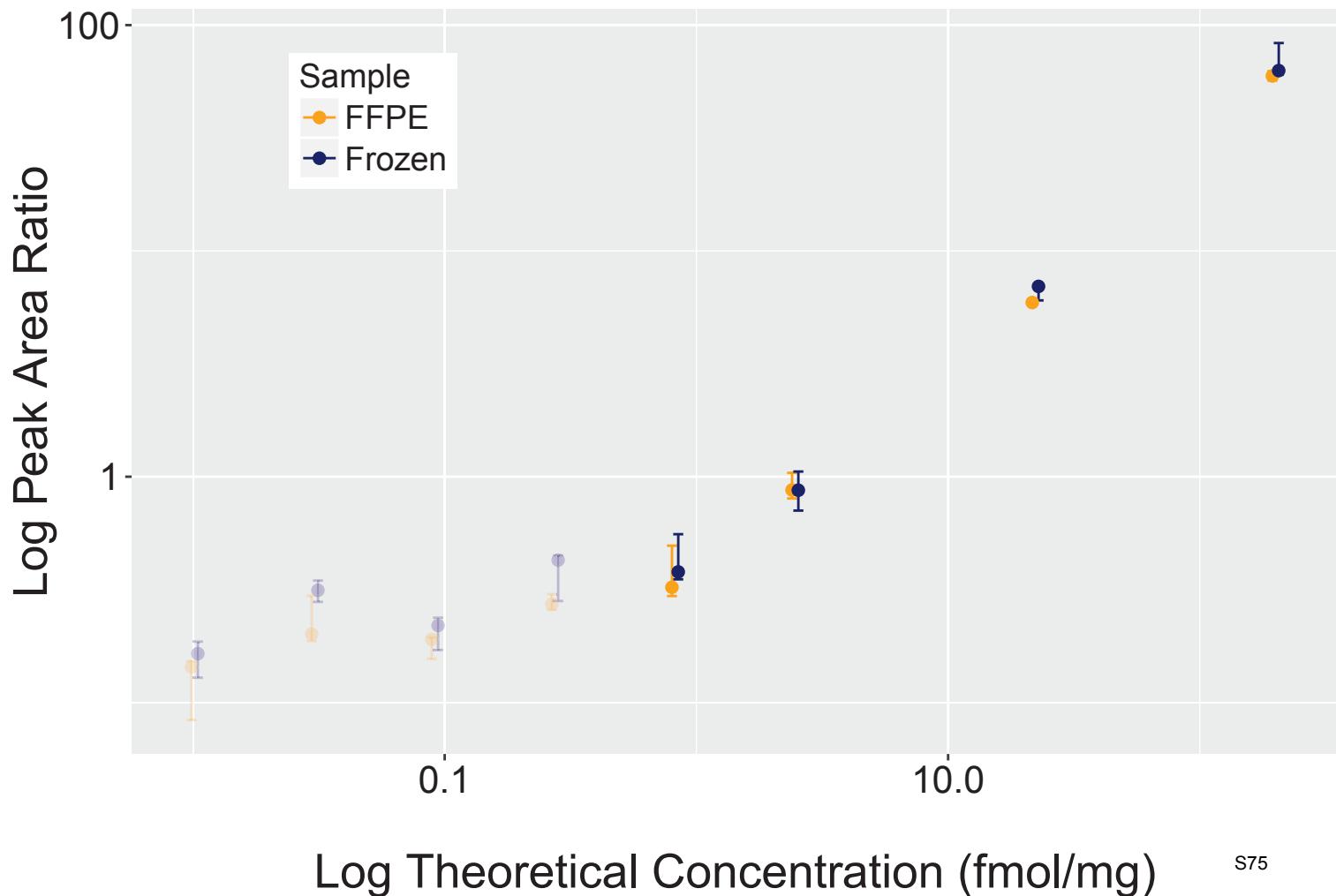
Analyte: CAT.AFYVNVLNEEQR



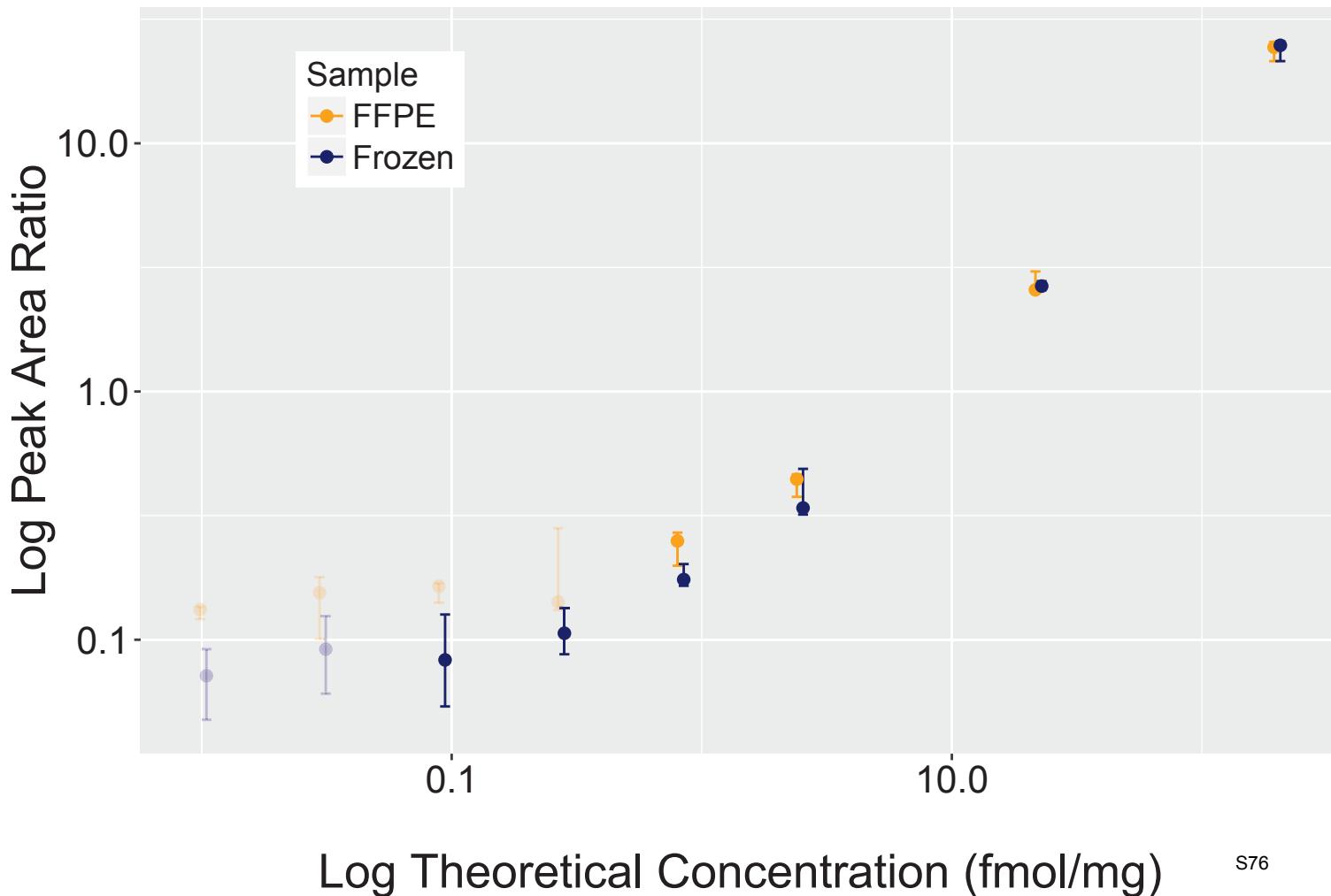
Analyte: FAM83H.AGFADPDDFTLGAGPR



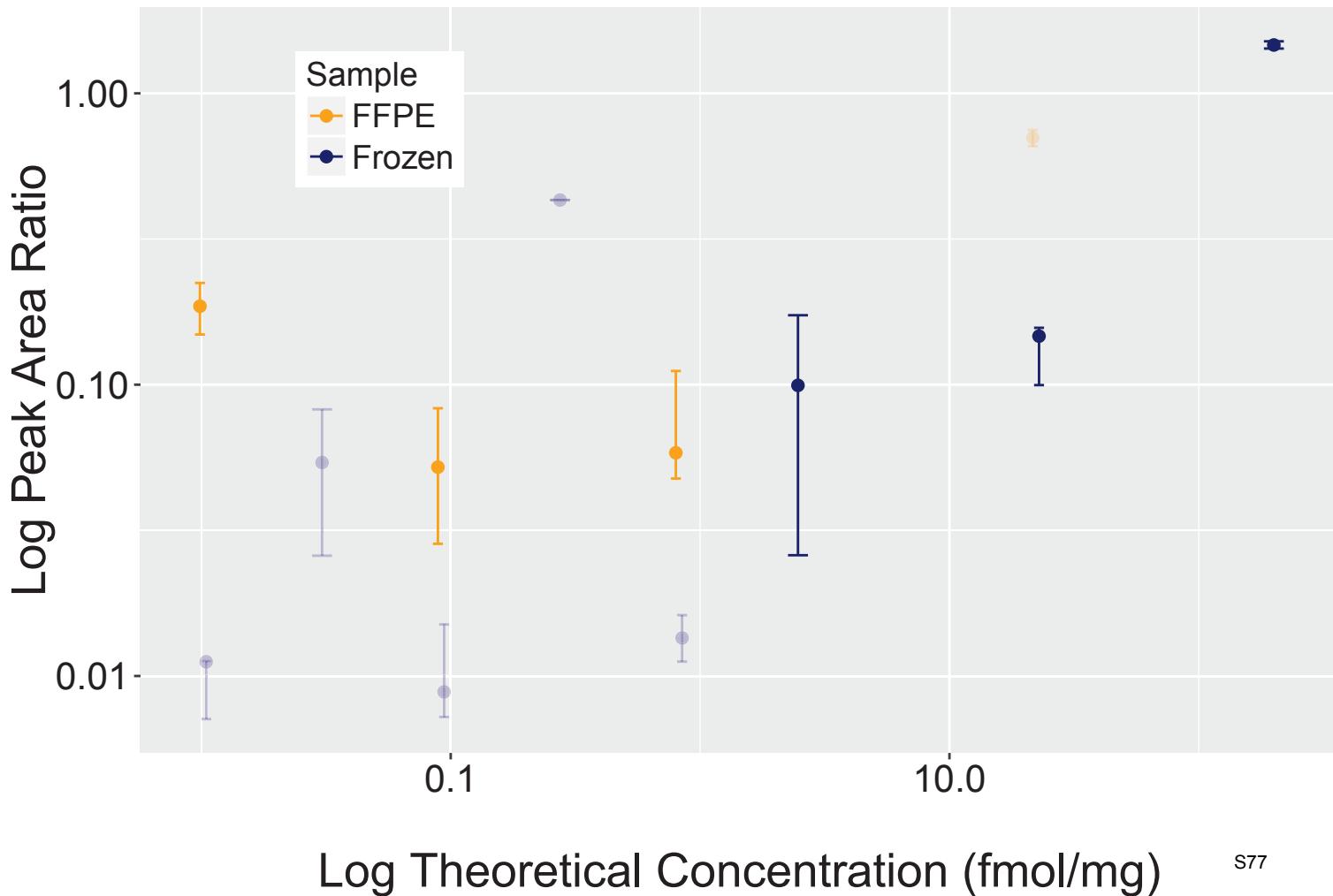
Analyte: XPO5.AGGFVVGYTSSGNPIFR



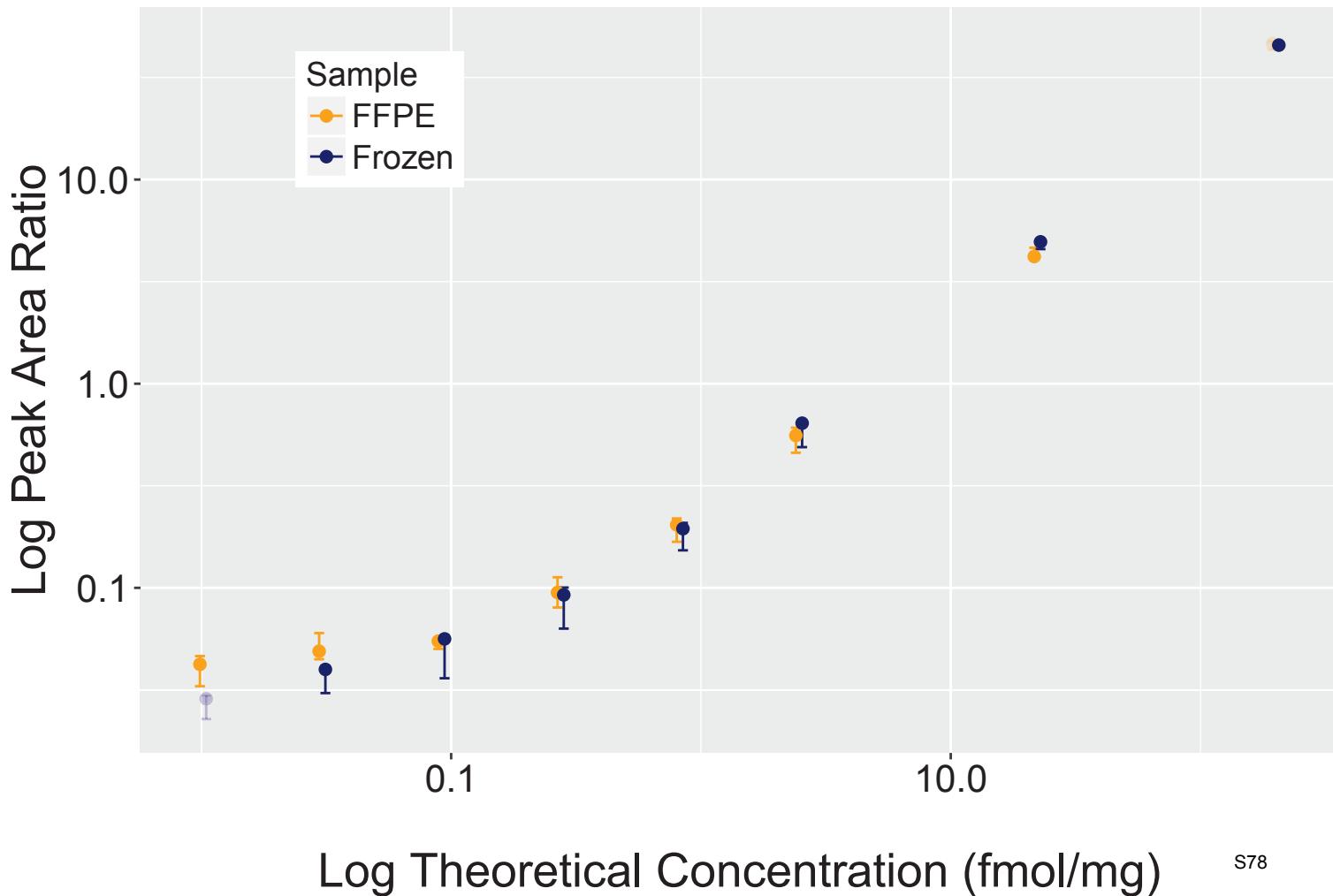
Analyte: MBOAT7.AGGGPTLQC[+57]PPPSSPEK



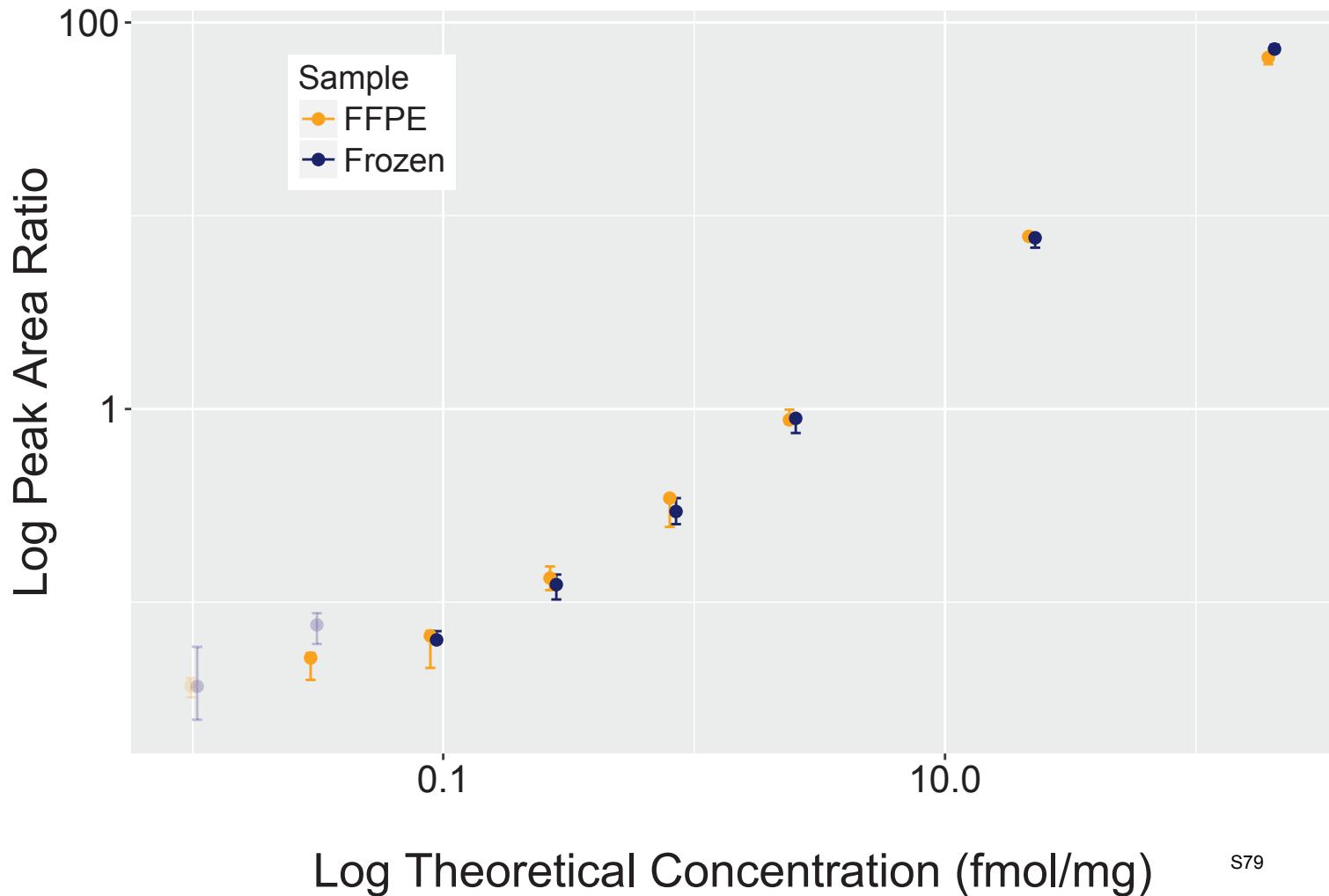
Analyte: LMNA.AGQVVTIWAAGAGATHSPPTDLVWK



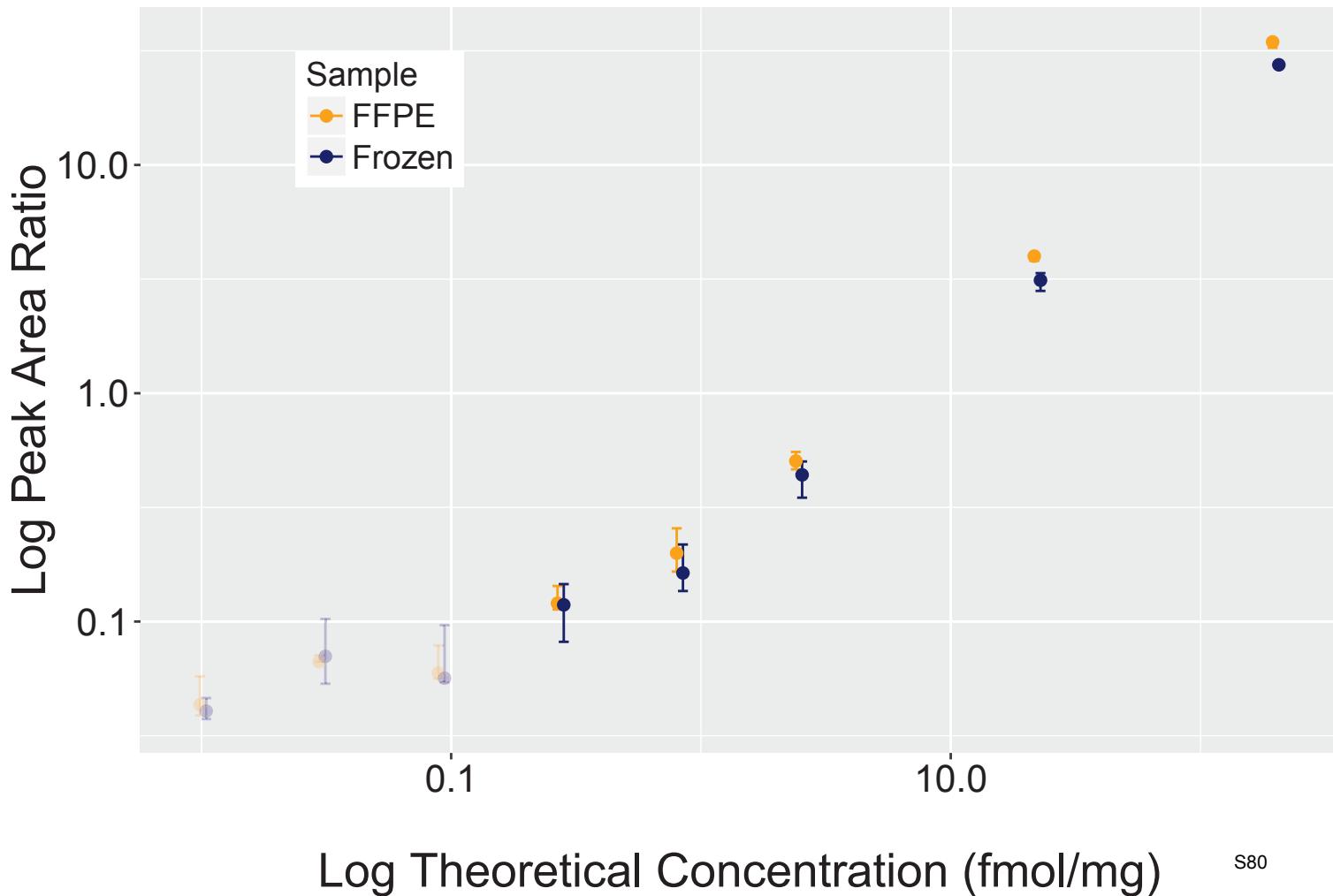
Analyte: HUWE1.AGSSTPGDAPPAAEVQGR



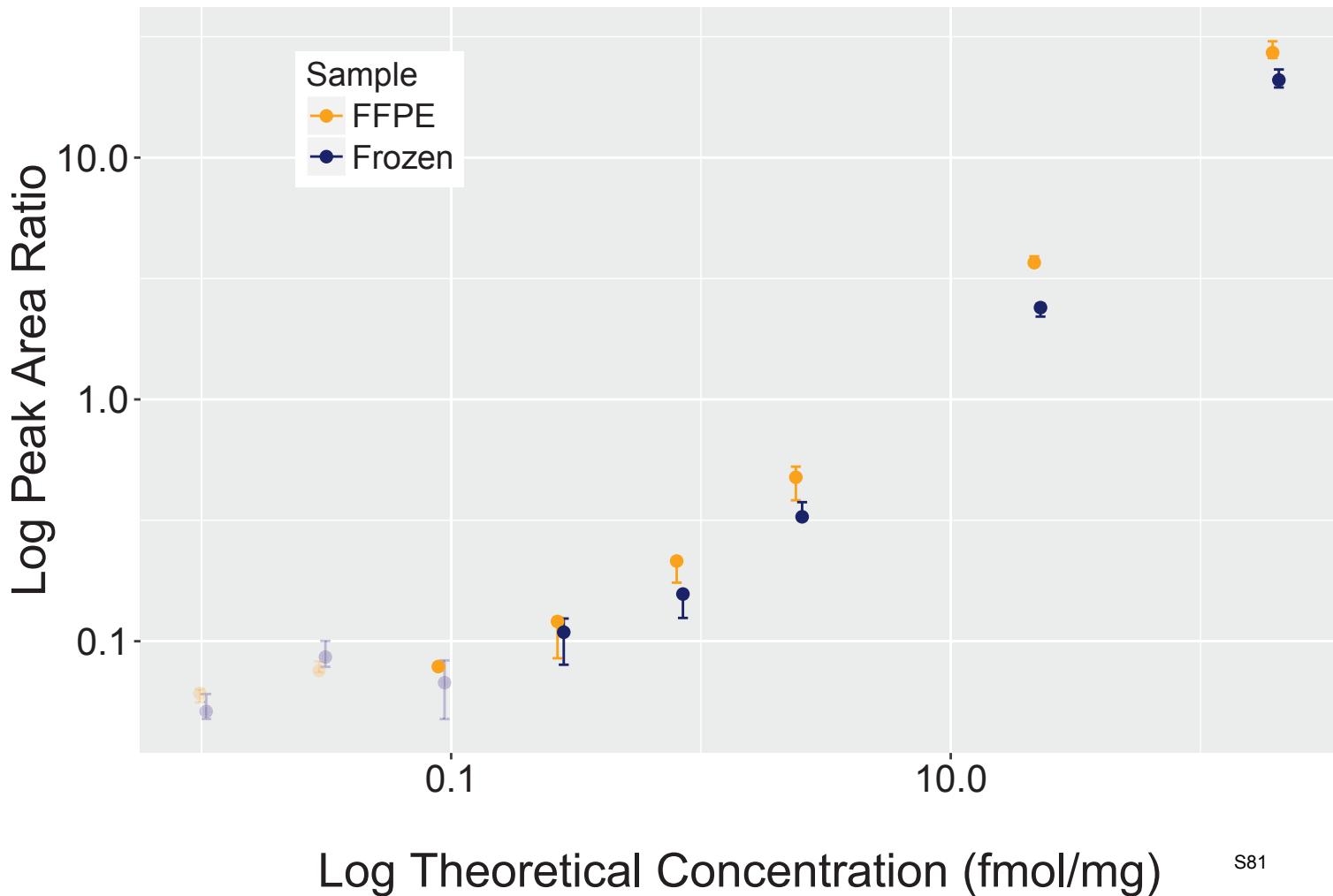
Analyte: PHGDH.AGTGVDNVVDLEAATR



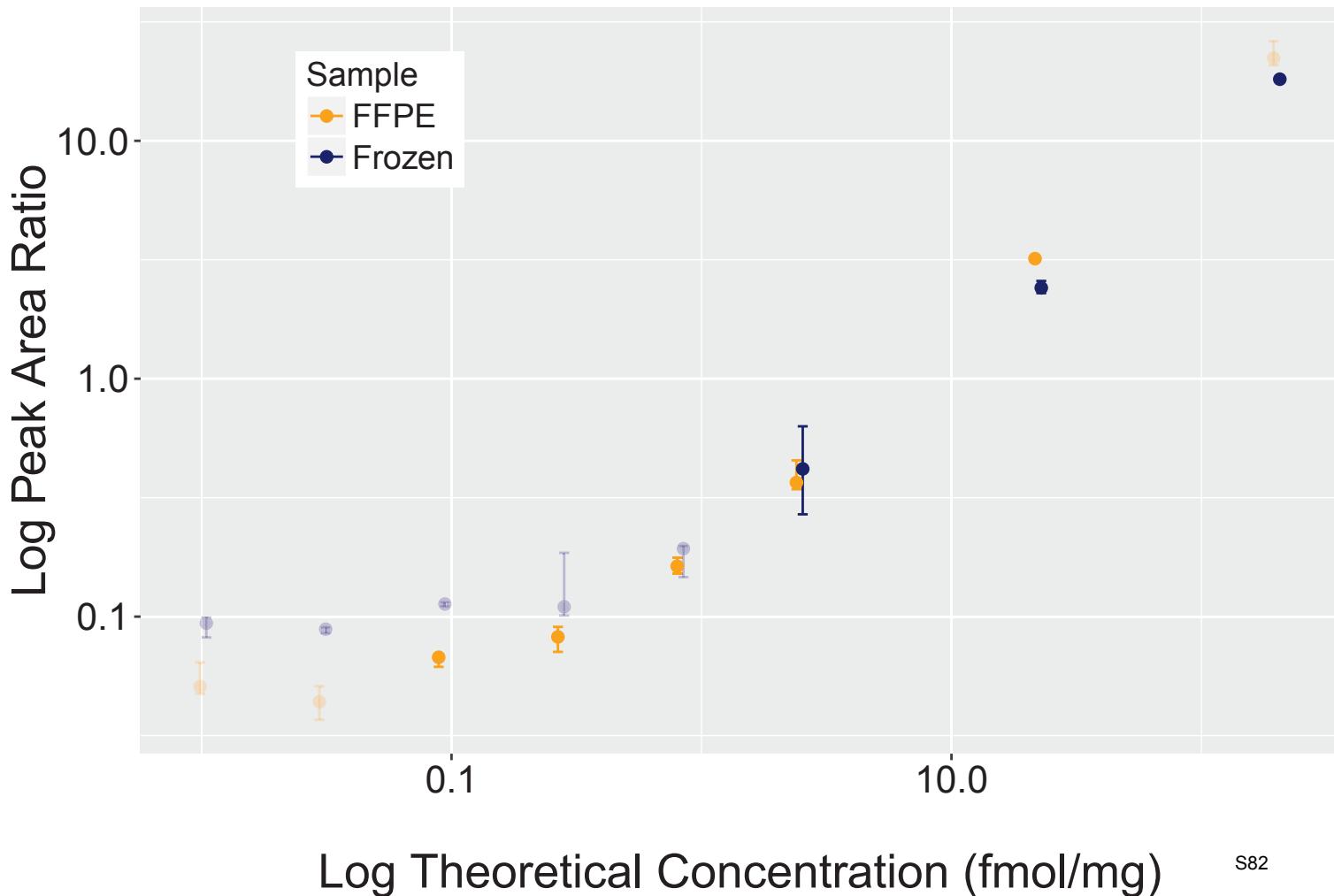
Analyte: CMBL.AGVSVYGVK



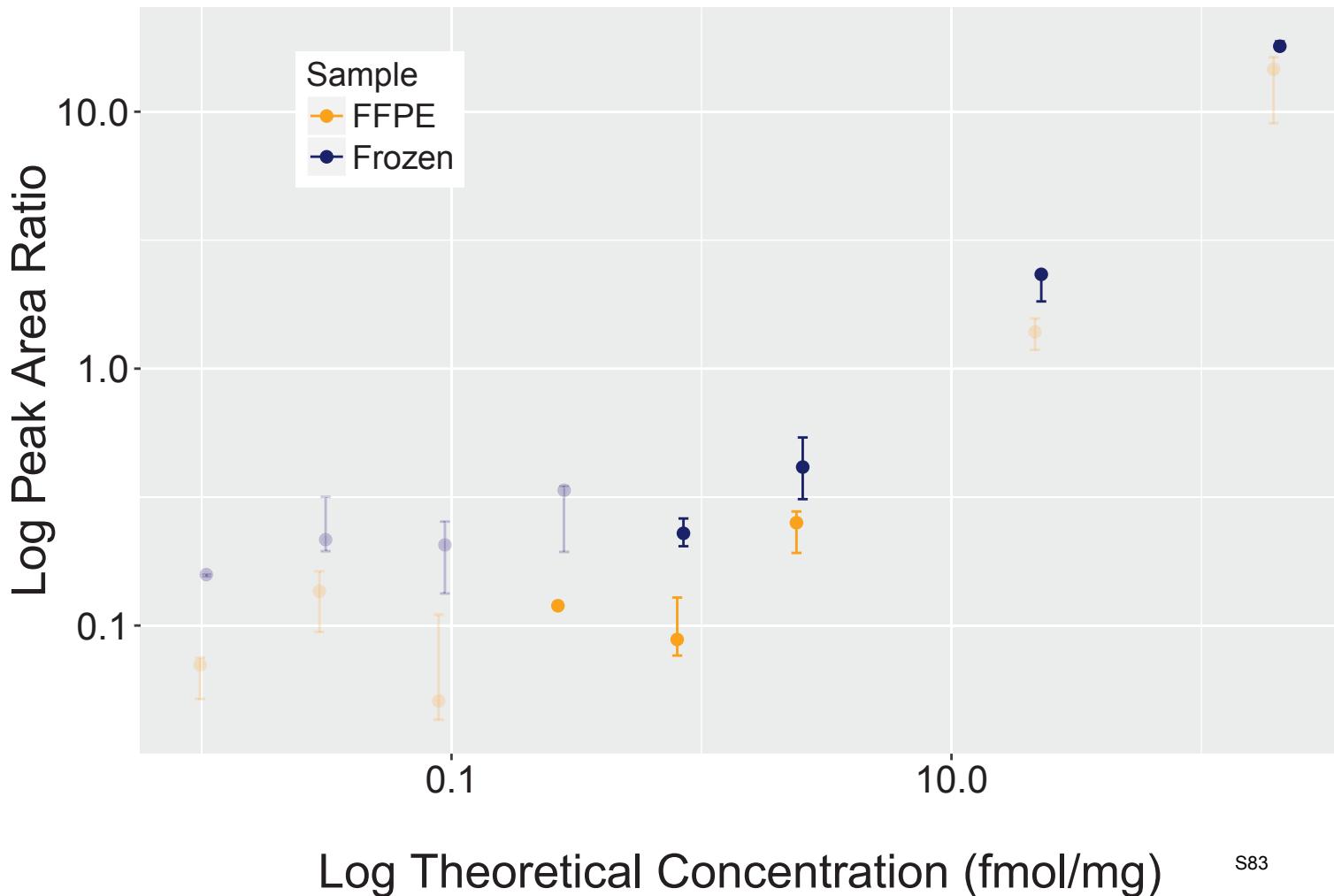
Analyte: CCT8.AIADTGANVVVTGGK



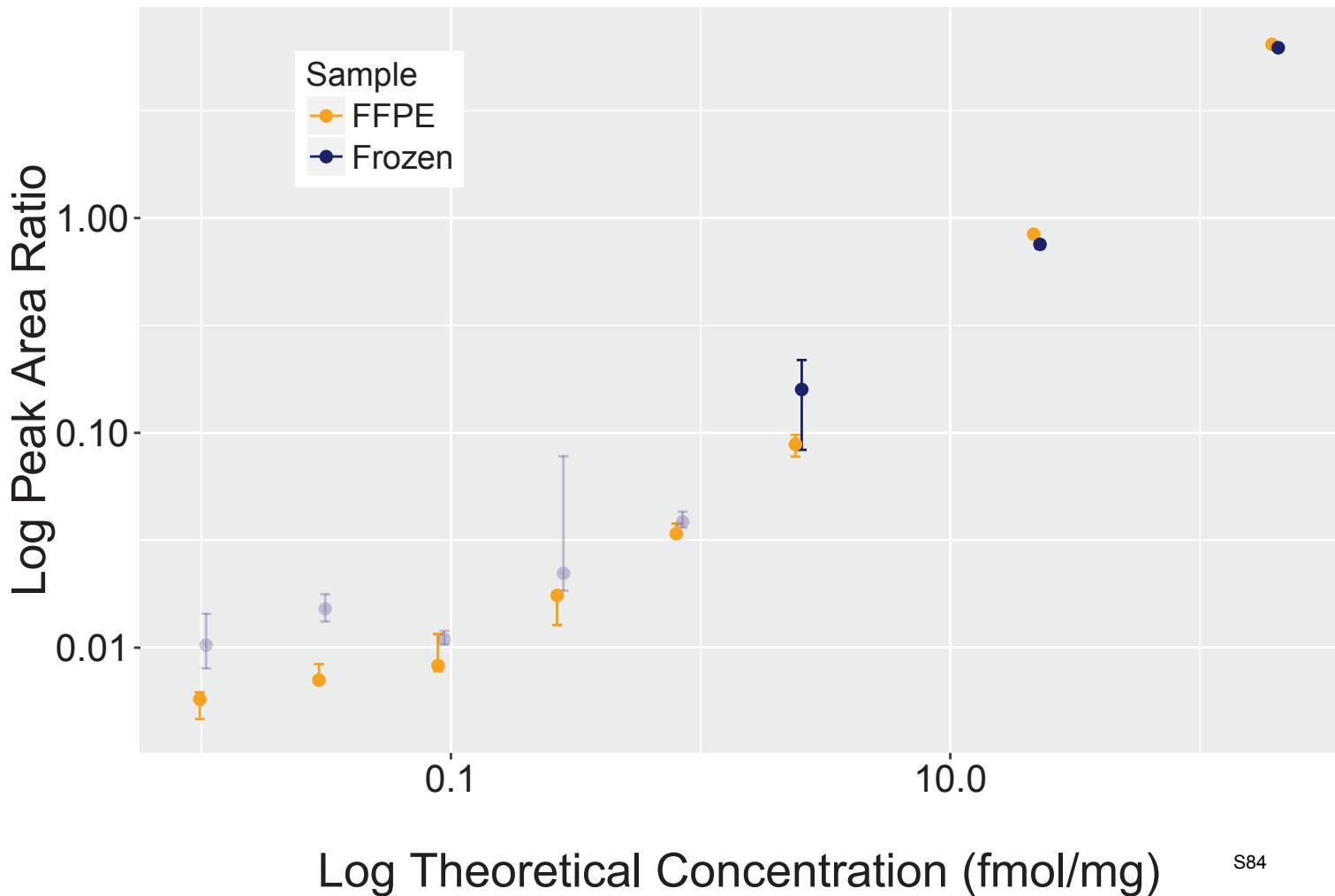
Analyte: GSS.AIENELLAR



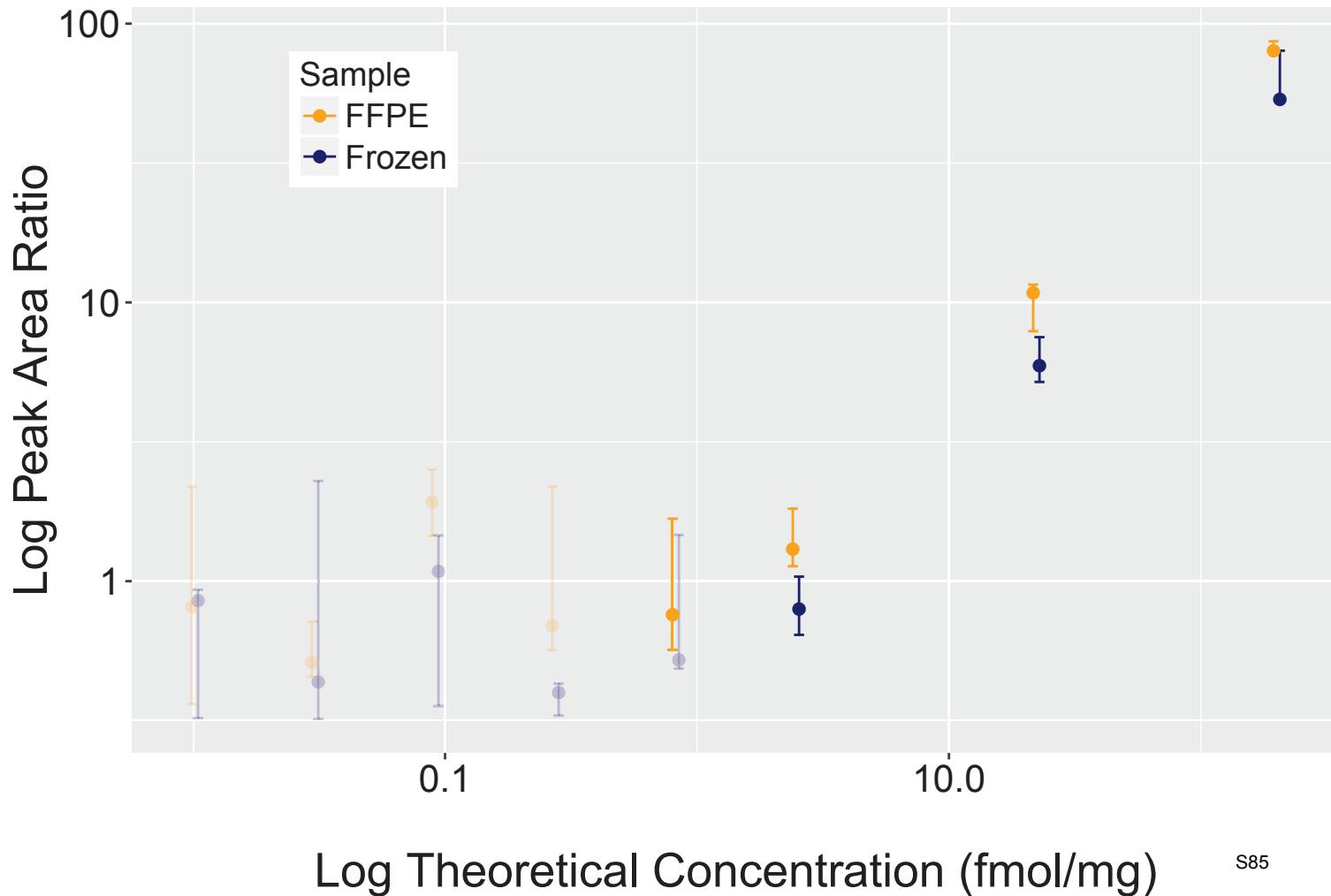
Analyte: CORO1C.AIFLADGNVFTTGF



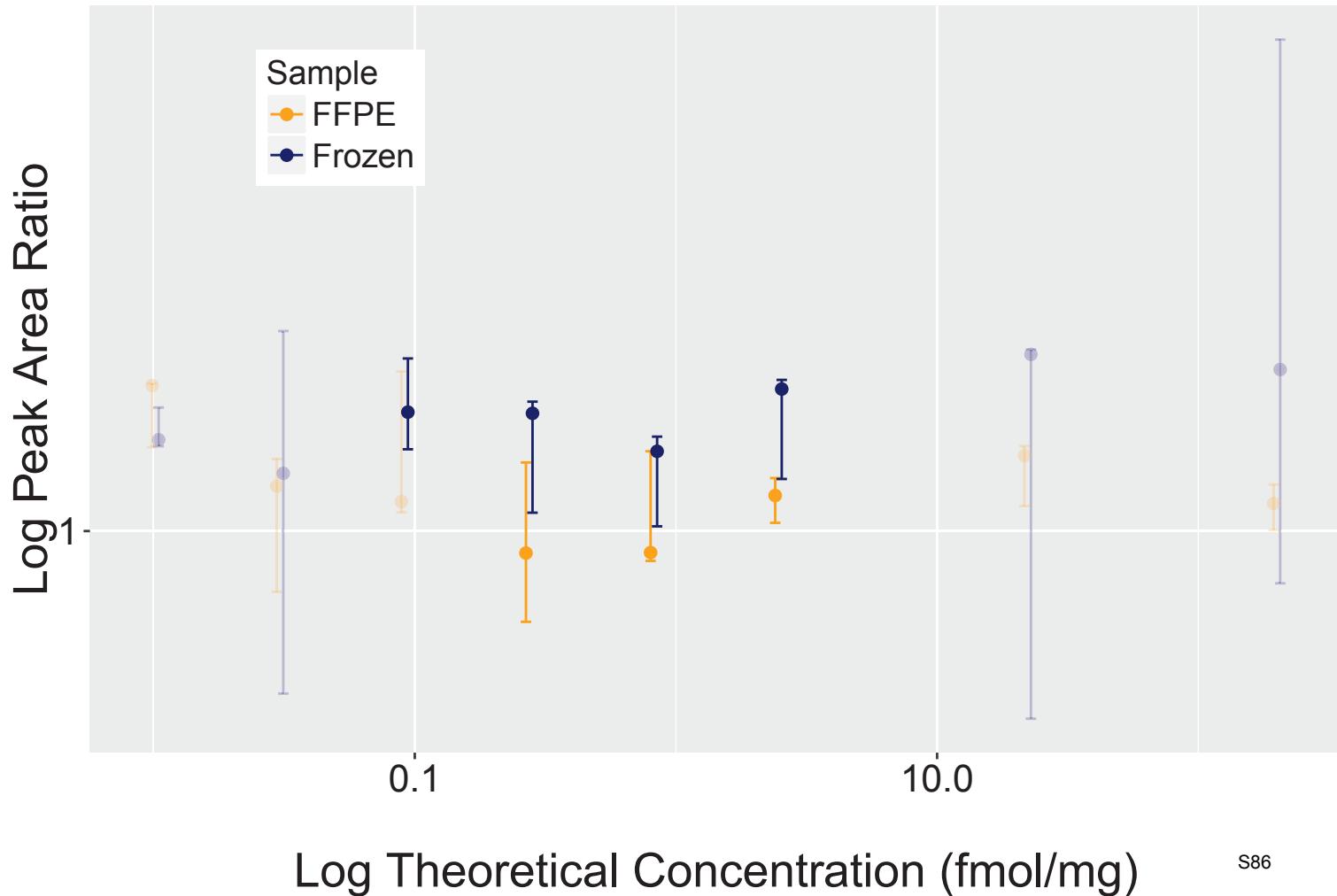
Analyte: PAFAH1B3.AIVQLVNER



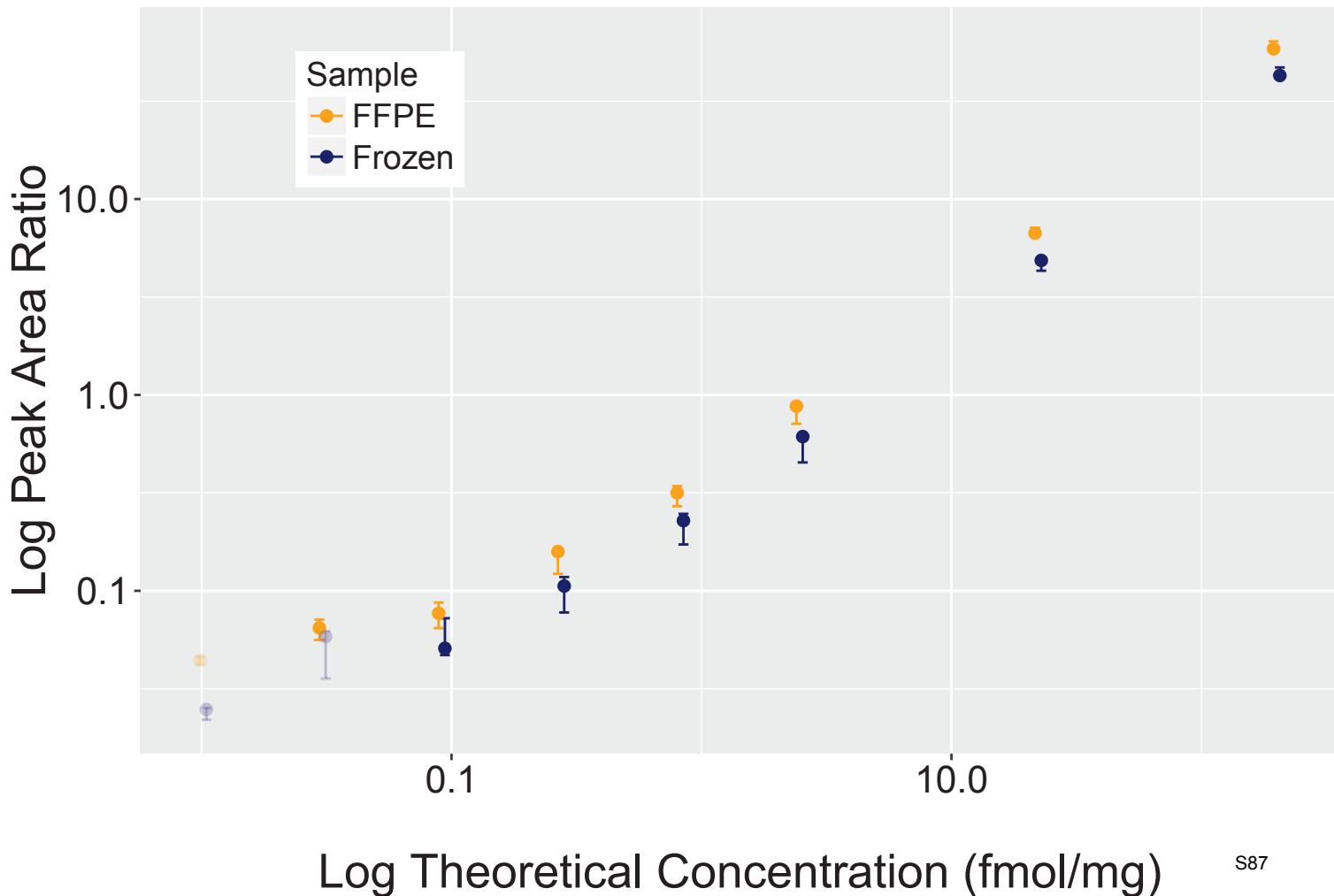
Analyte: EPCAM.AKPEGALQNNDGLYDPDC[+57]DESGL



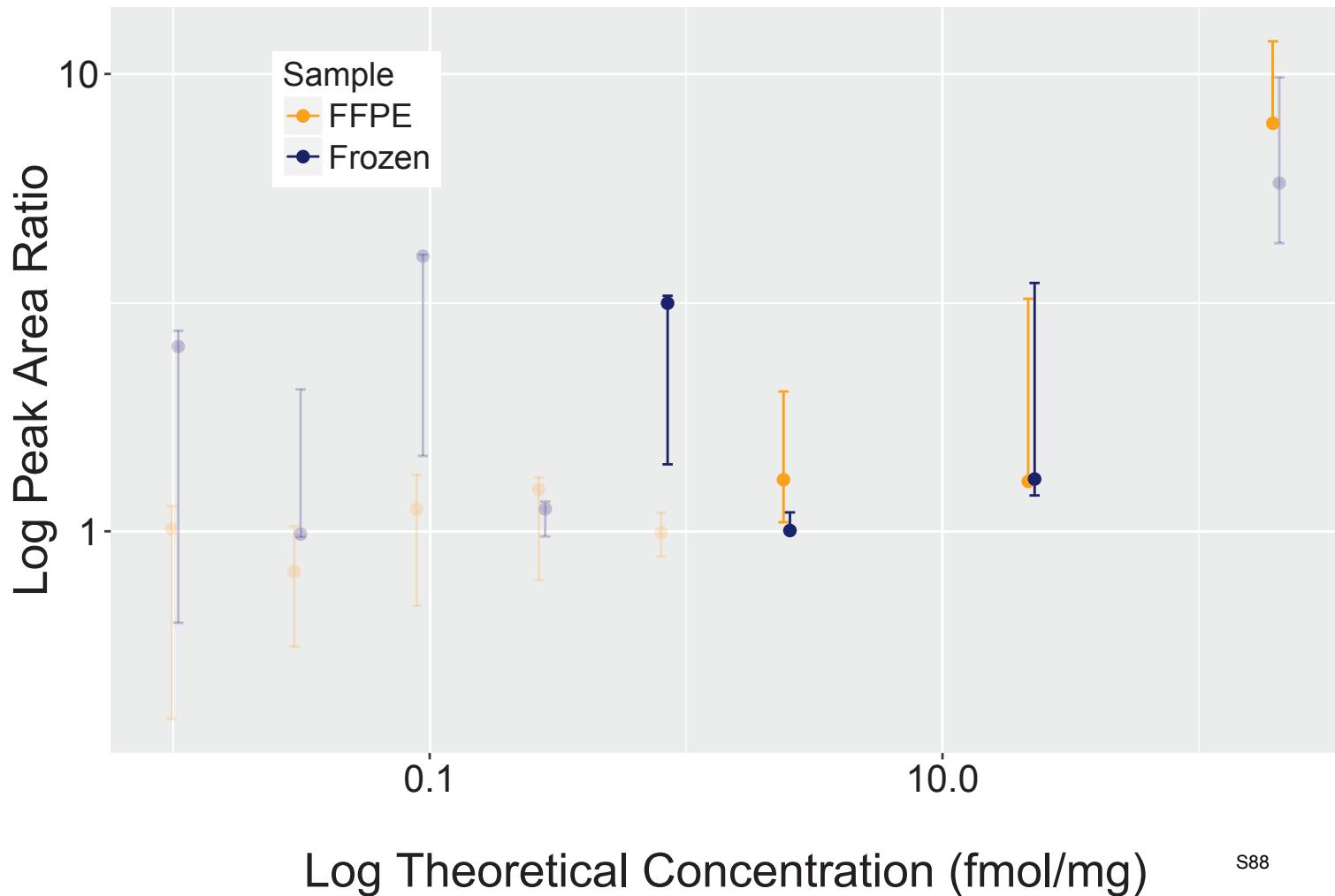
Analyte: PDIA6.ALDLFSDNAPPPELLEIINEDIAK



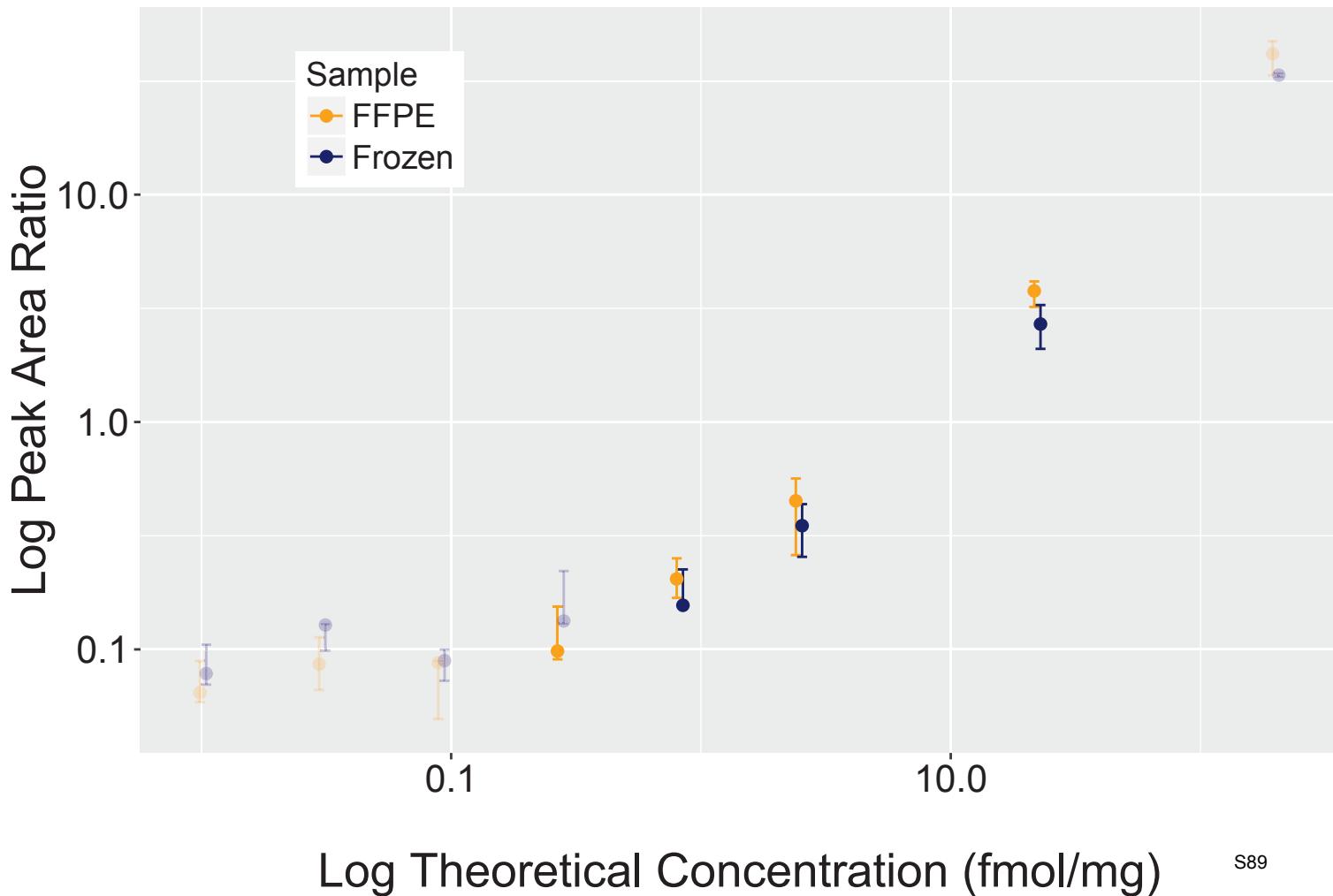
Analyte: APEH.ALDVSASDDEIAR



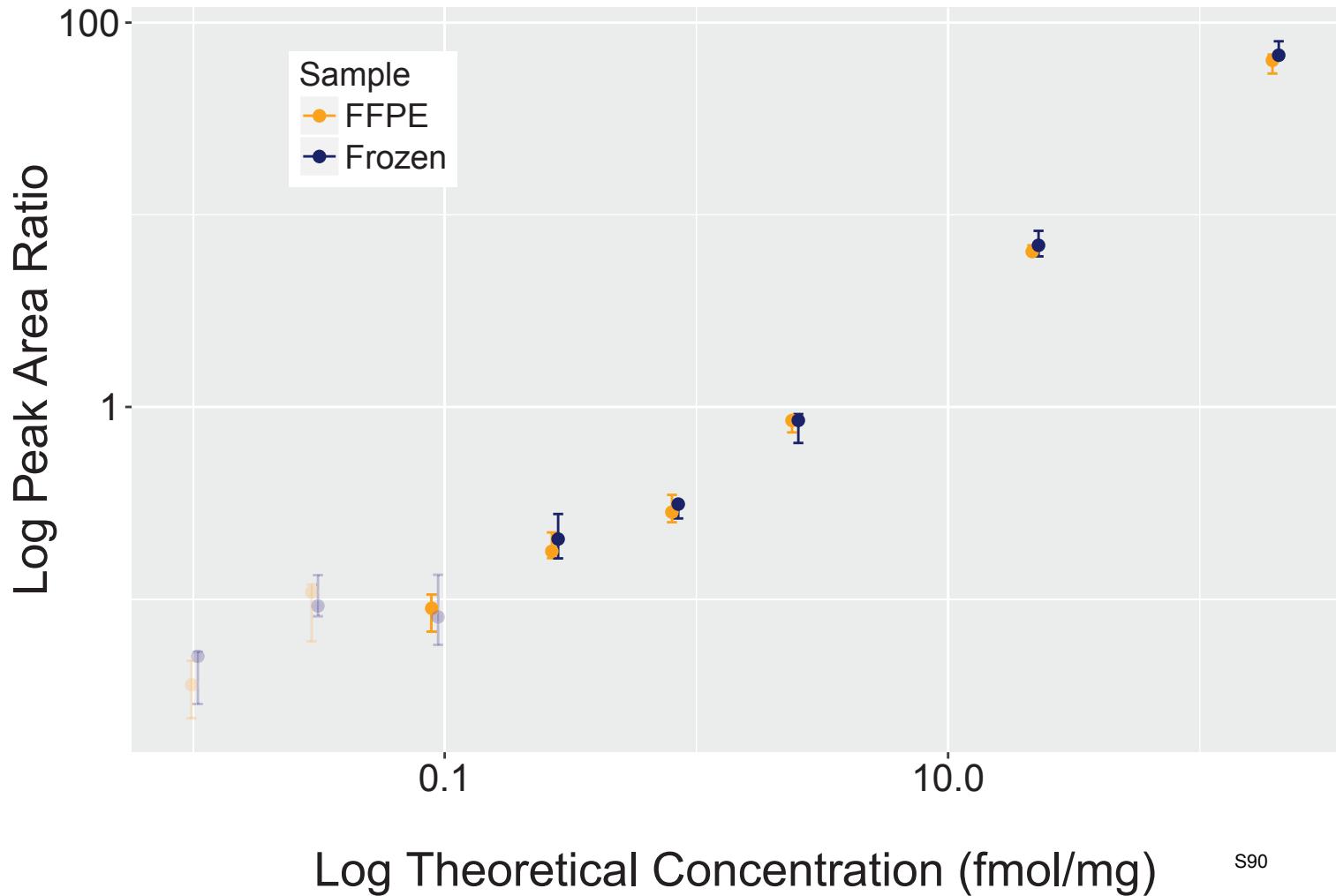
Analyte: TXNRD1.ALEGTLSELAAETDLPVVFVK



Analyte: RUVBL1.ALESSIAPIVIFASNR

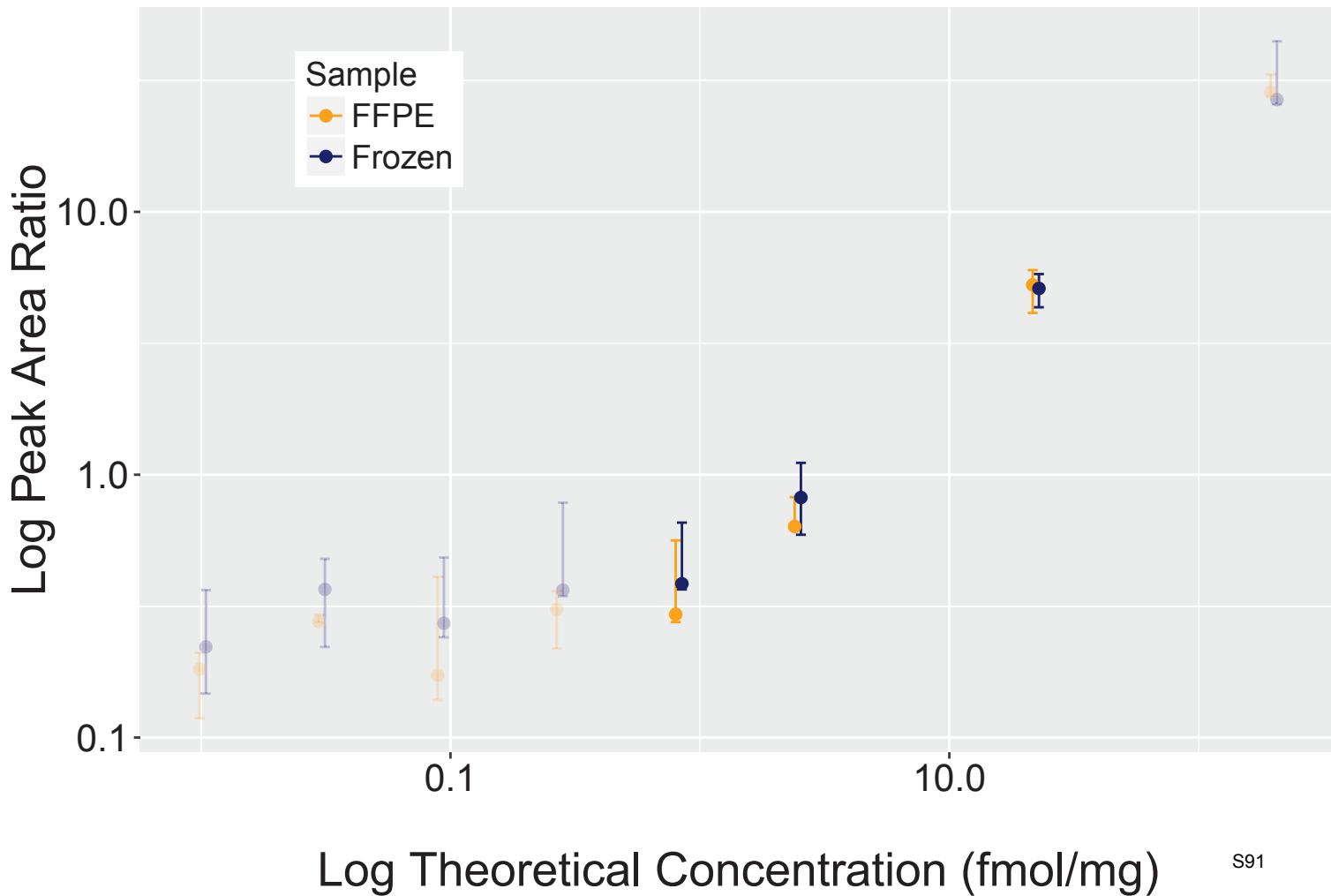


Analyte: CDKN2A.ALLEAGALPNAPNSYGR

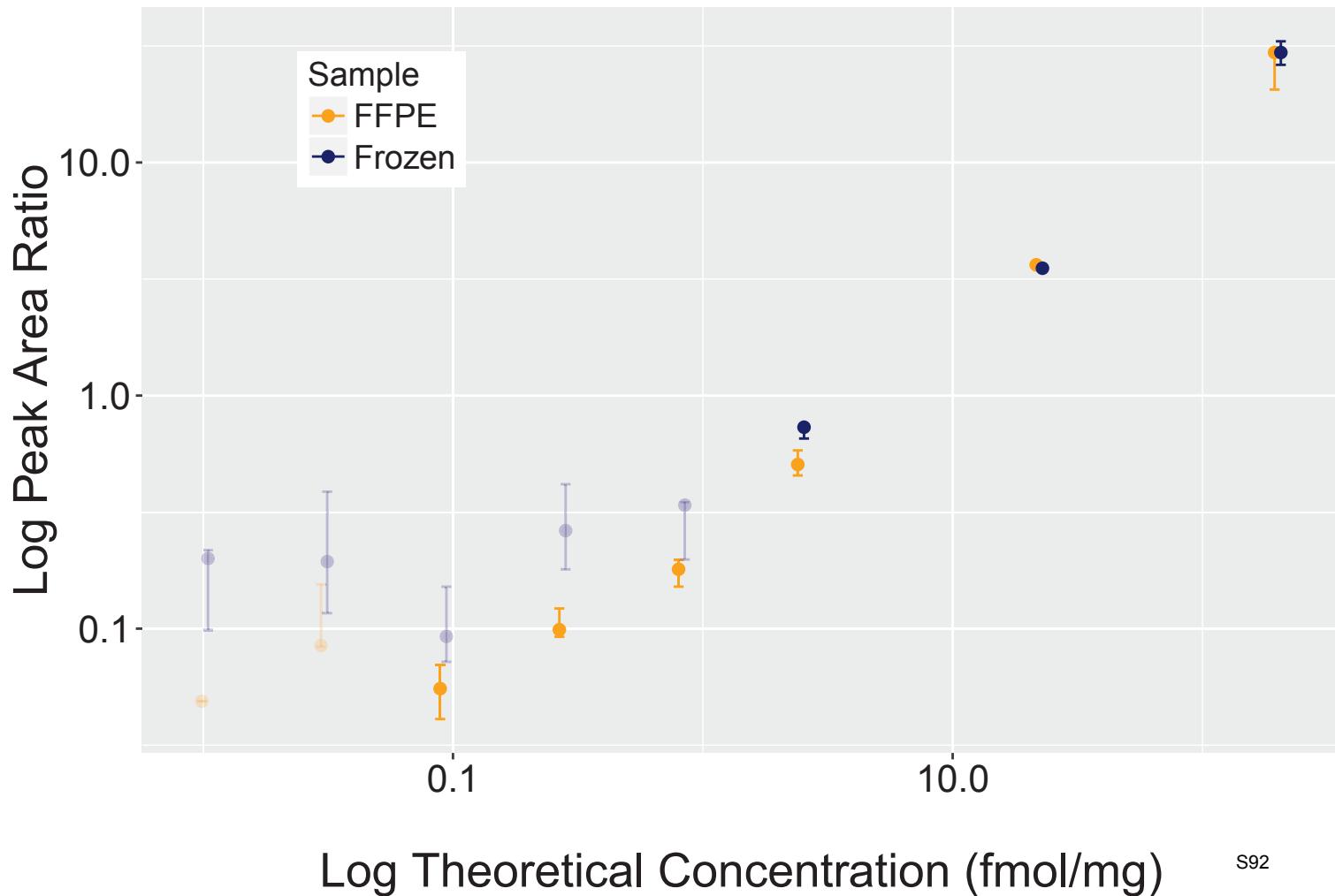


S⁹⁰

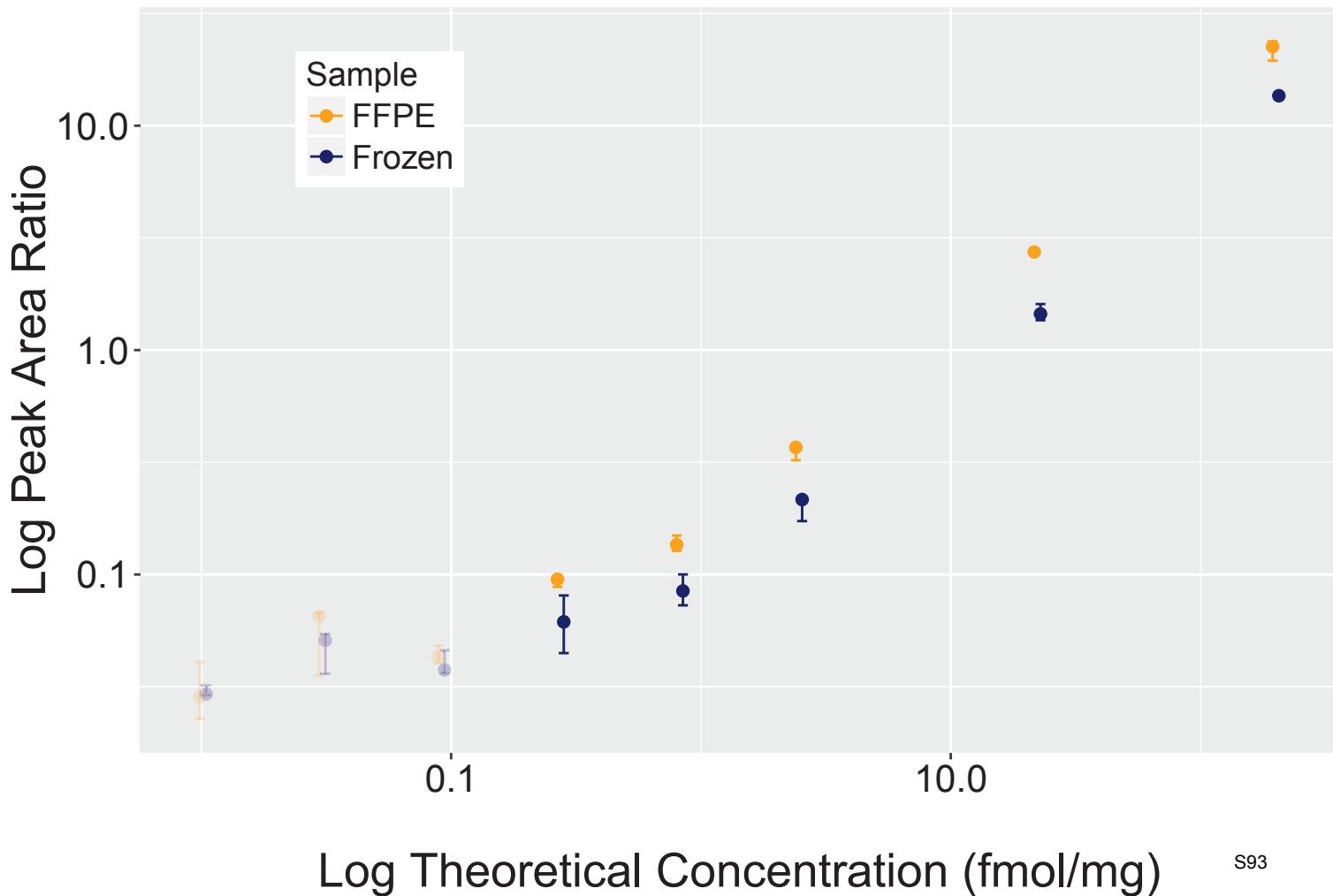
Analyte: ABAT.ALLTGLLDLQAR



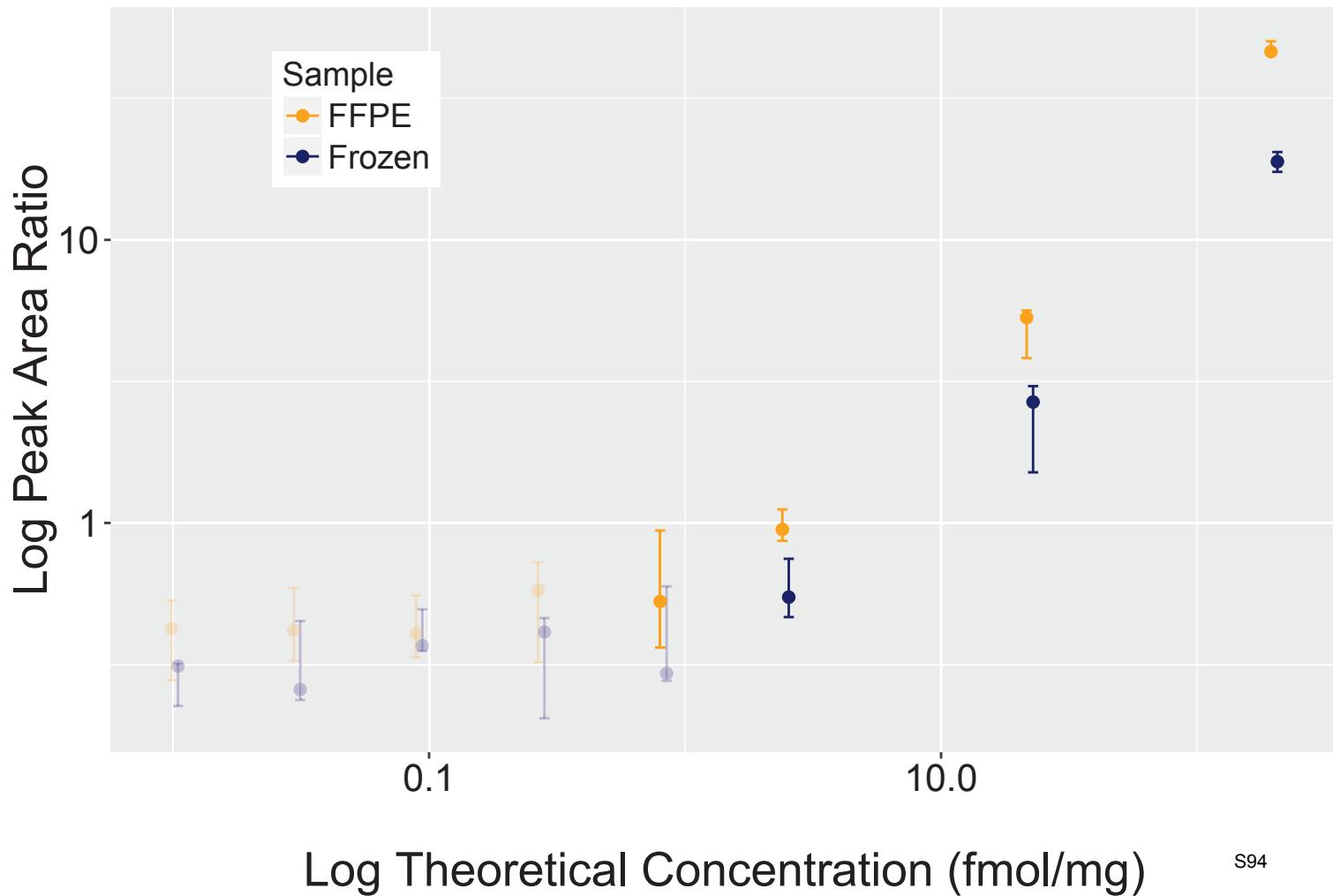
Analyte: GLT25D1.ALQAAQEIEC[+57]R



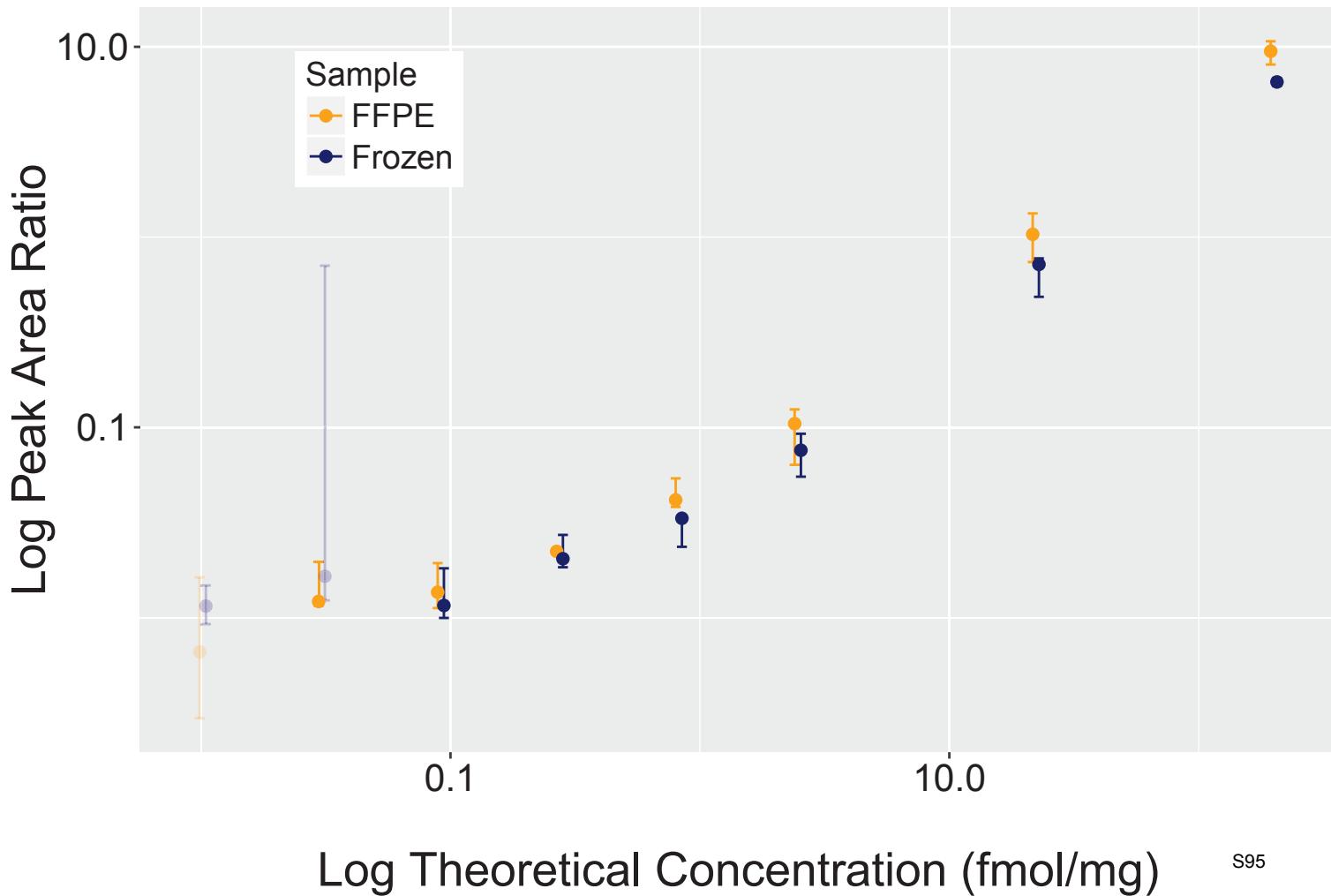
Analyte: CCT6A.ALQFLEEVK



Analyte: ASS1.APNTPDILEIEFK

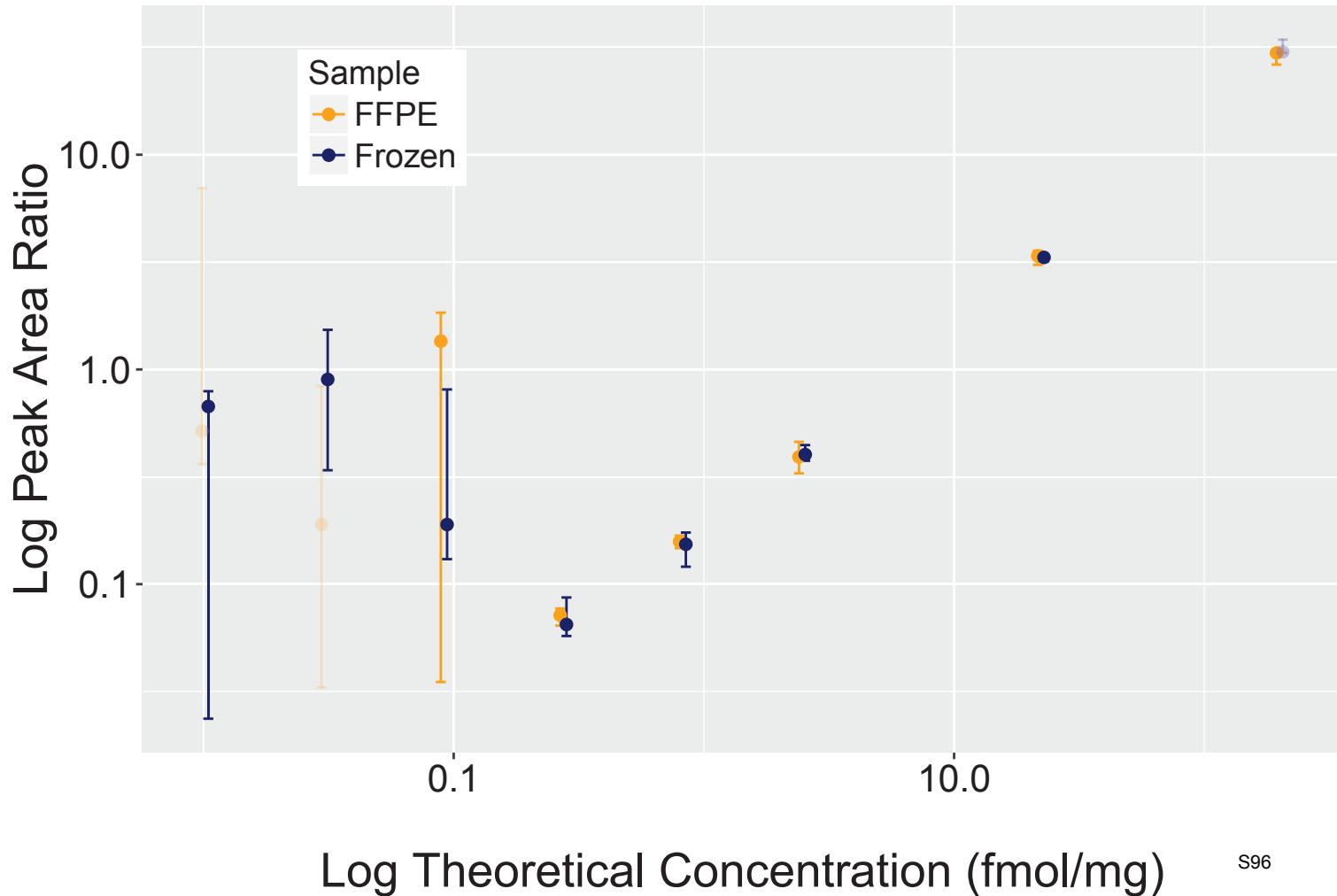


Analyte: FBP1.APVILGSPDDVLEFLK

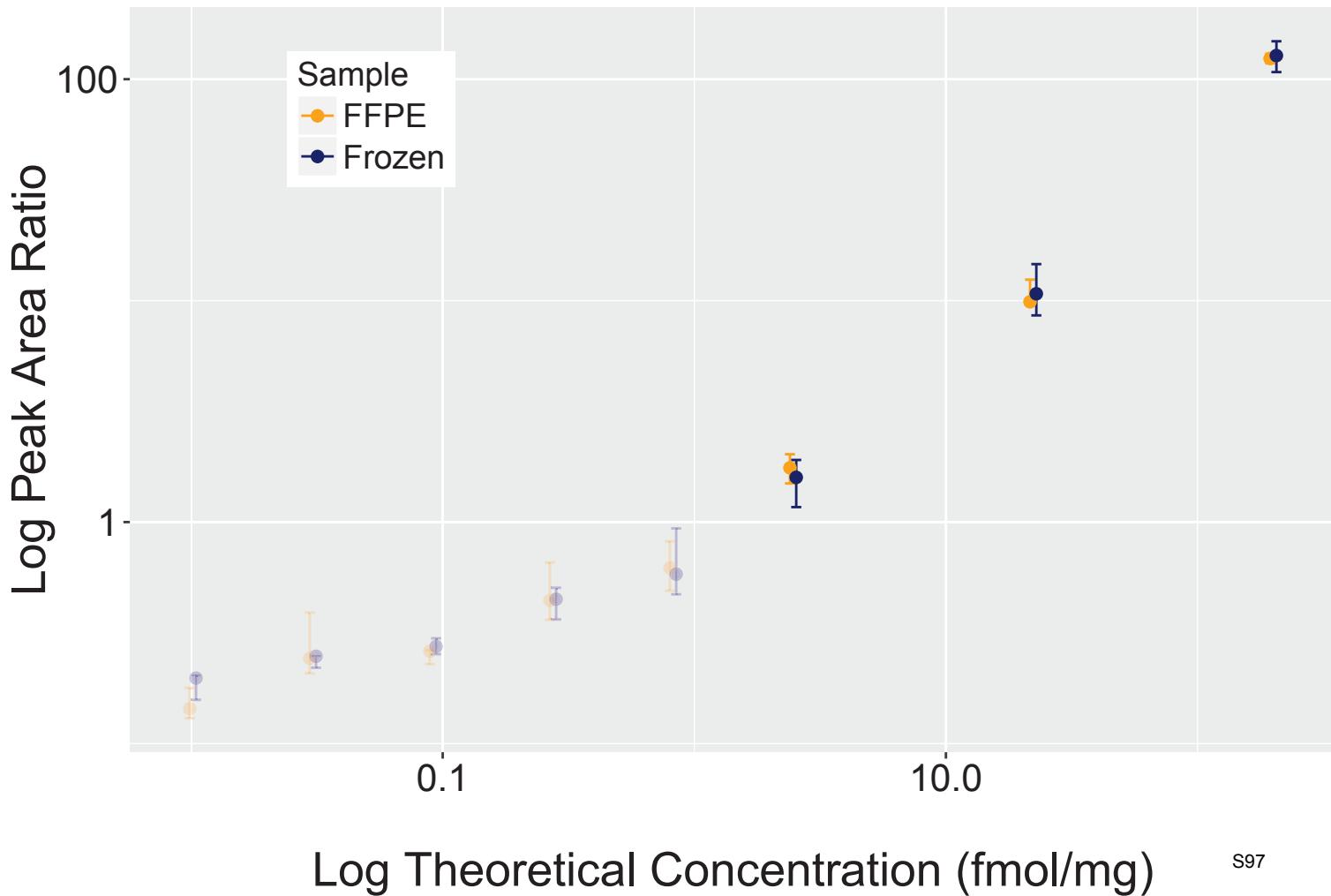


S95

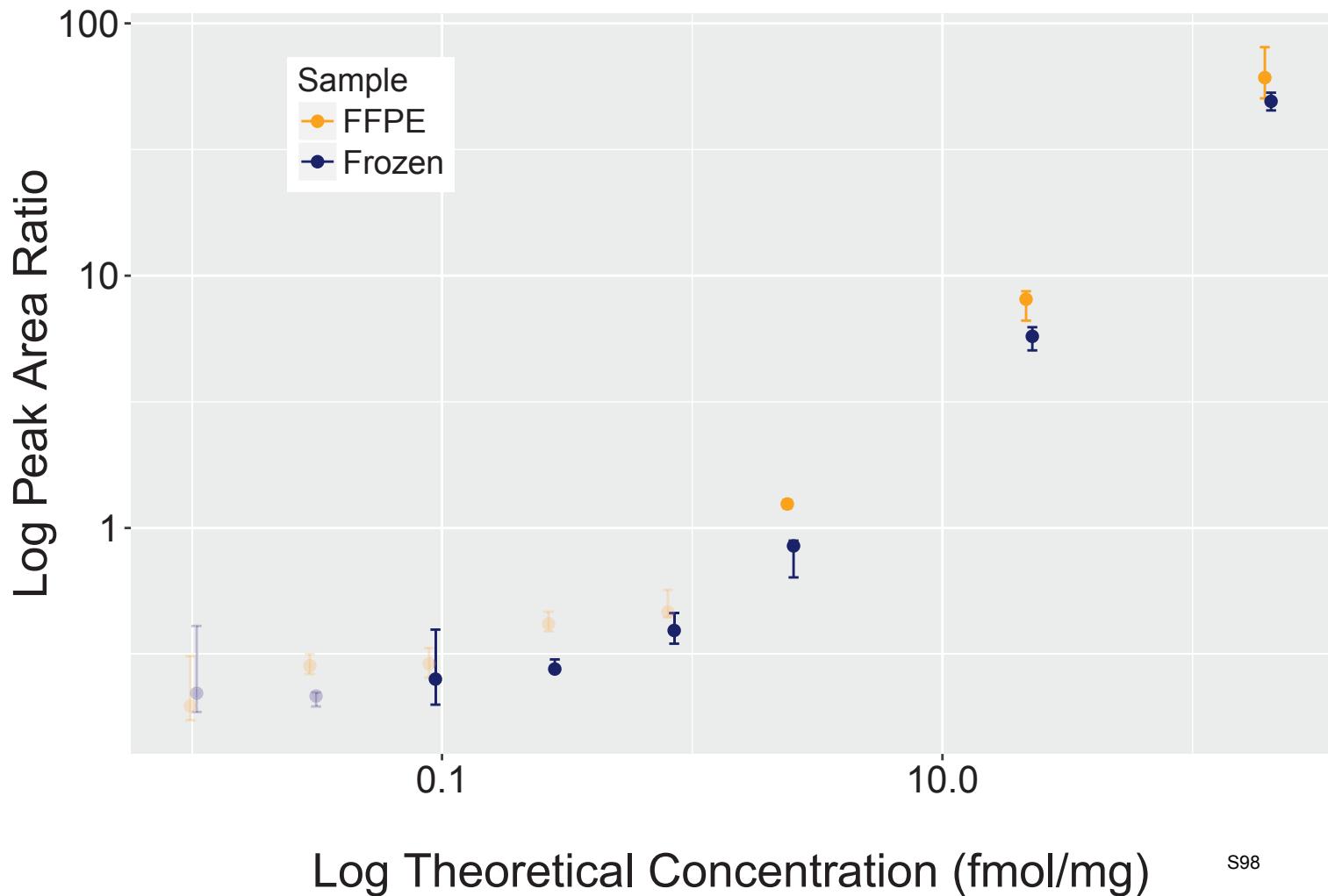
Analyte: STOML2.APVPGTPDSLSSGSSR



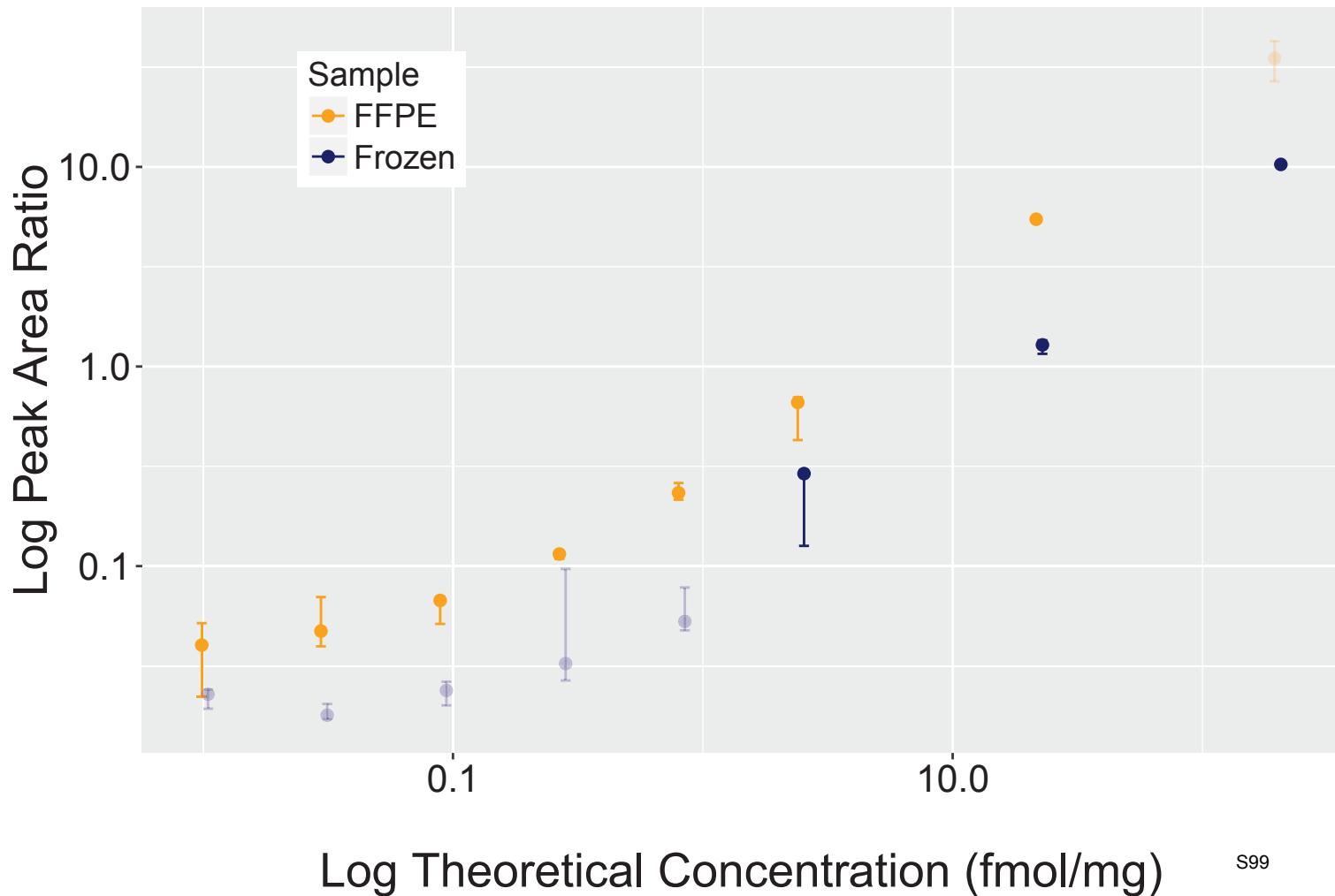
Analyte: YARS.APWELLELR



Analyte: MYH14.AQAELENVSGALNEAESK

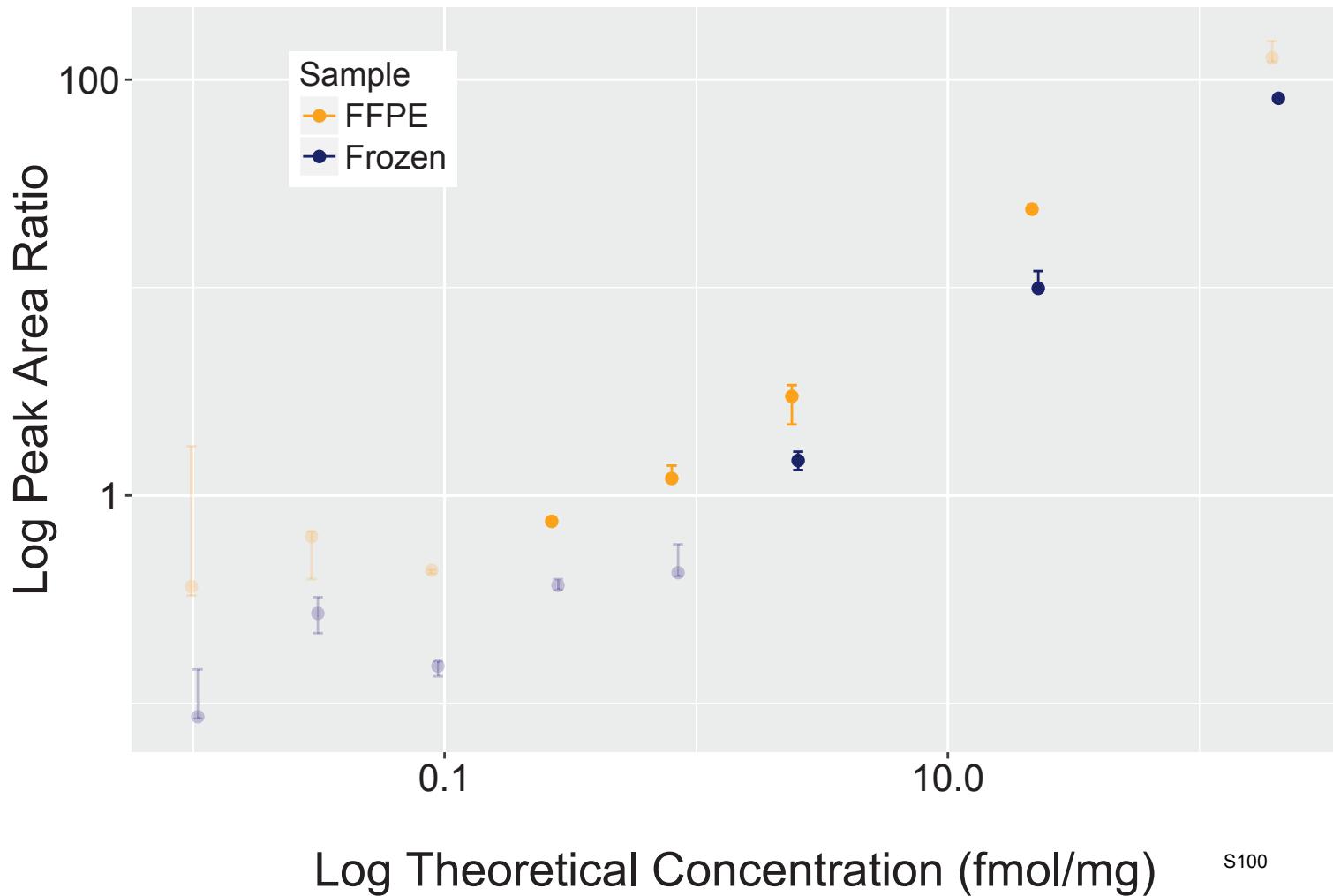


Analyte: GSTP1.ASC[+57]LYGQLPK



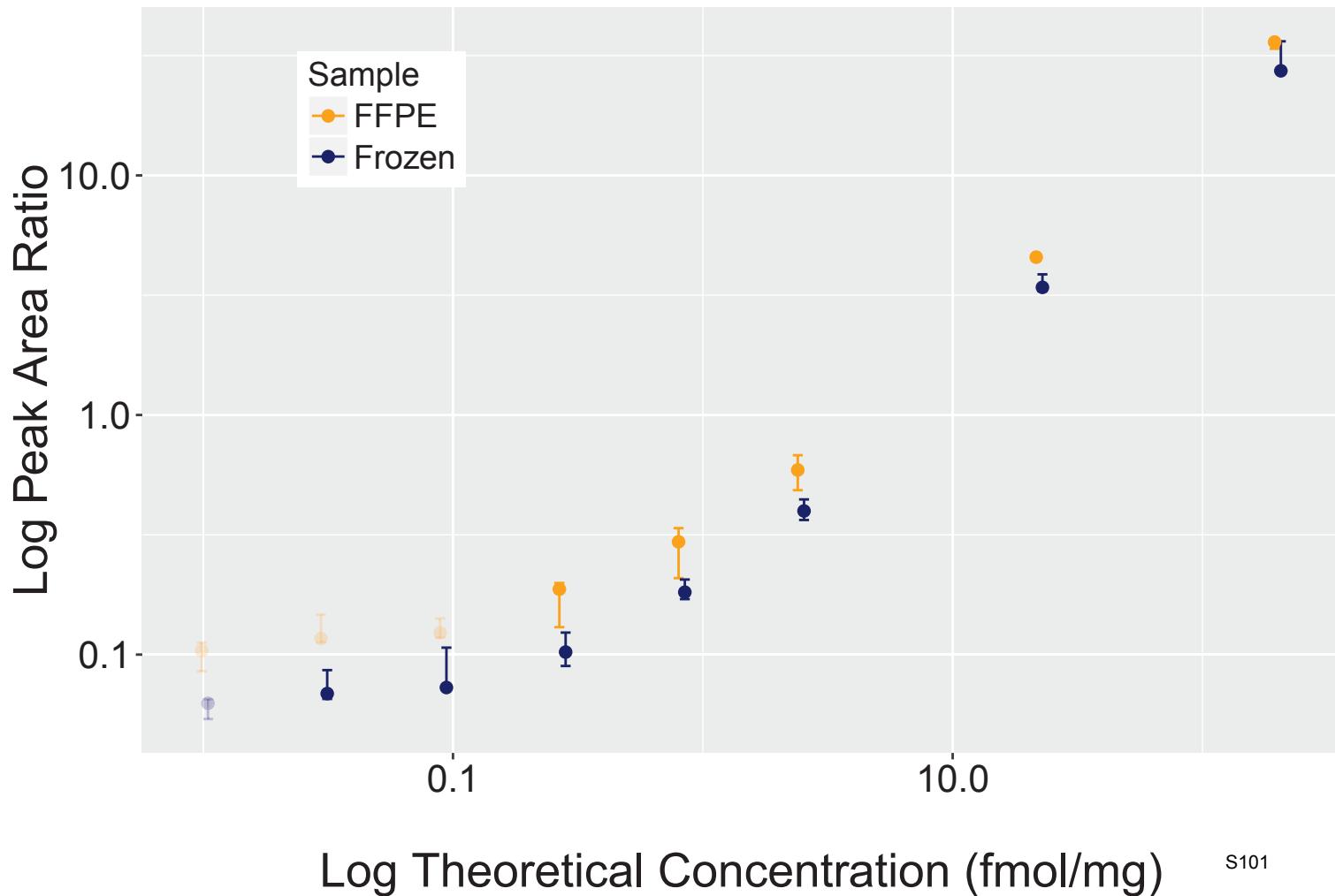
S⁹⁹

Analyte: TPM4.ASDAEGDVAALNR



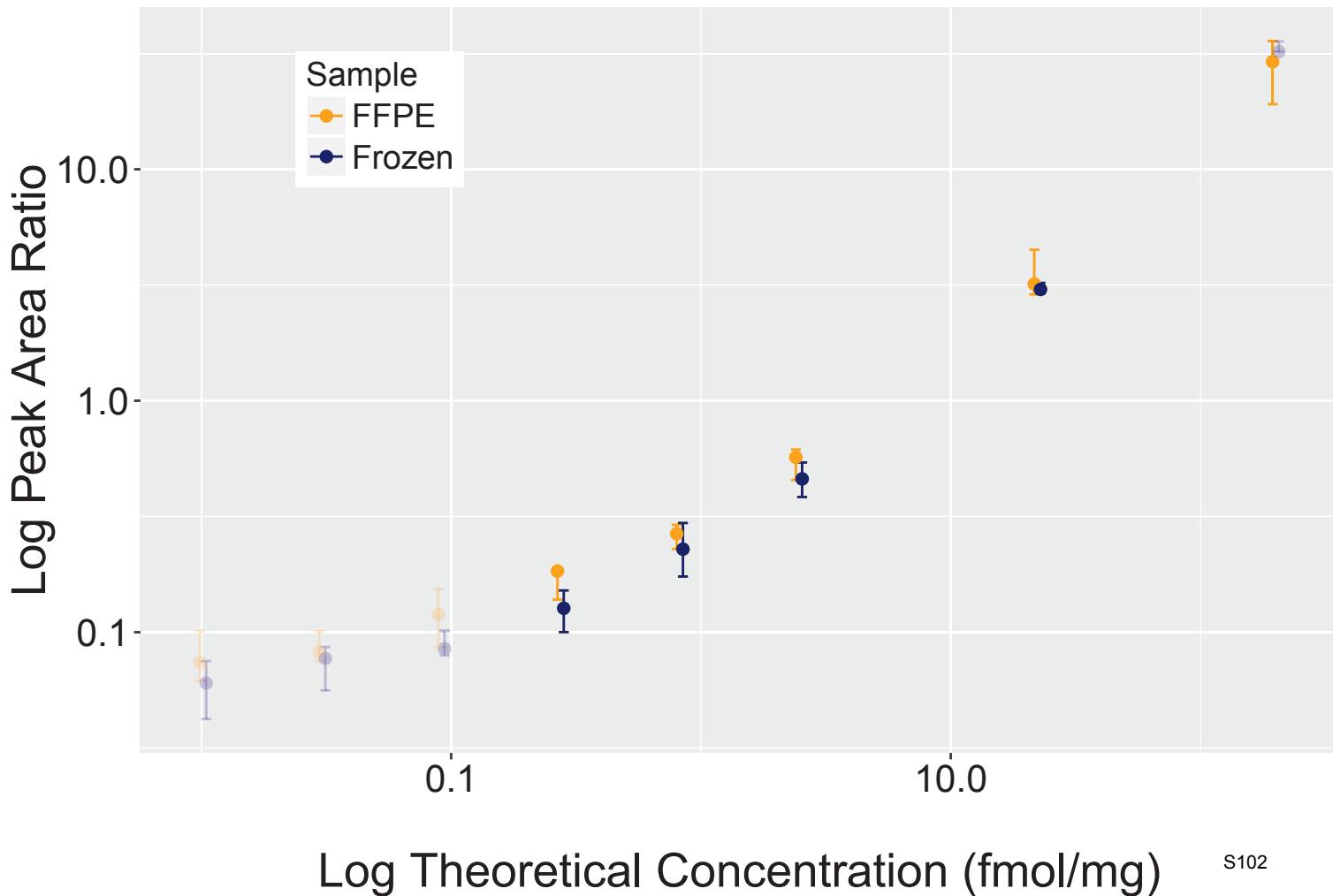
S100

Analyte: LYPLA1.ASFPQGPIGGANR



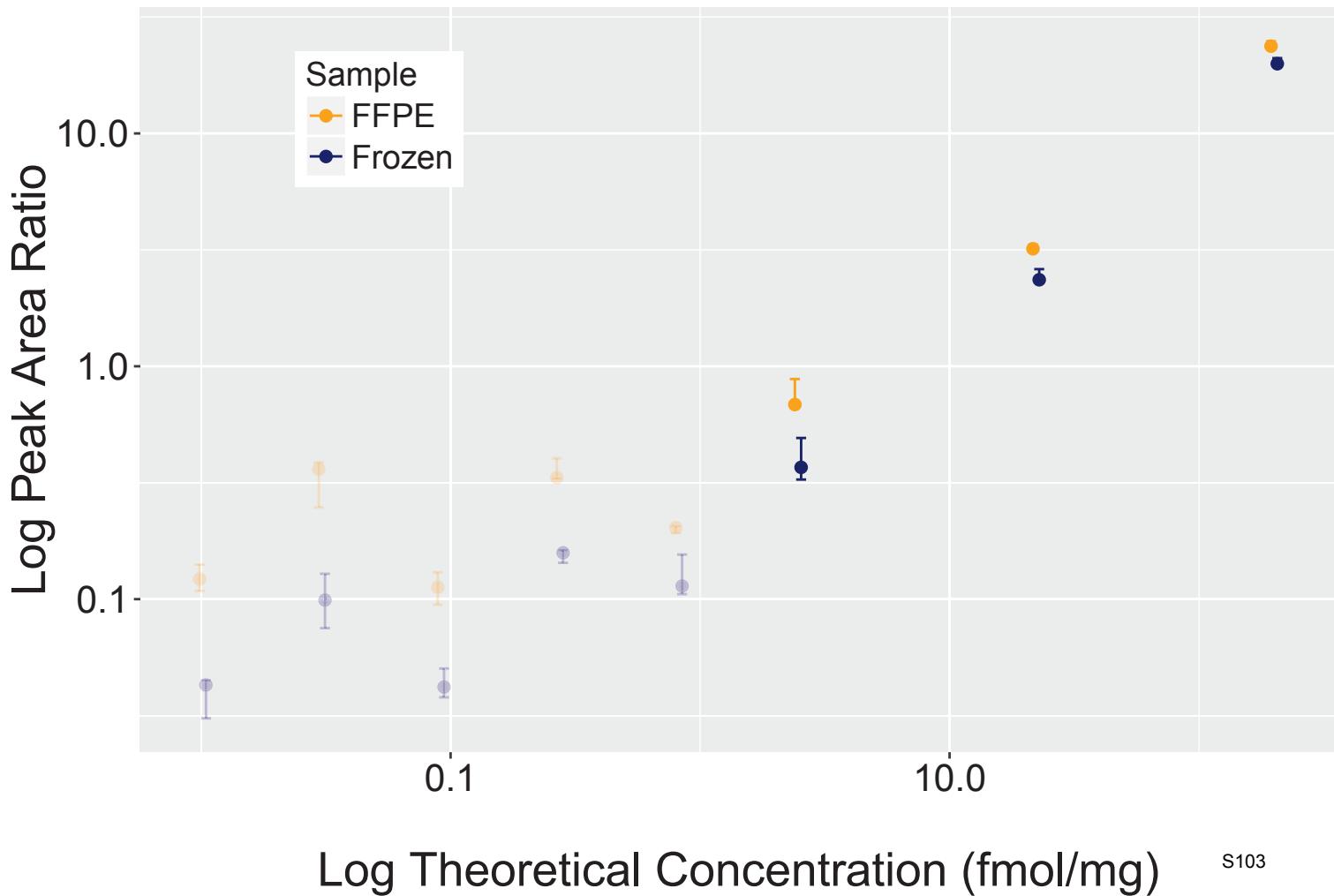
S101

Analyte: ACADVL.ASNTAEVFFDGVR

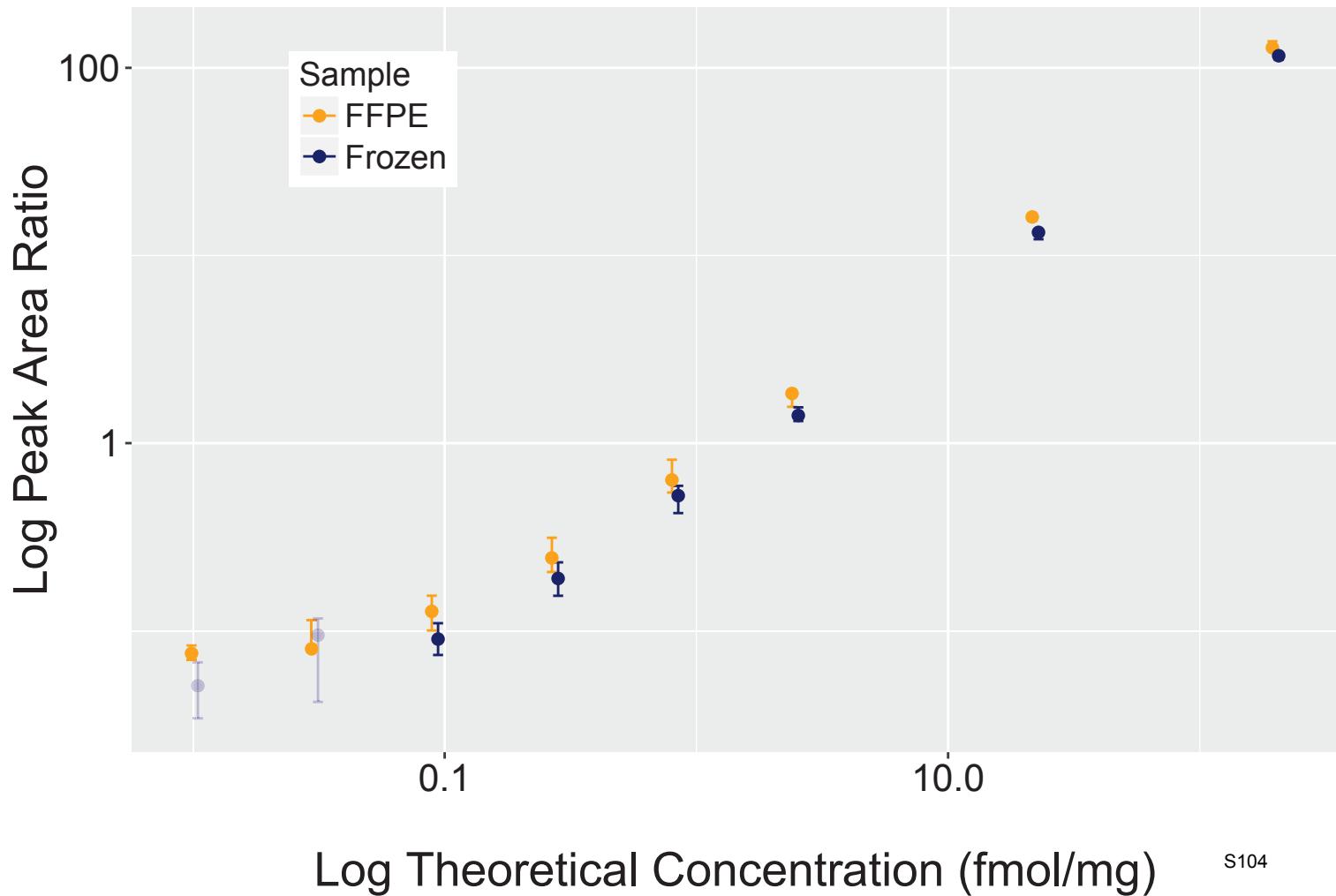


S102

Analyte: LRRC59.ATILDLSC[+57]NK

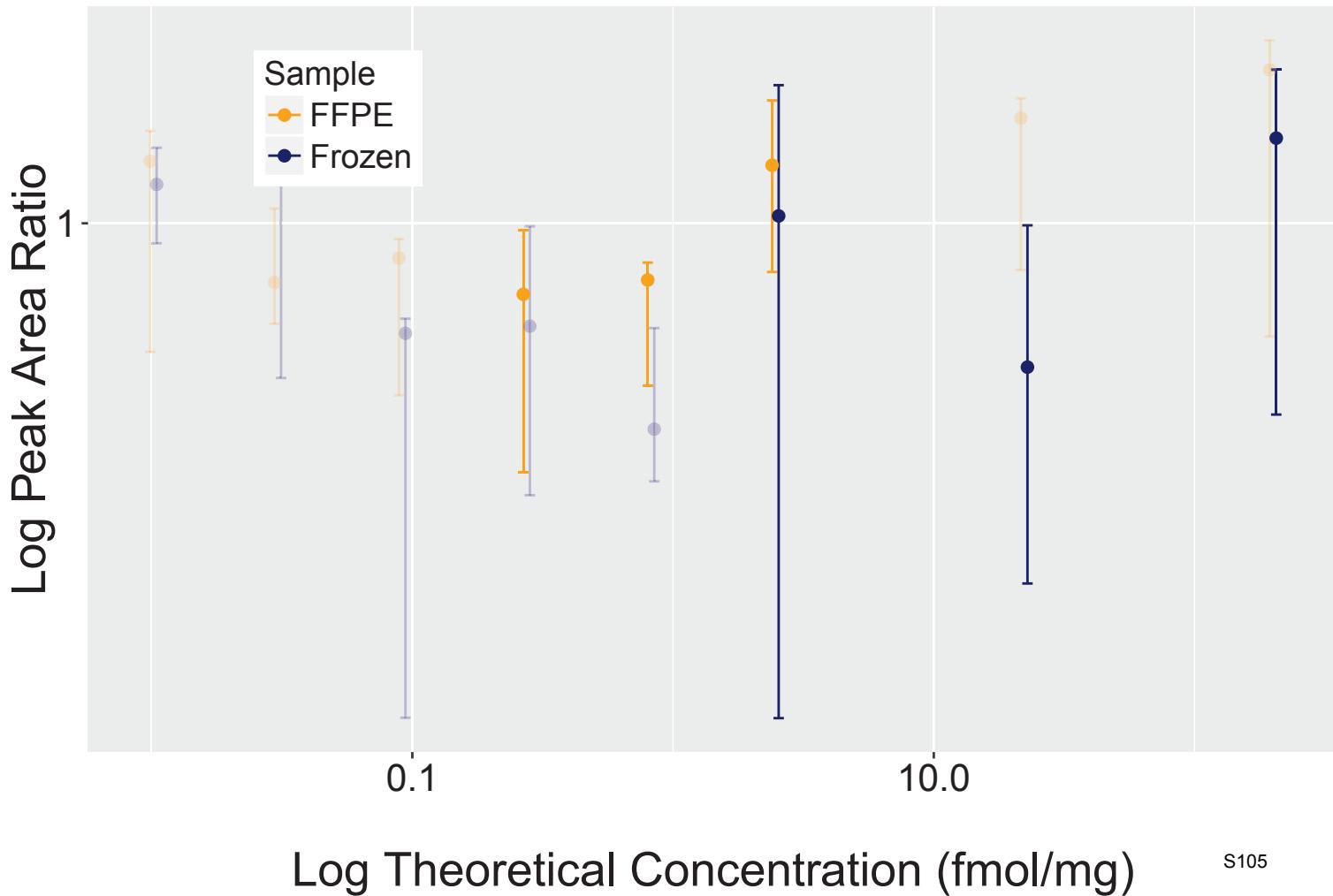


Analyte: HSD17B4.ATSTATSGFAGAIGQK



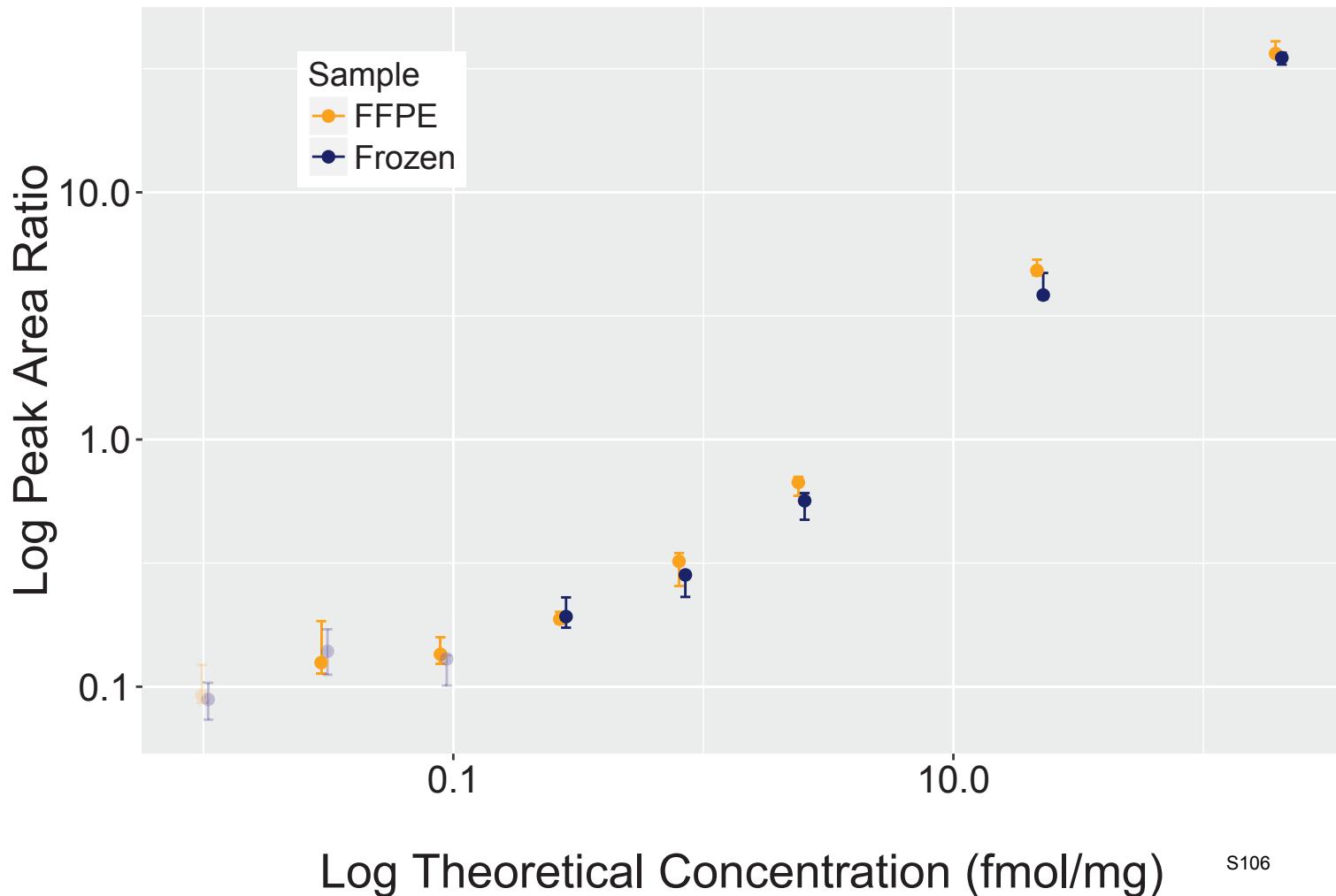
S104

Analyte: PMPCB.AVEILADIIQNSTLGEAEIER



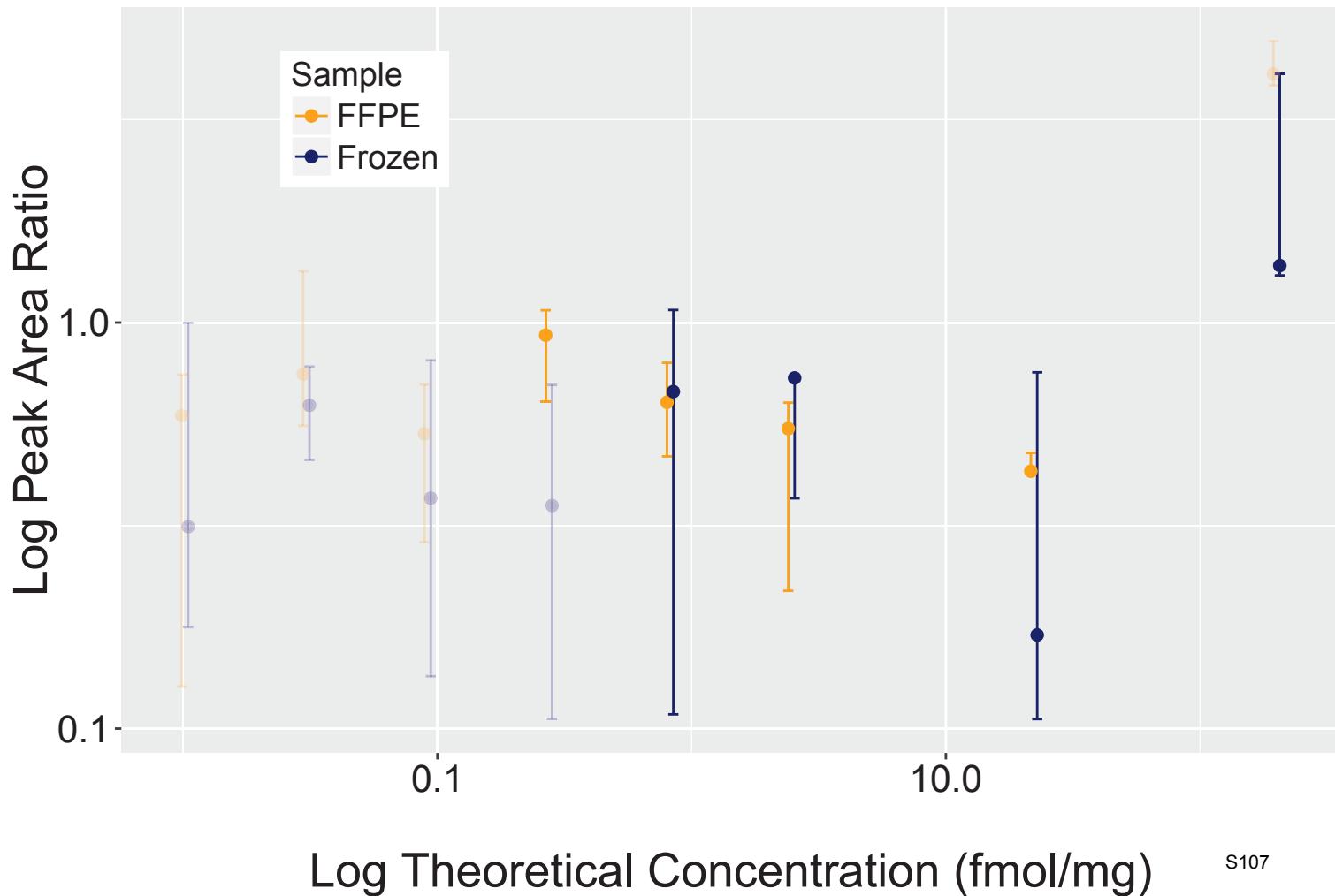
S105

Analyte: AARS.AVFDETPDPVR

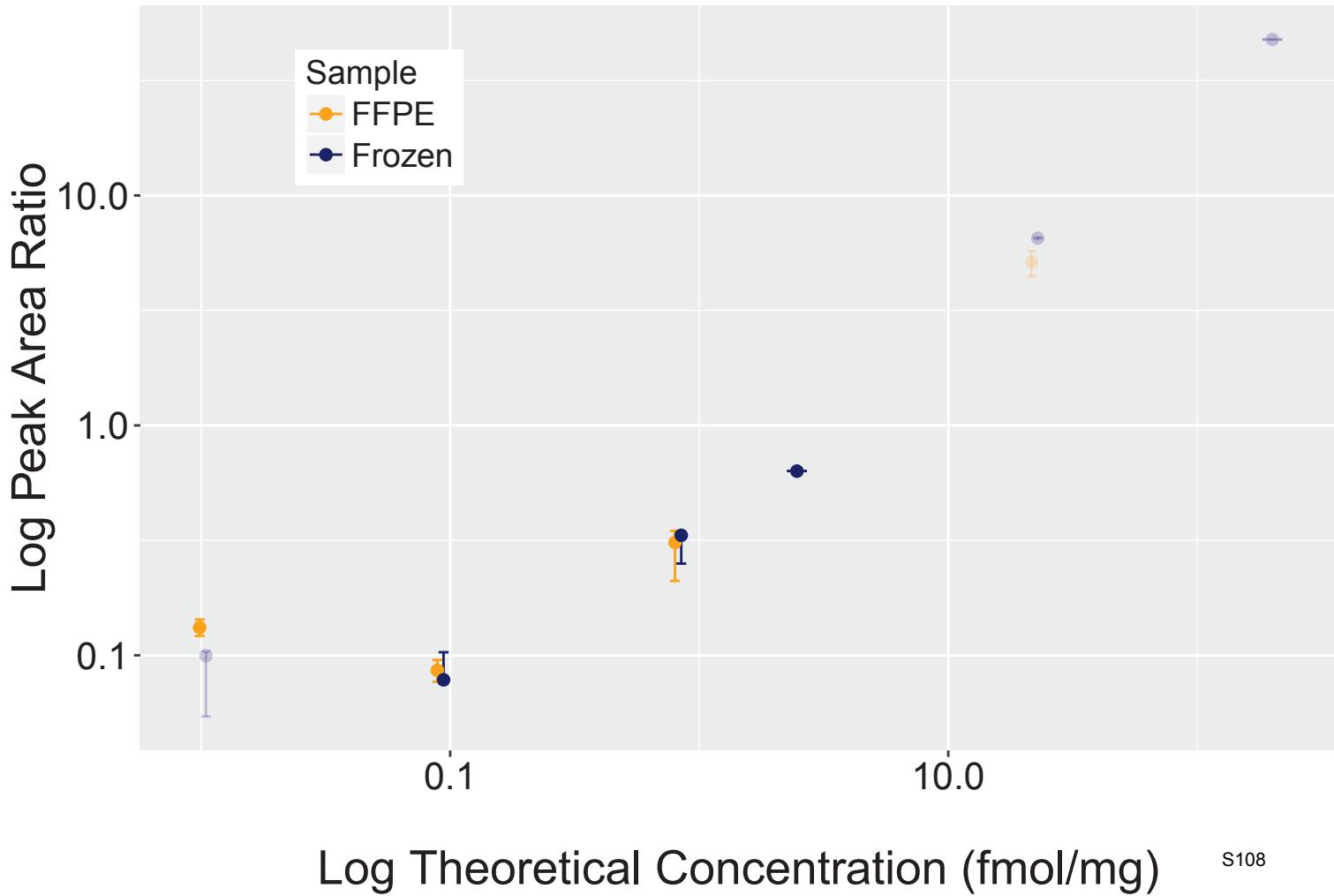


S¹⁰⁶

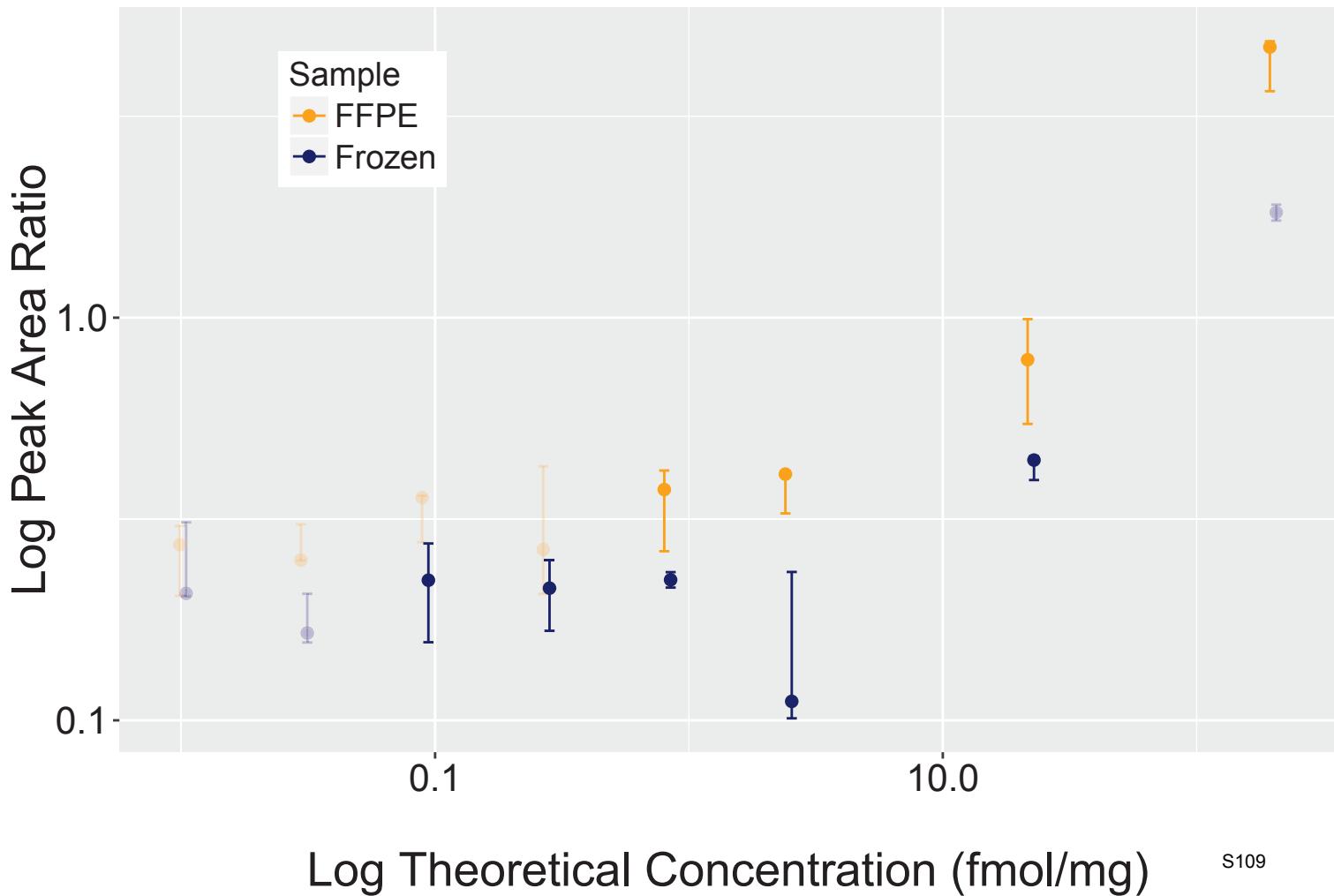
Analyte: TUBA4A.AVFVDLEPTVIDEIR



Analyte: ILF3.AVSDWIDEQEK

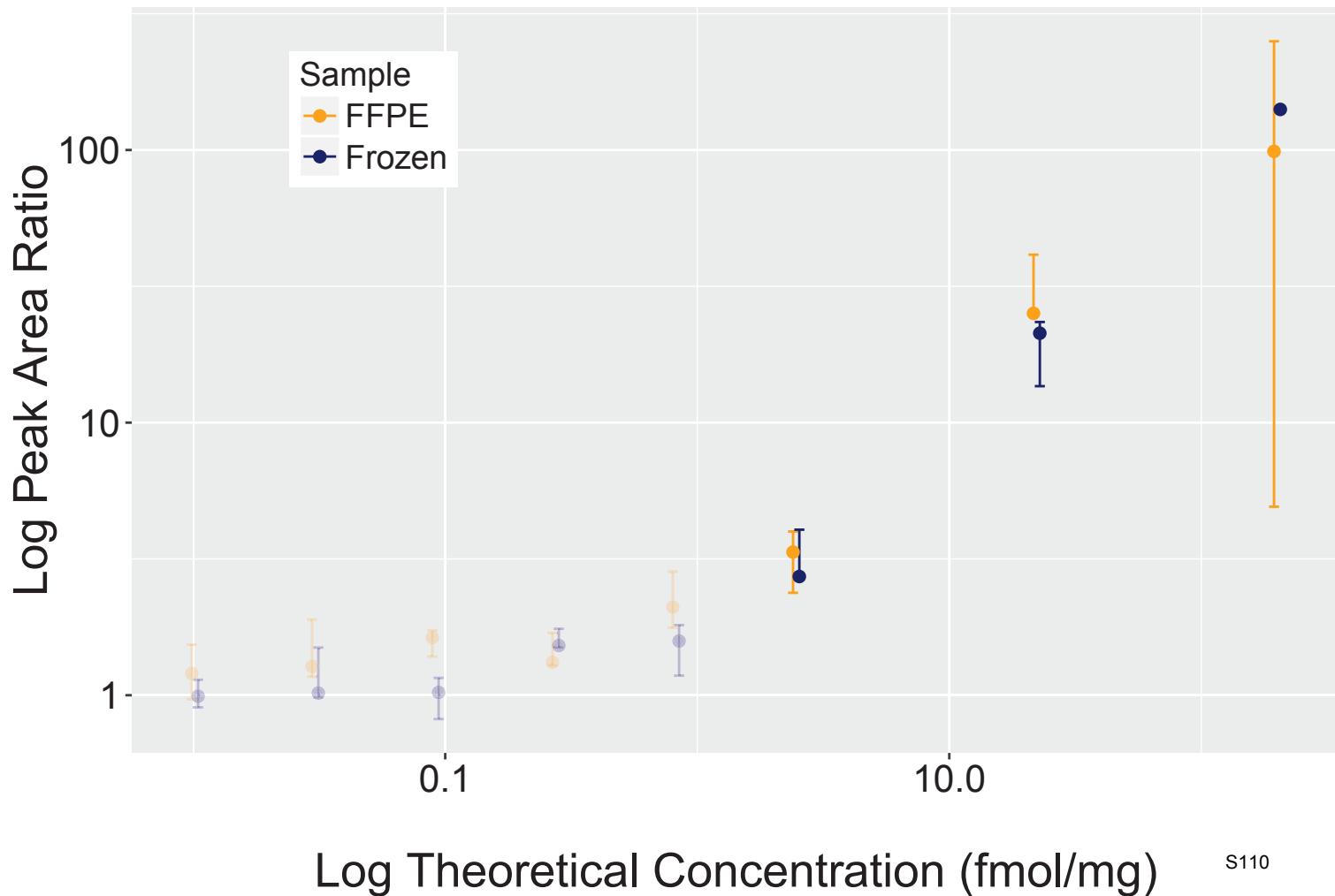


Analyte: STARD10.AVSIQQTGYLIQSTGPK



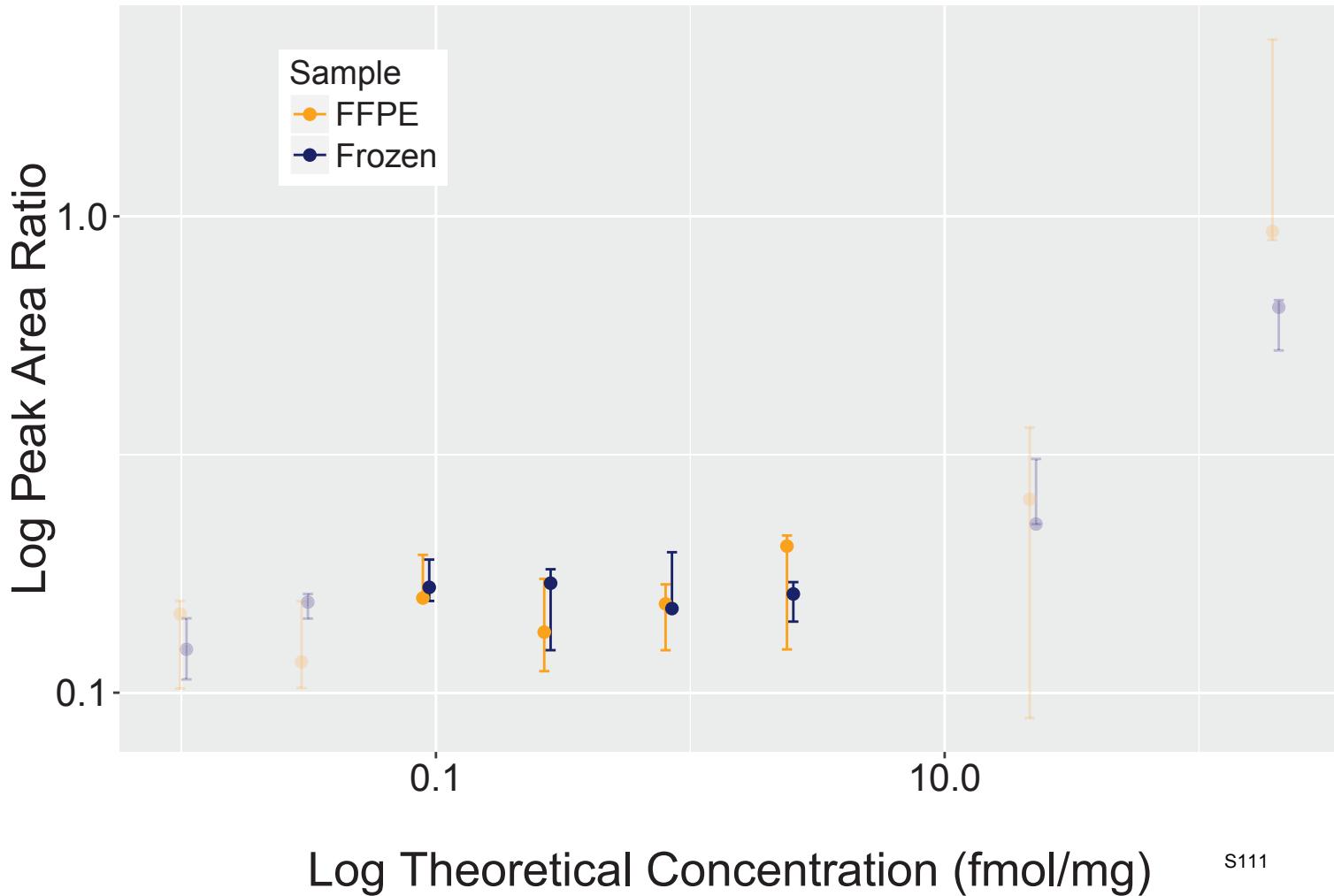
S109

Analyte: ESYT1.AVYSTNC[+57]PVWEEAFR

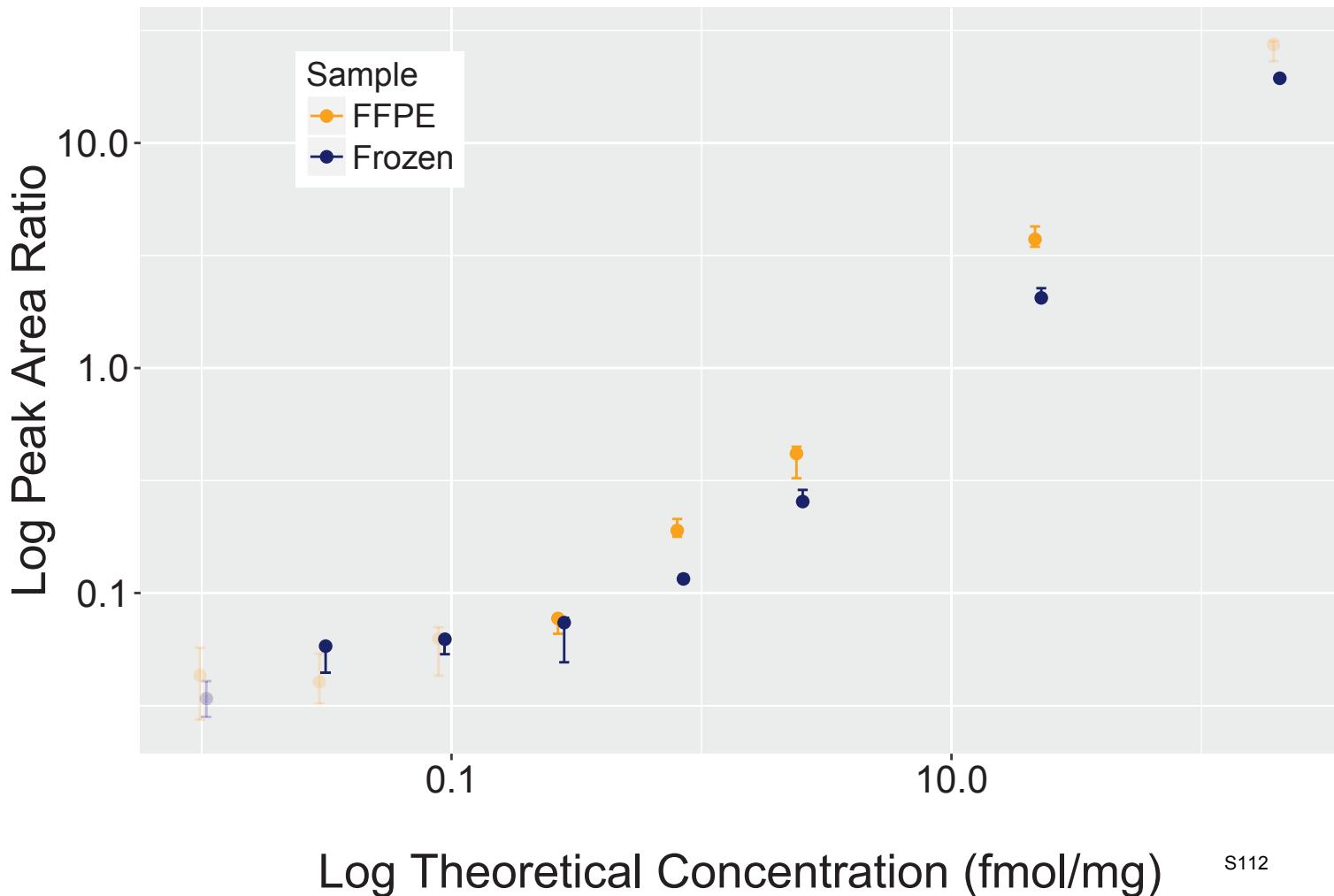


S110

Analyte: MSH6.AYGVC[+57]FVDTSLGK

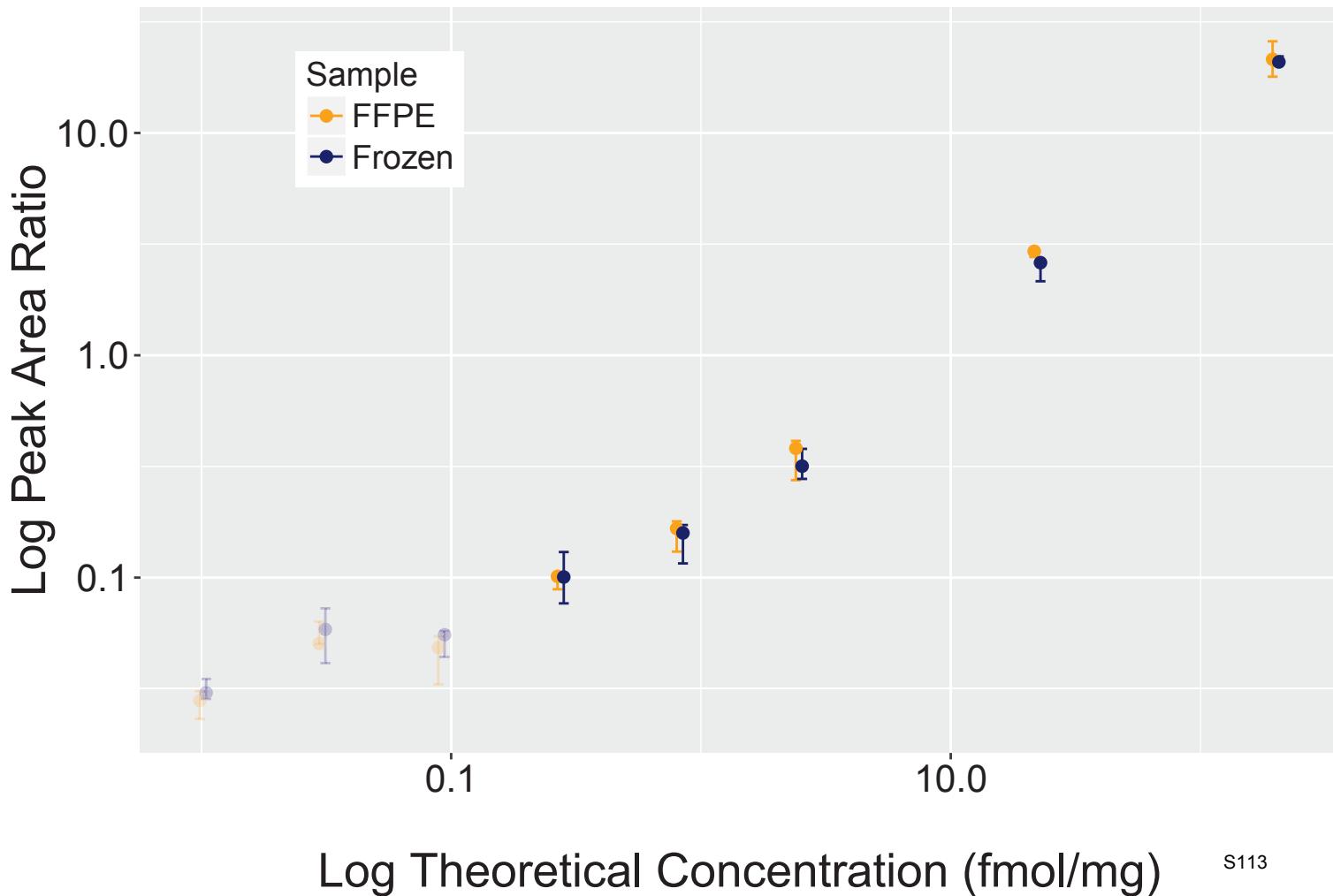


Analyte: LCP1.AYYHLLEQVAPK



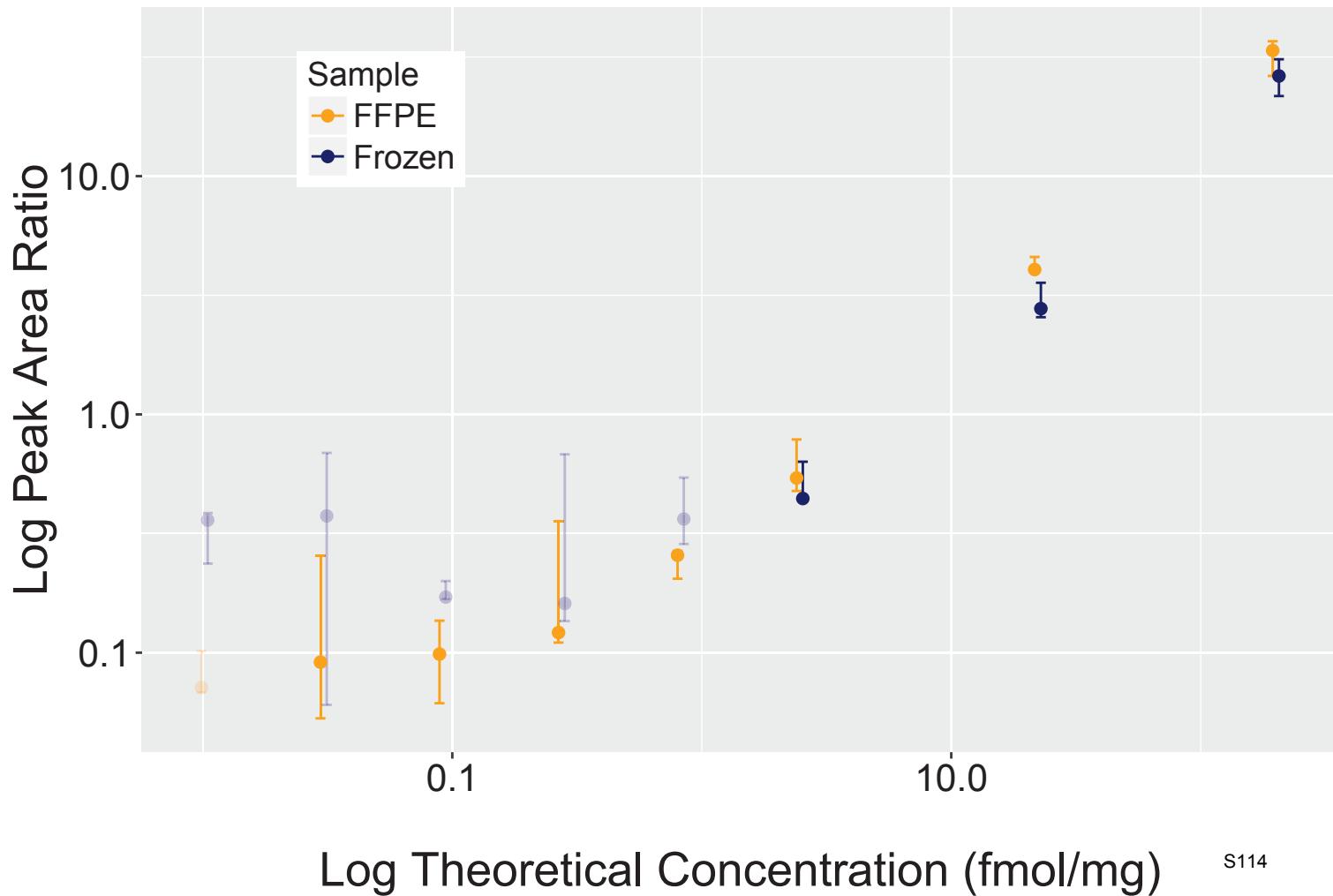
S112

Analyte: CORO1B.DADPILISLR



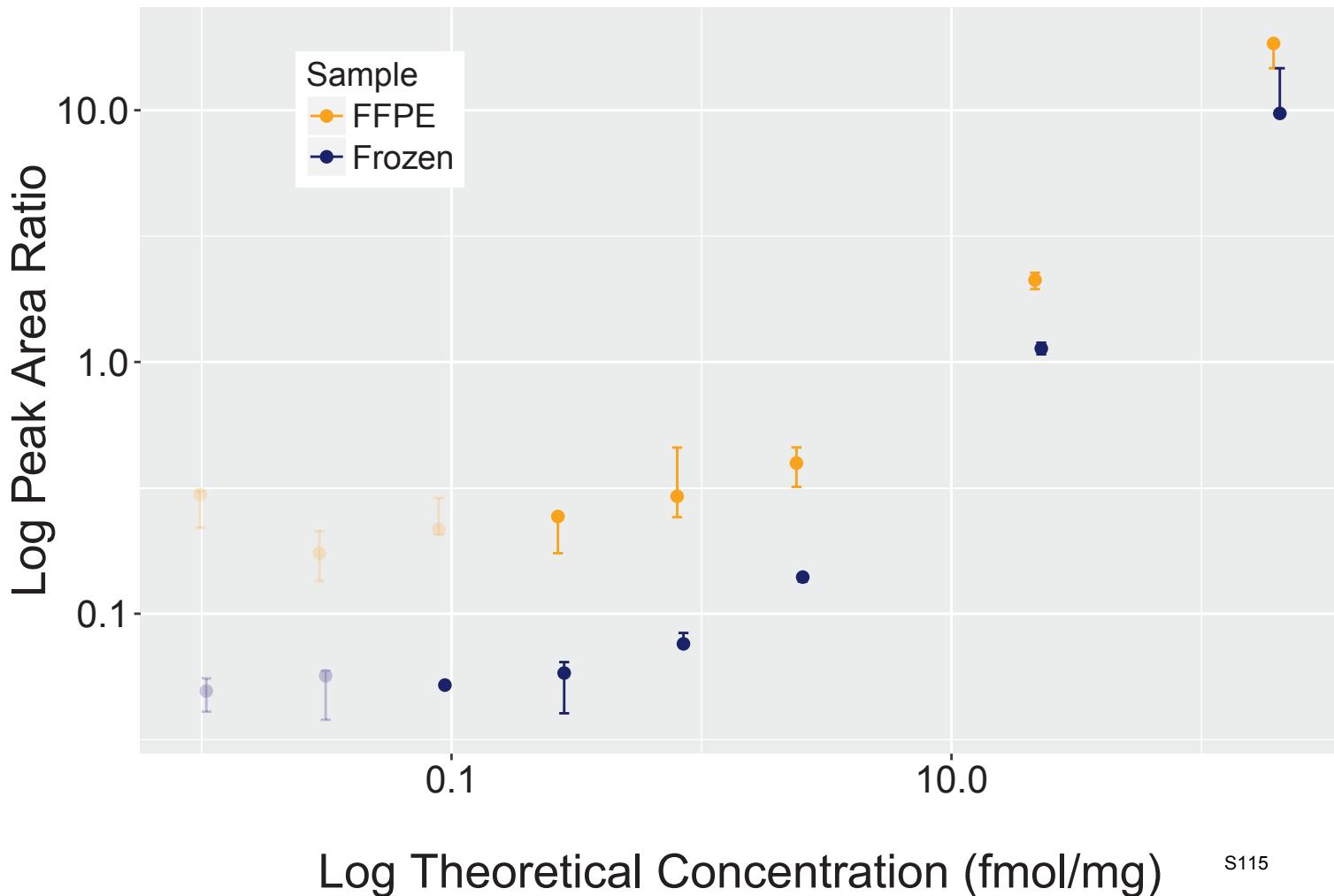
S113

Analyte: SFRS9.DAEDAIYGR

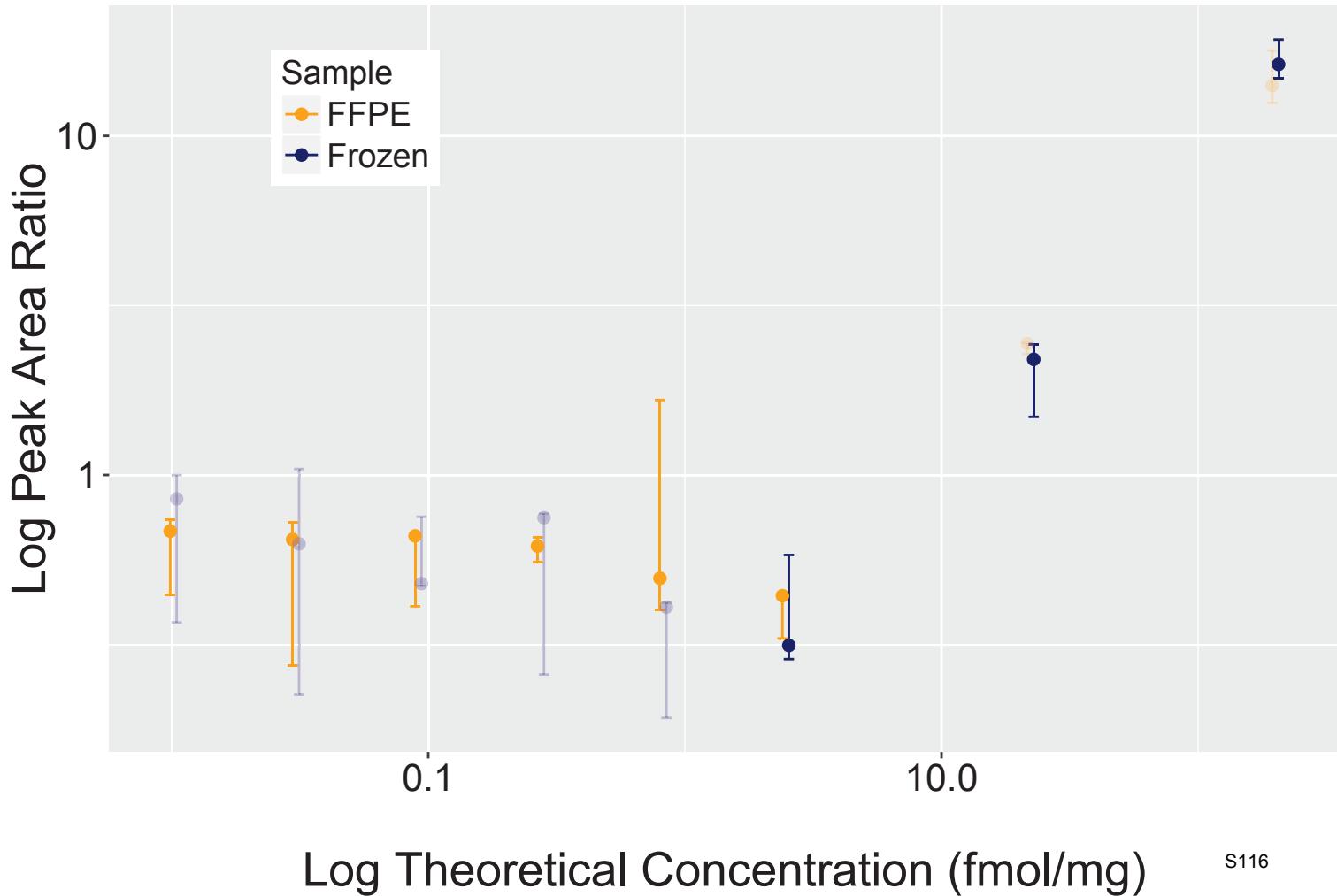


S114

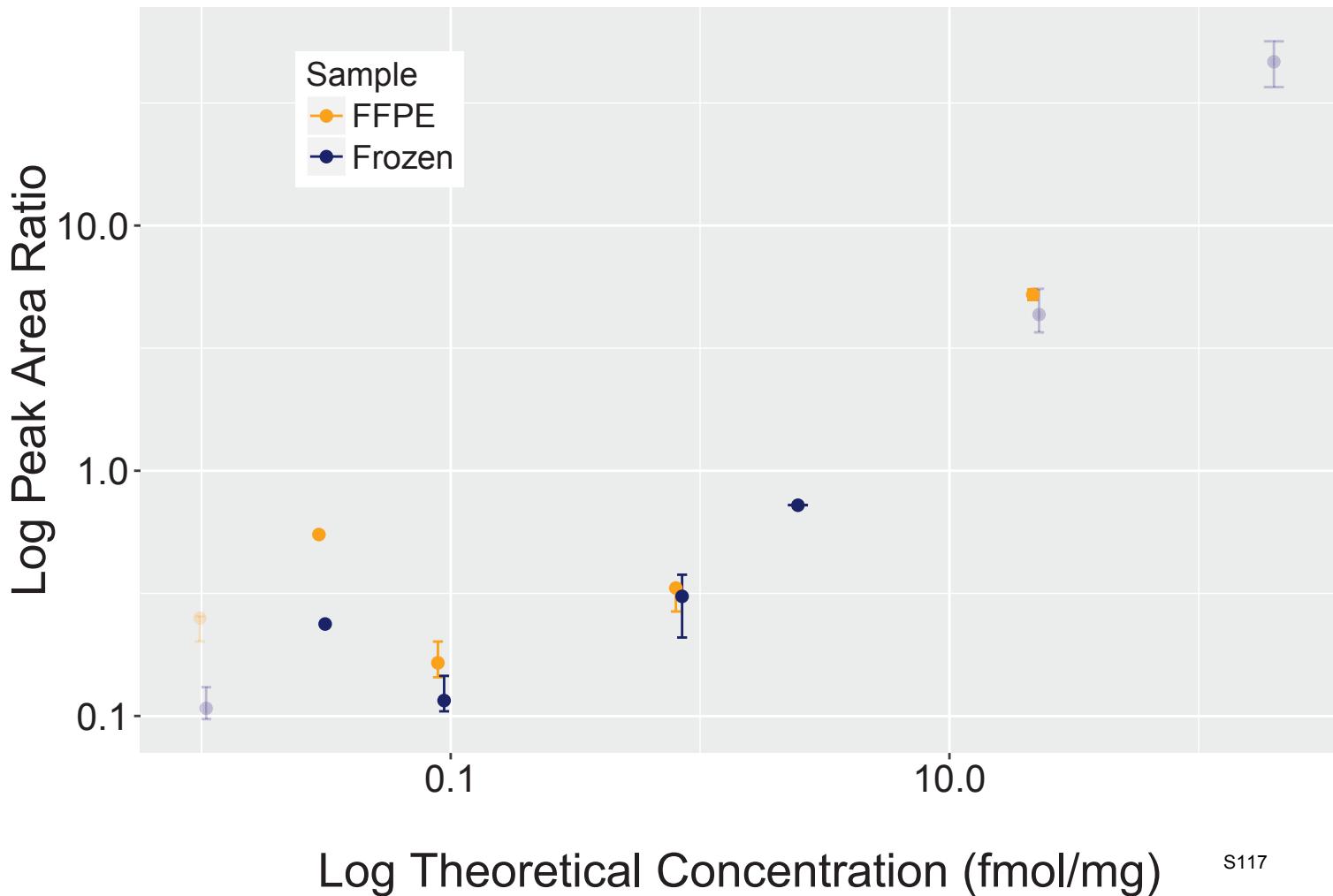
Analyte: CNBP.DC[+57]DLQEDAC[+57]YNC[+57]GR



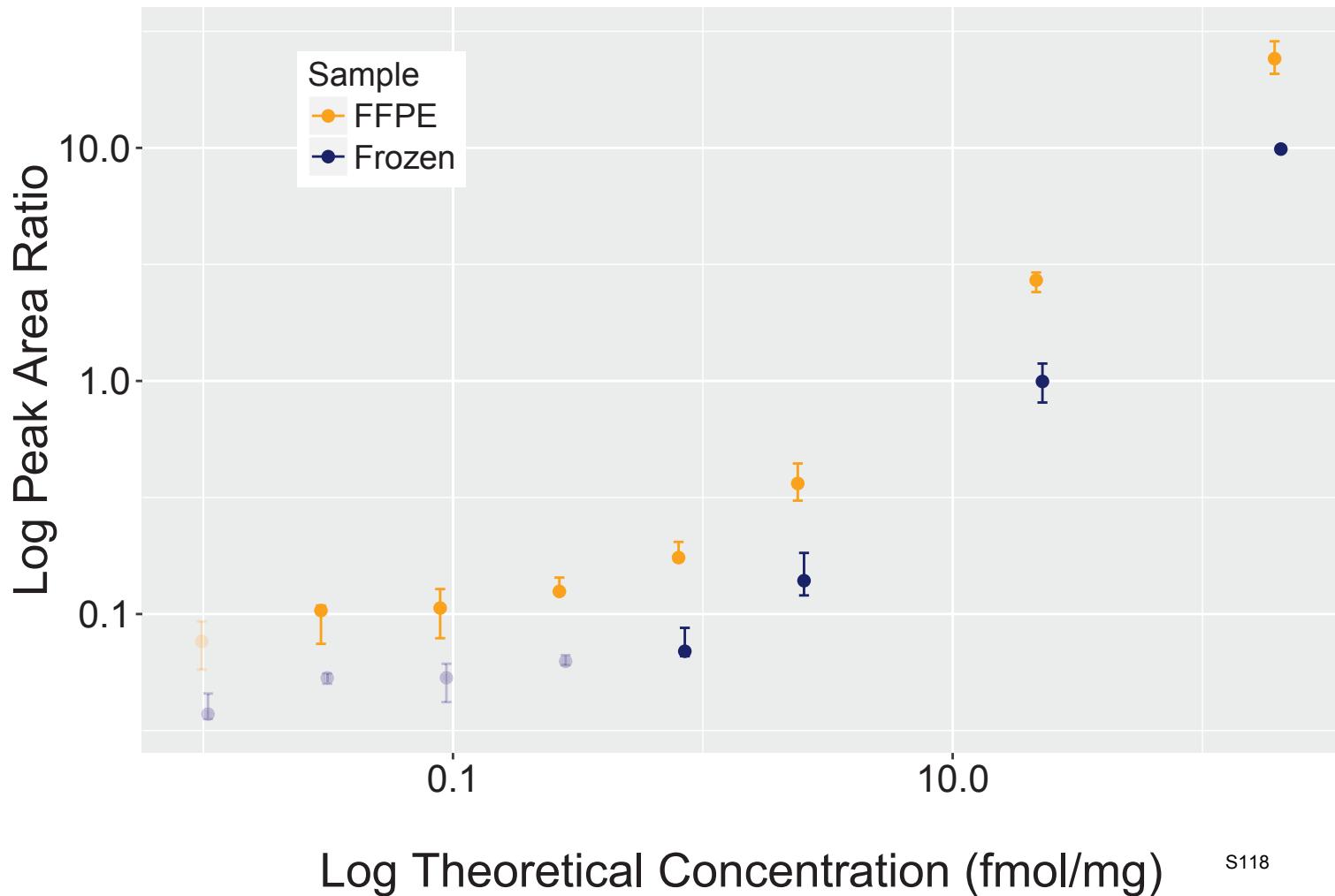
Analyte: SCARB2.DEVLYVFPSDFC[+57]R



Analyte: SARS.DEWLRPEDLPIK

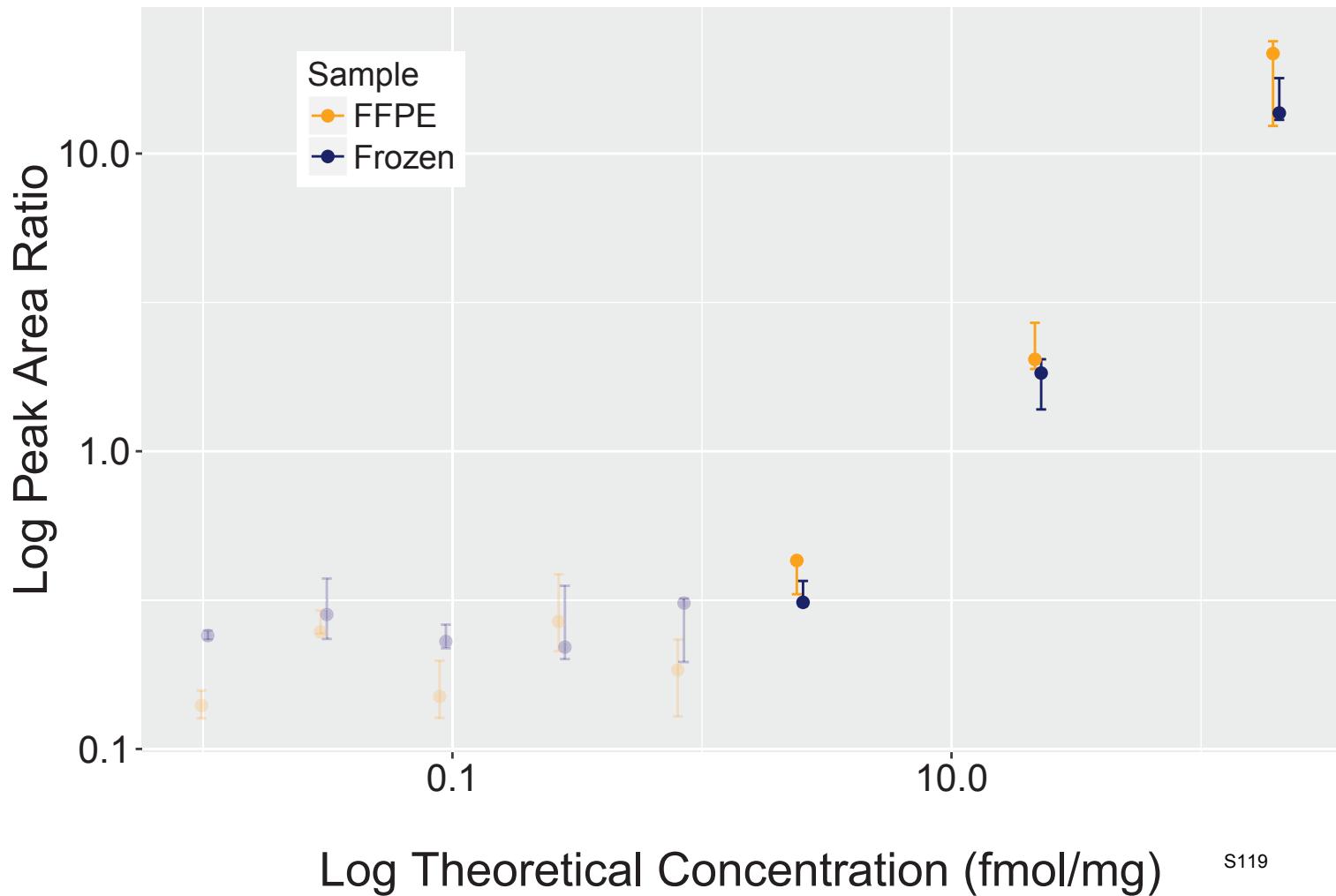


Analyte: FBP1.DFDPAVTEYIQR

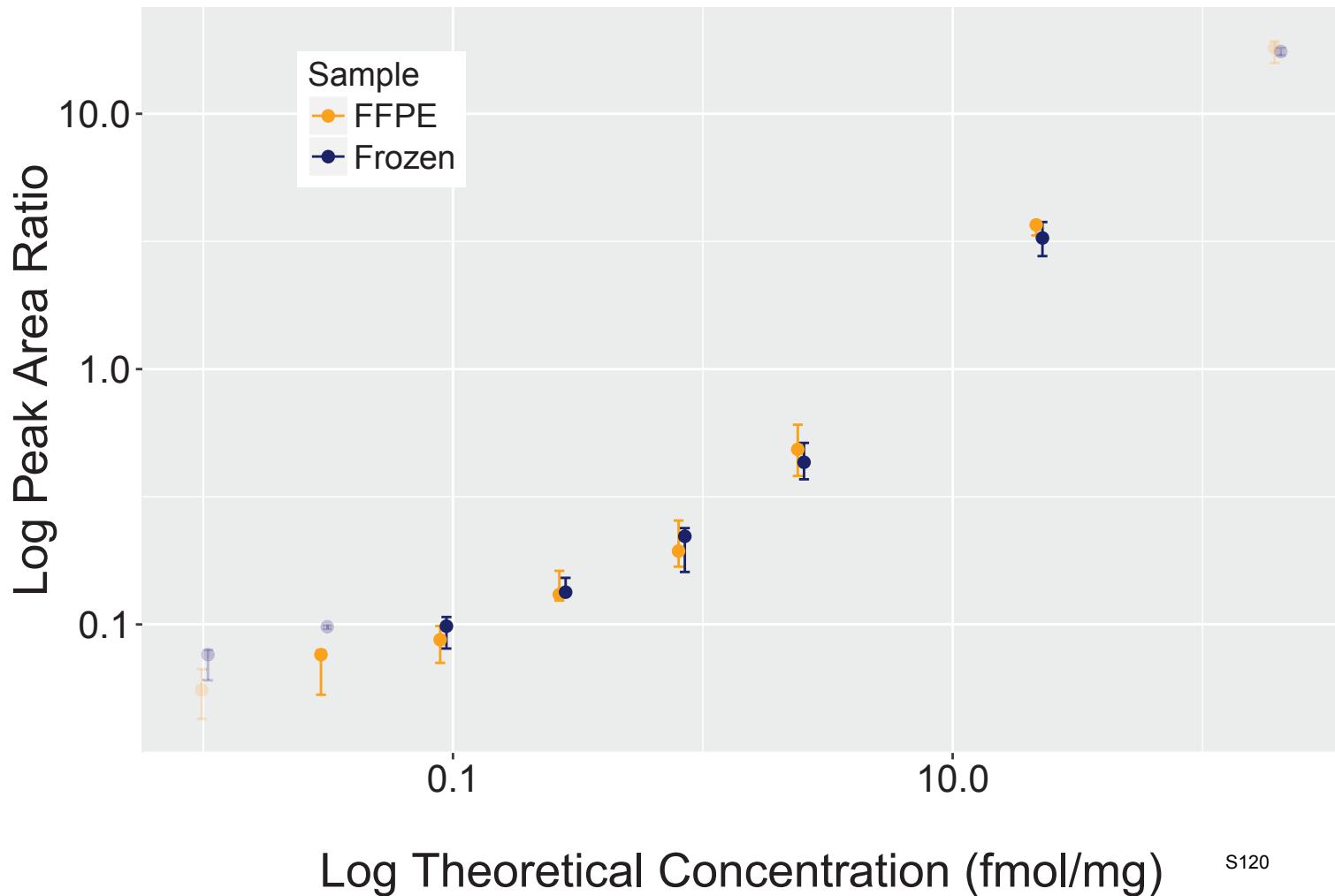


S118

Analyte: G3BP1.DFFQSYGNVVELR

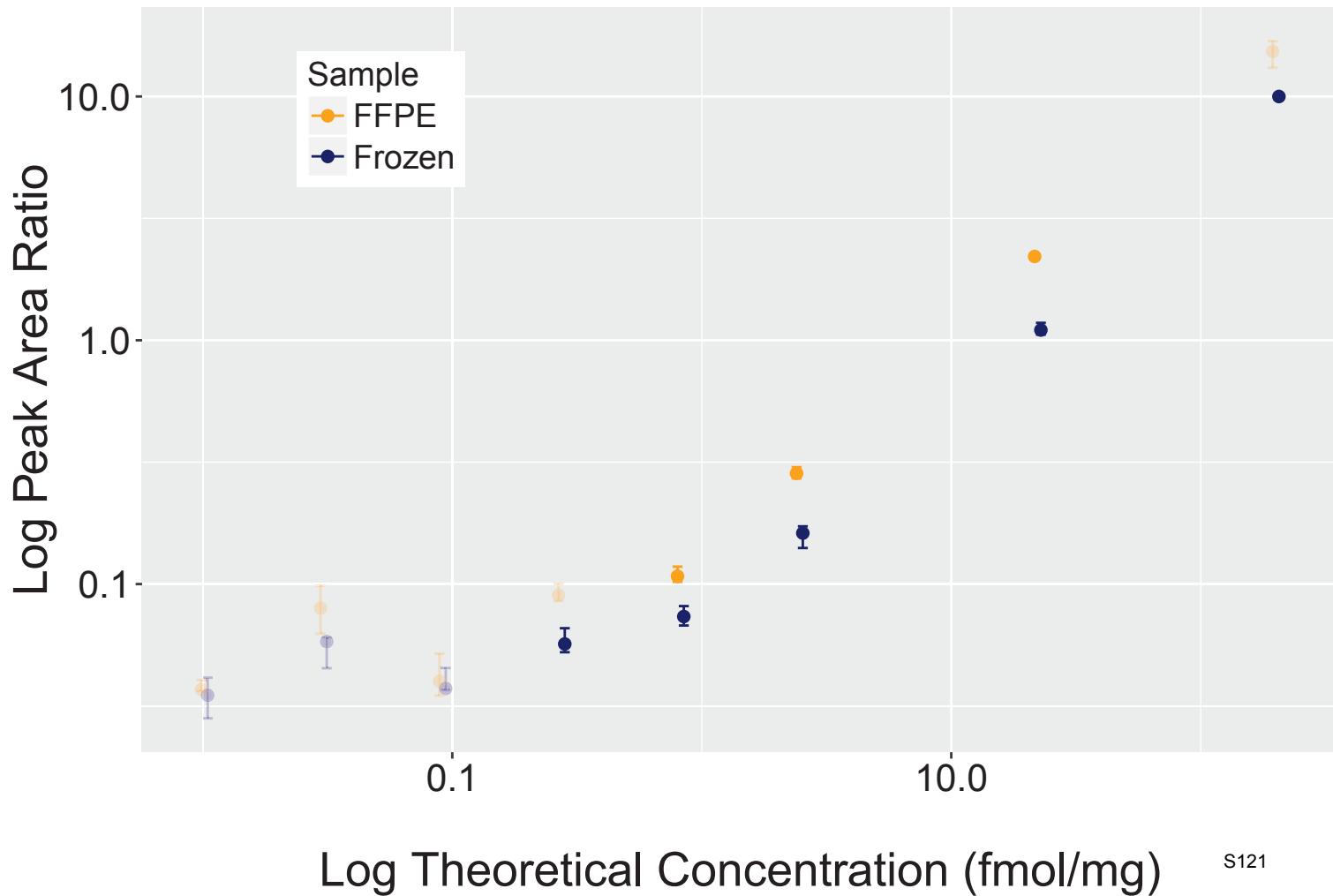


Analyte: ACAA2.DFTATDLSEFAAK

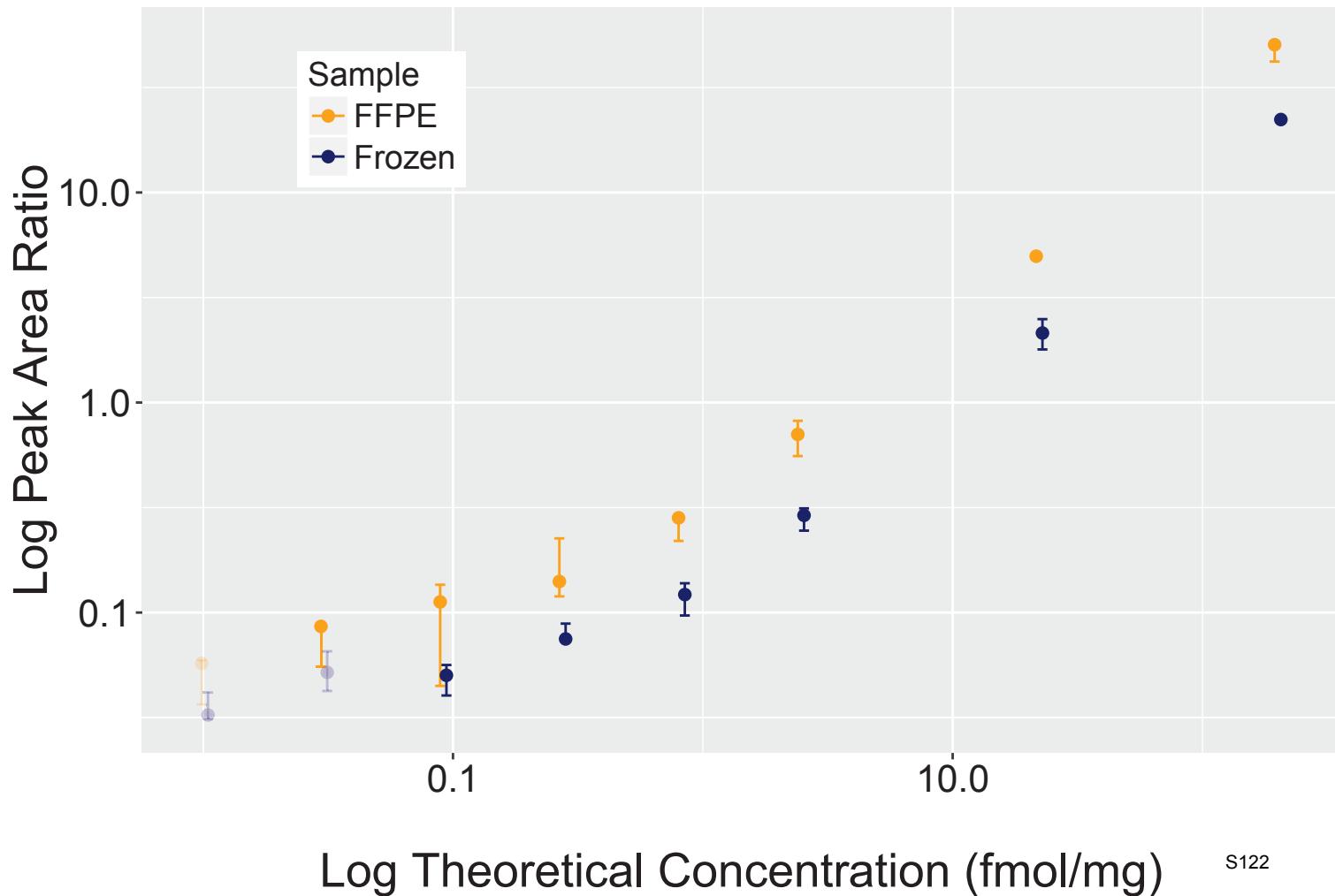


S120

Analyte: PRDX6.DFTPVC[+57]TTELGR

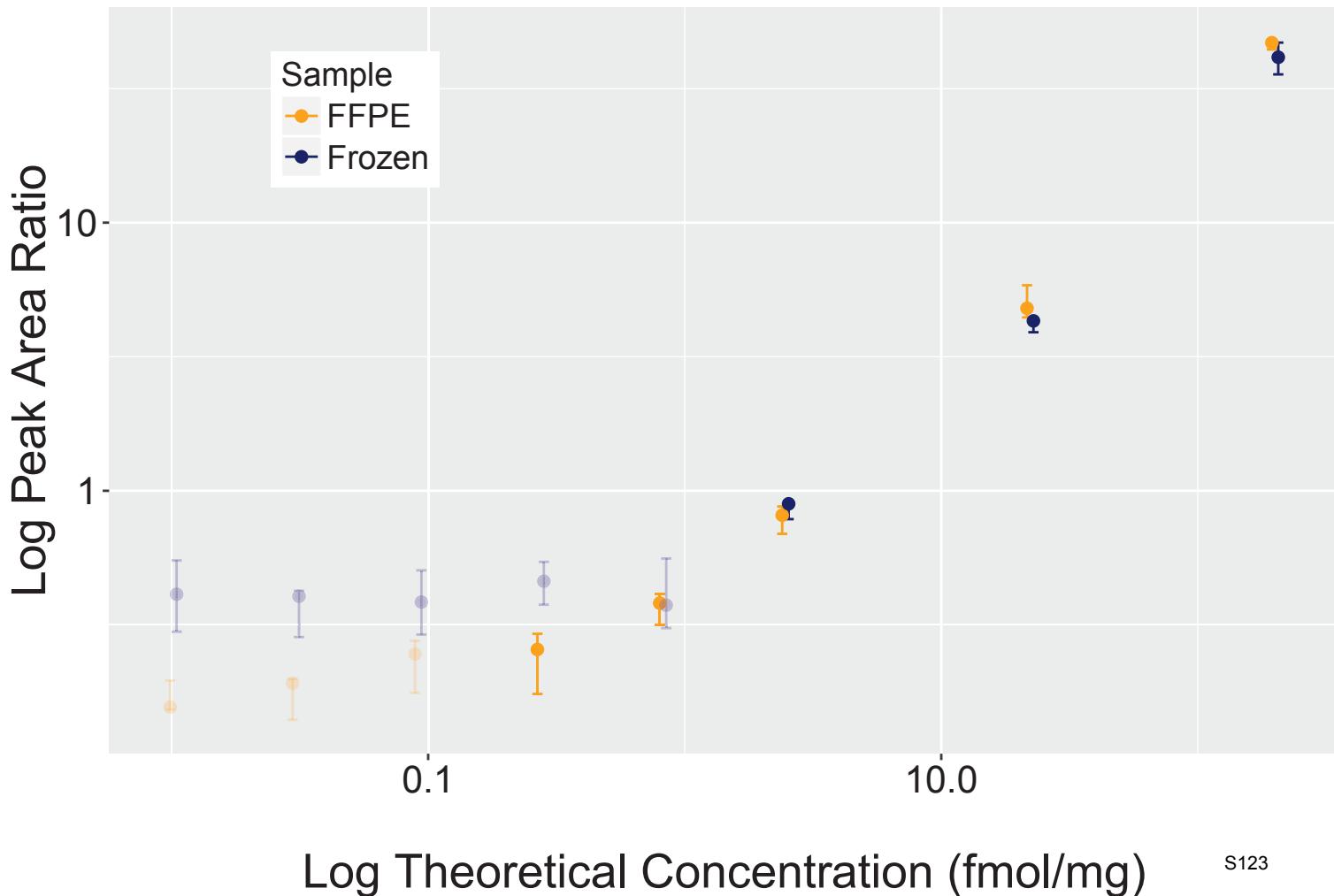


Analyte: ERP29.DGDFENPVPYTGAVK



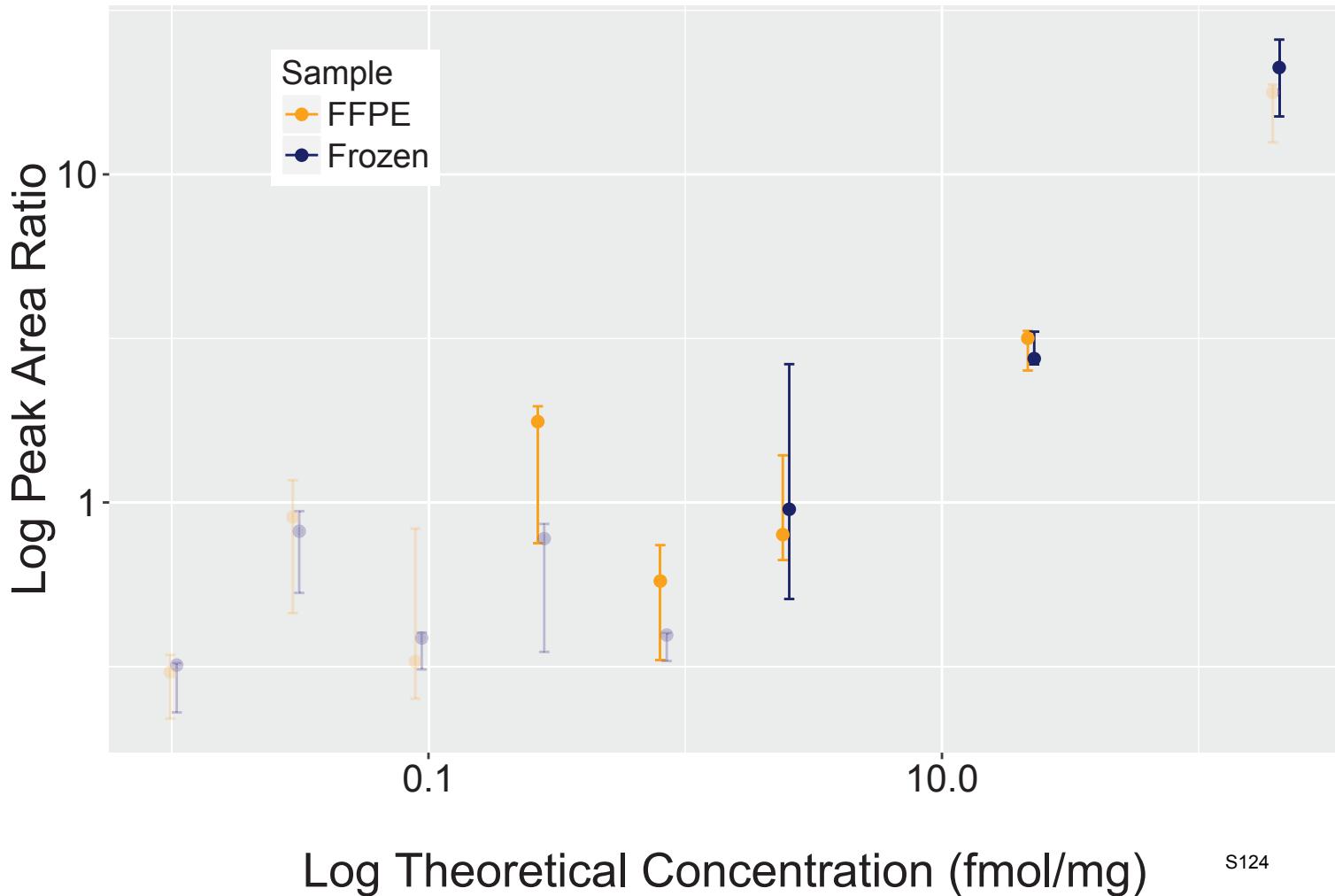
S₁₂₂

Analyte: UBAP2L.DGSLASNPYSGDLTK



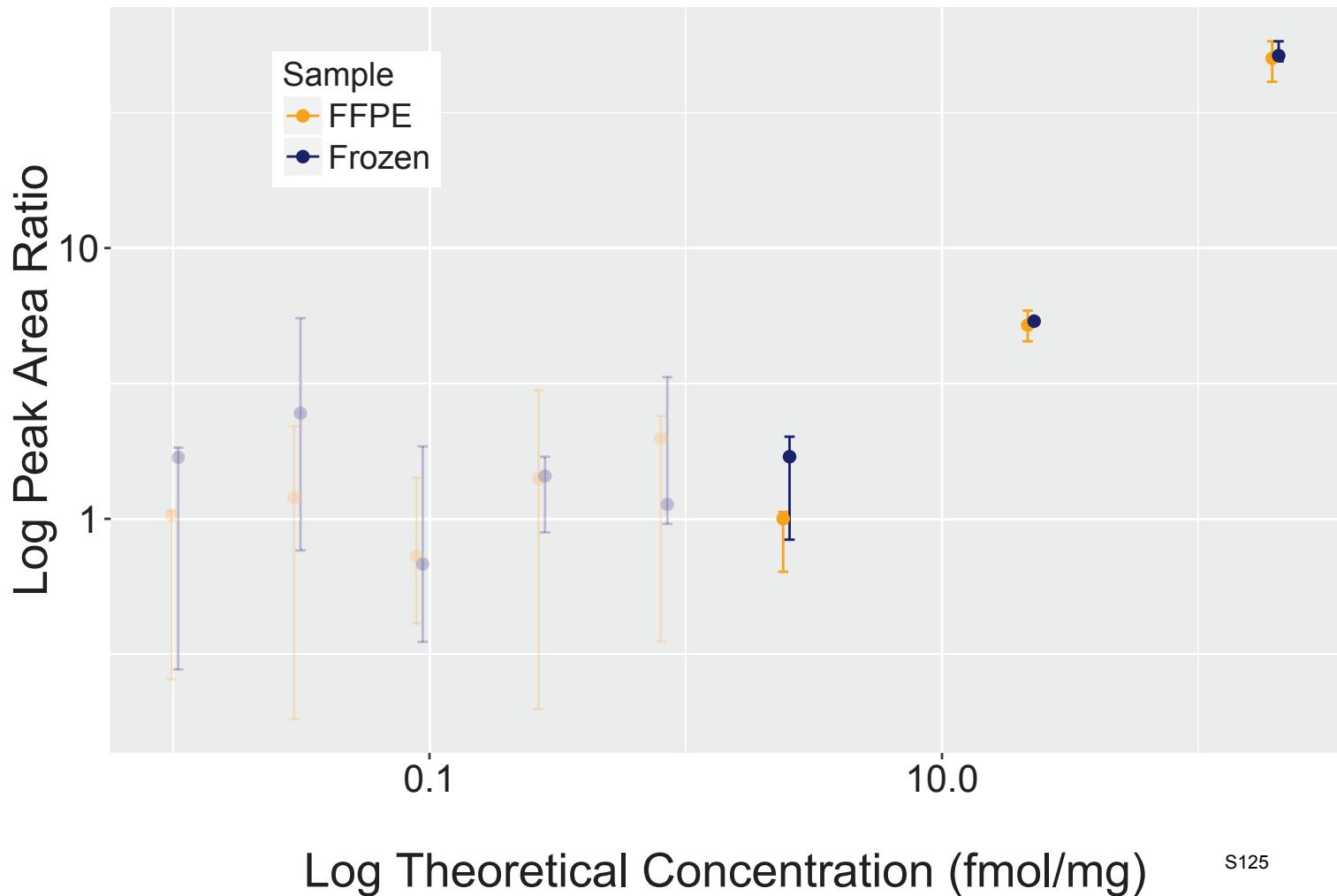
S123

Analyte: CSDA.DGVPEGAQLQGPVHR



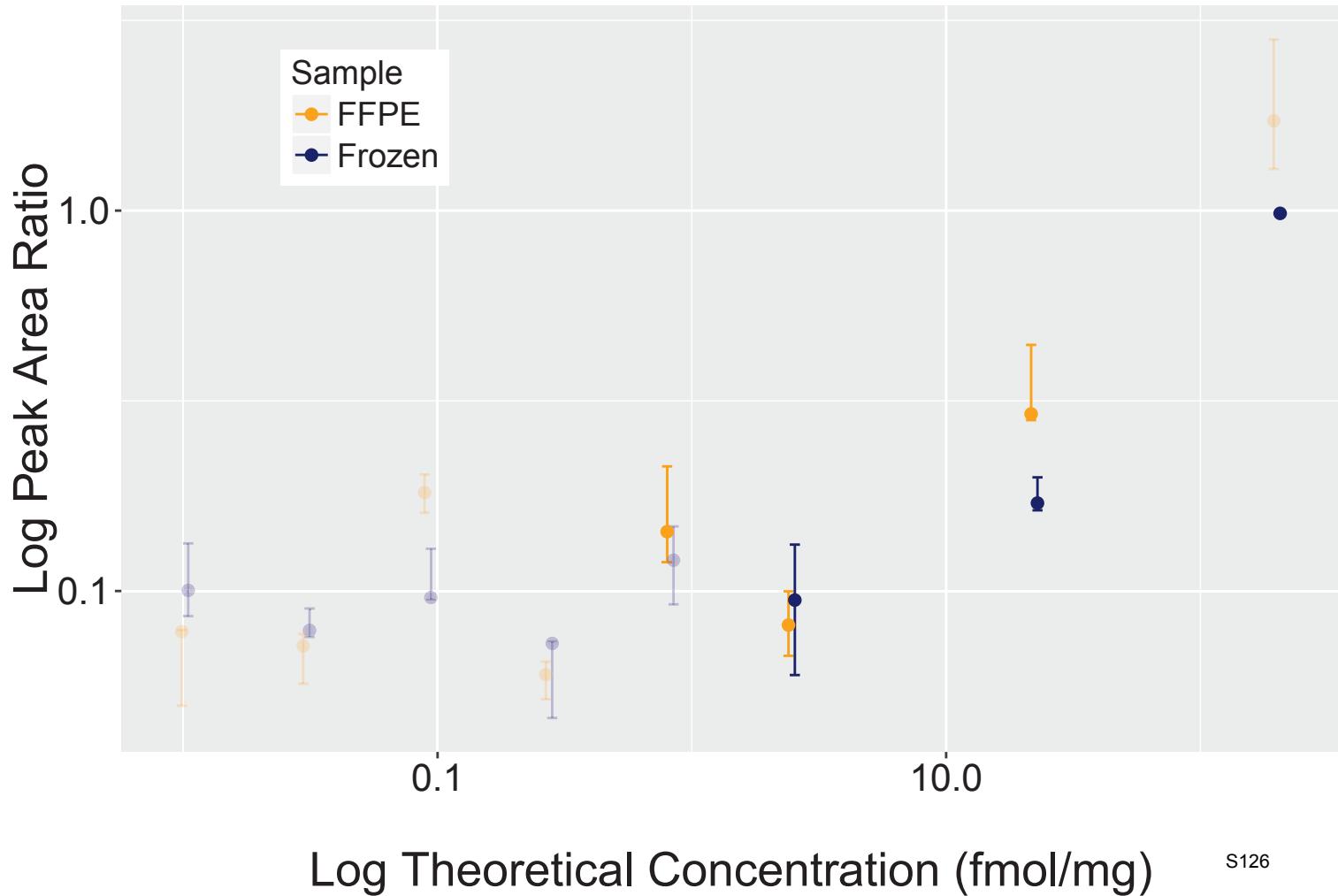
S124

Analyte: PNP.DHINLPGFSGQNPLR

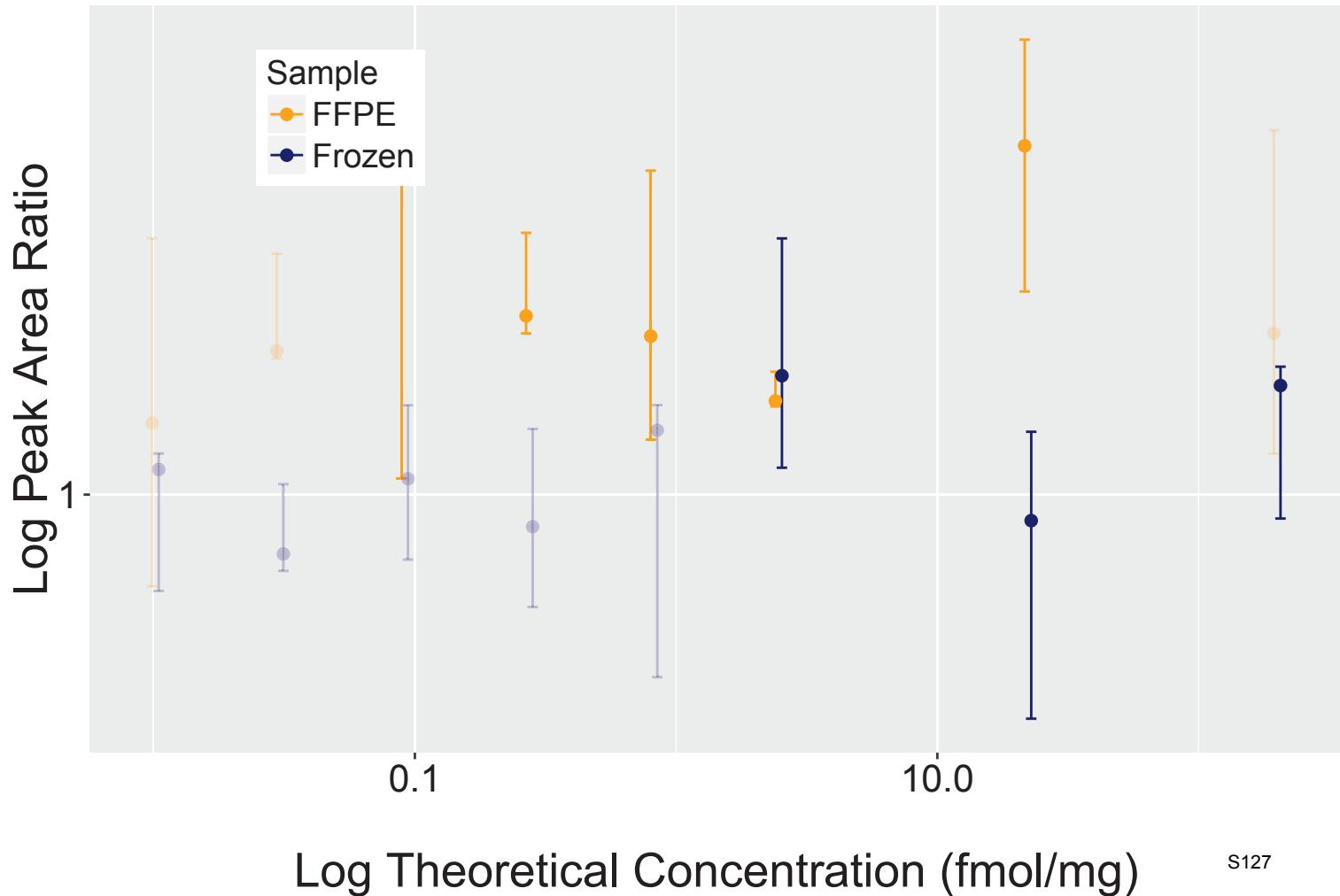


S125

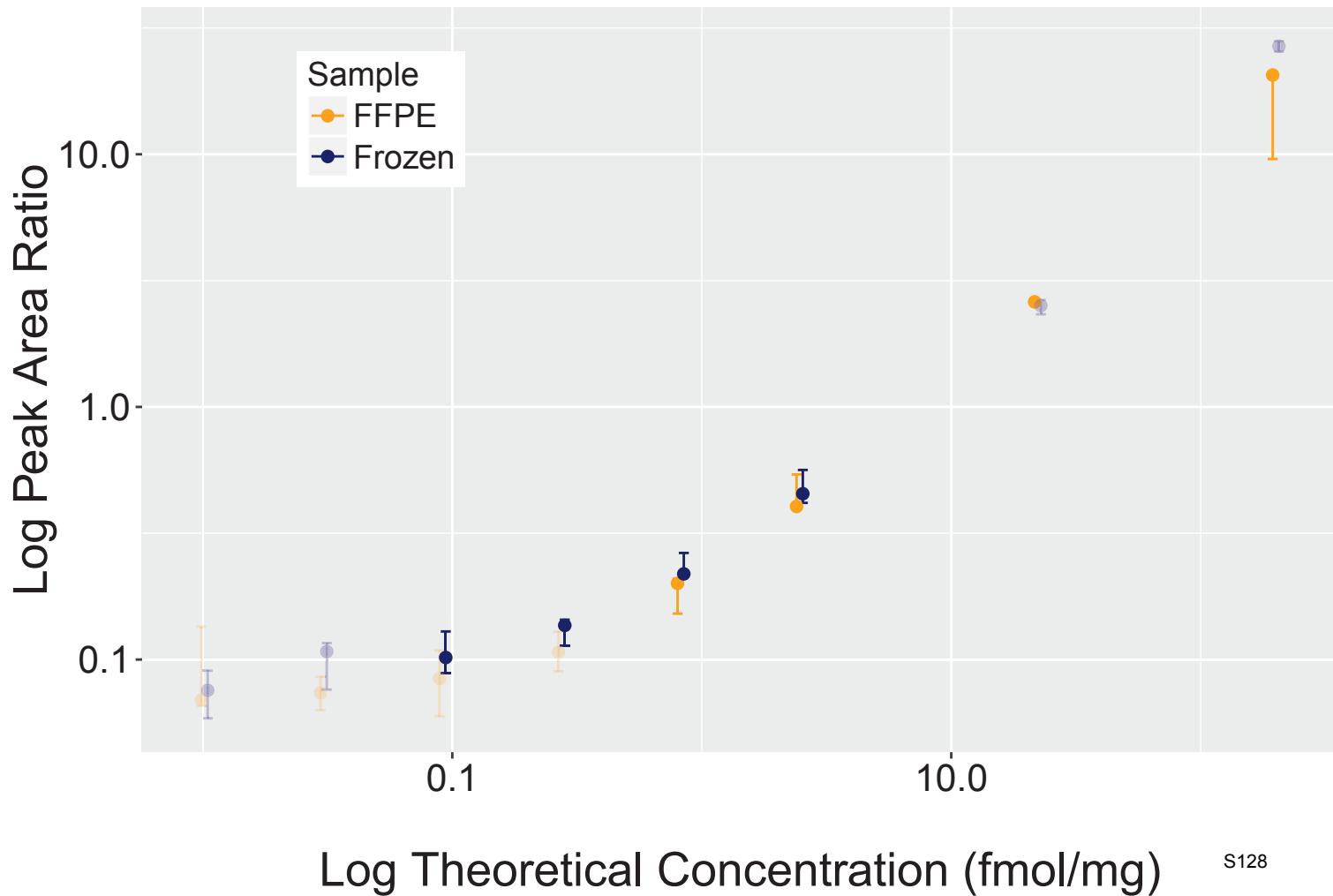
Analyte: CCT8.DIDEVSSLLR



Analyte: LDHA.DLADELALVDVIEDK

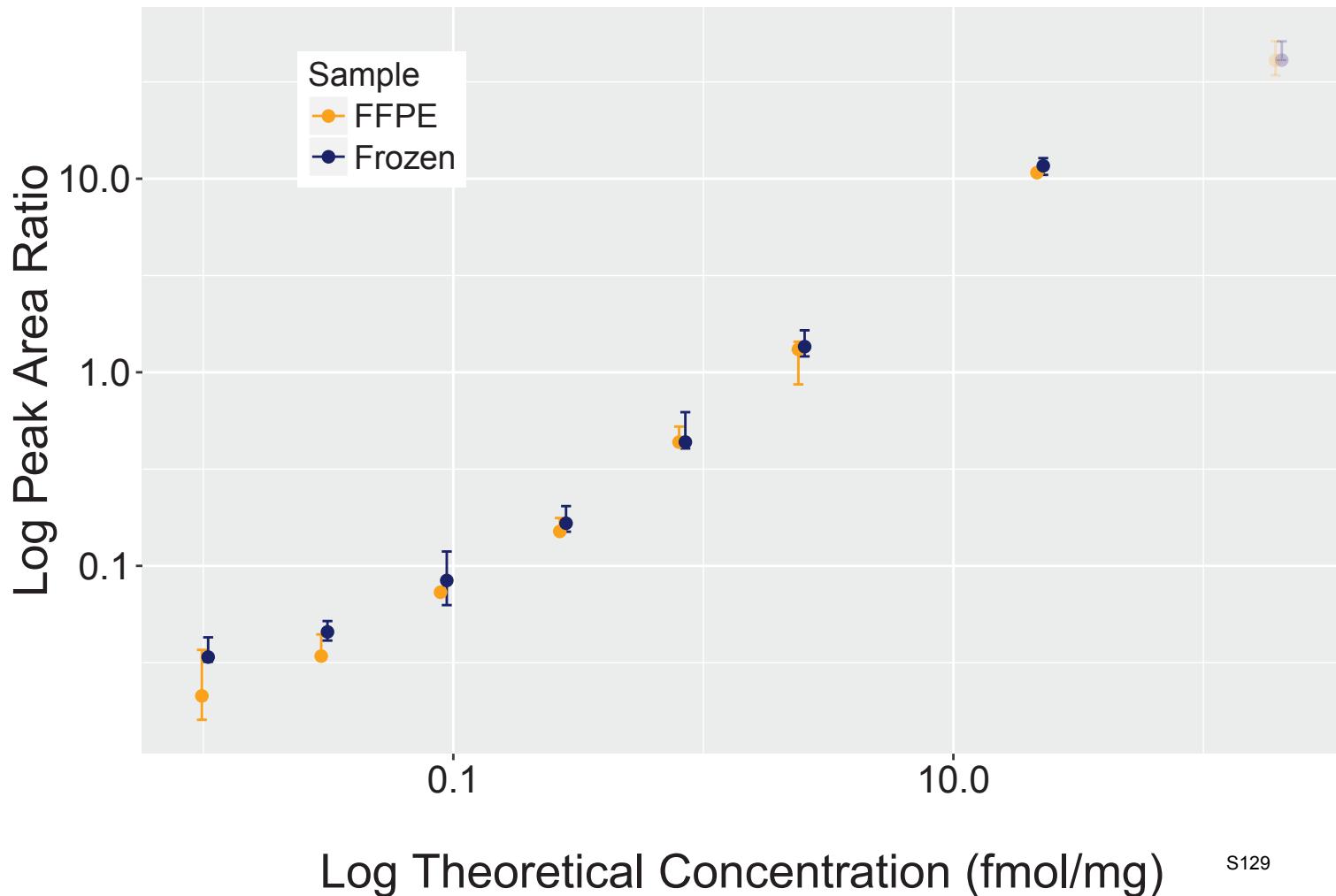


Analyte: ERP44.DLAEITTLDR



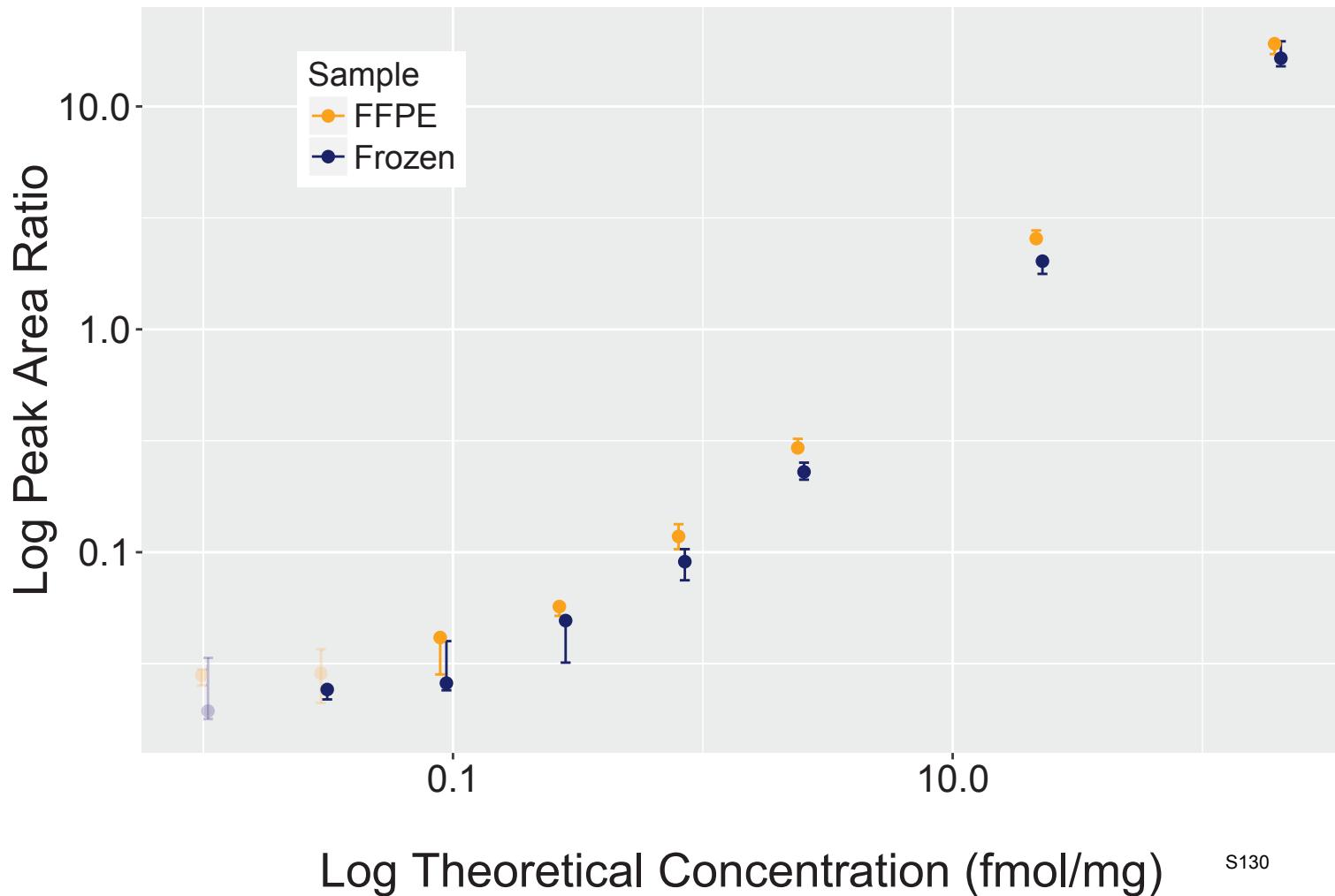
S₁₂₈

Analyte: HSD17B10.DLAPIGIR



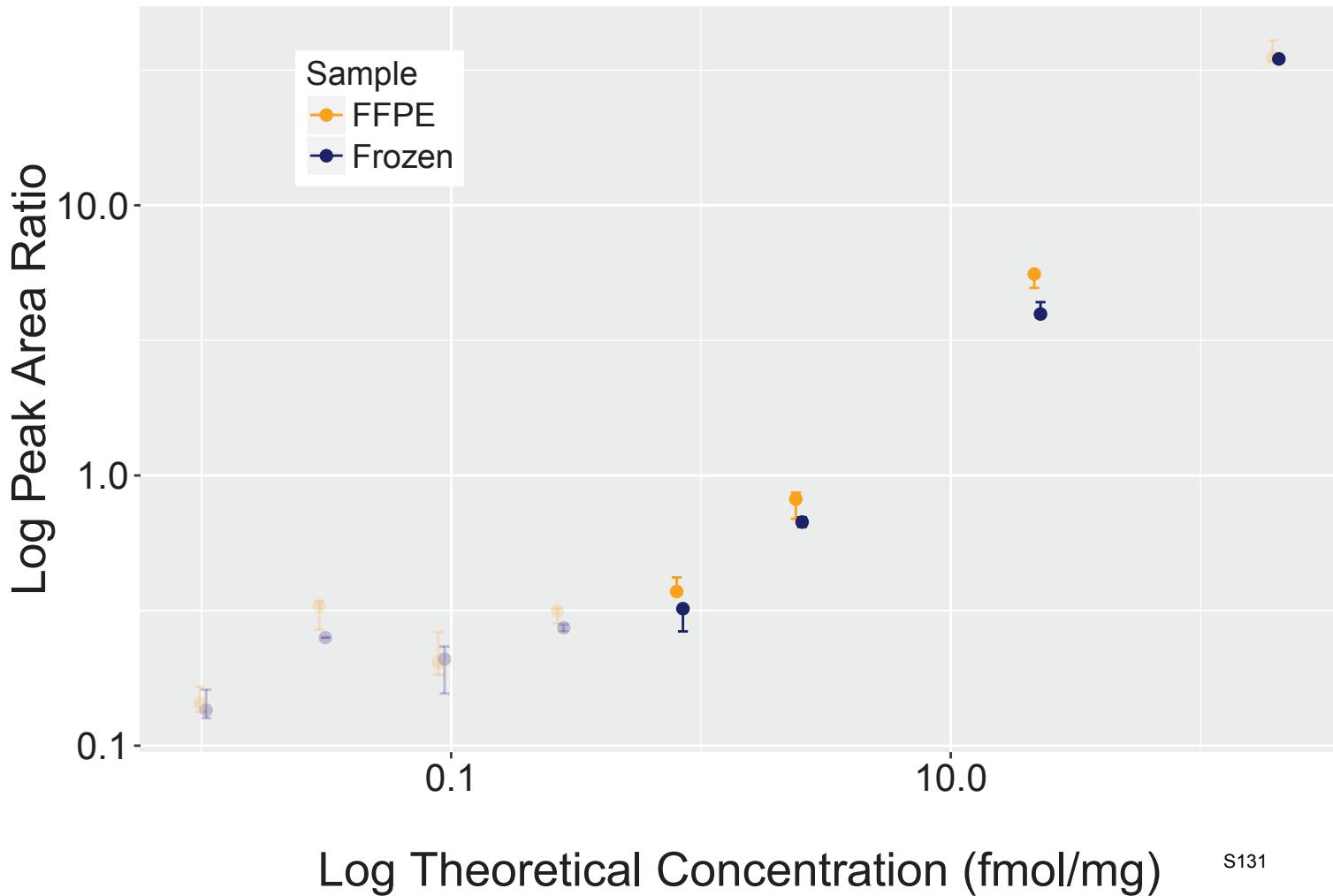
S¹²⁹

Analyte: HIBADH.DLGLAQDSATSTK



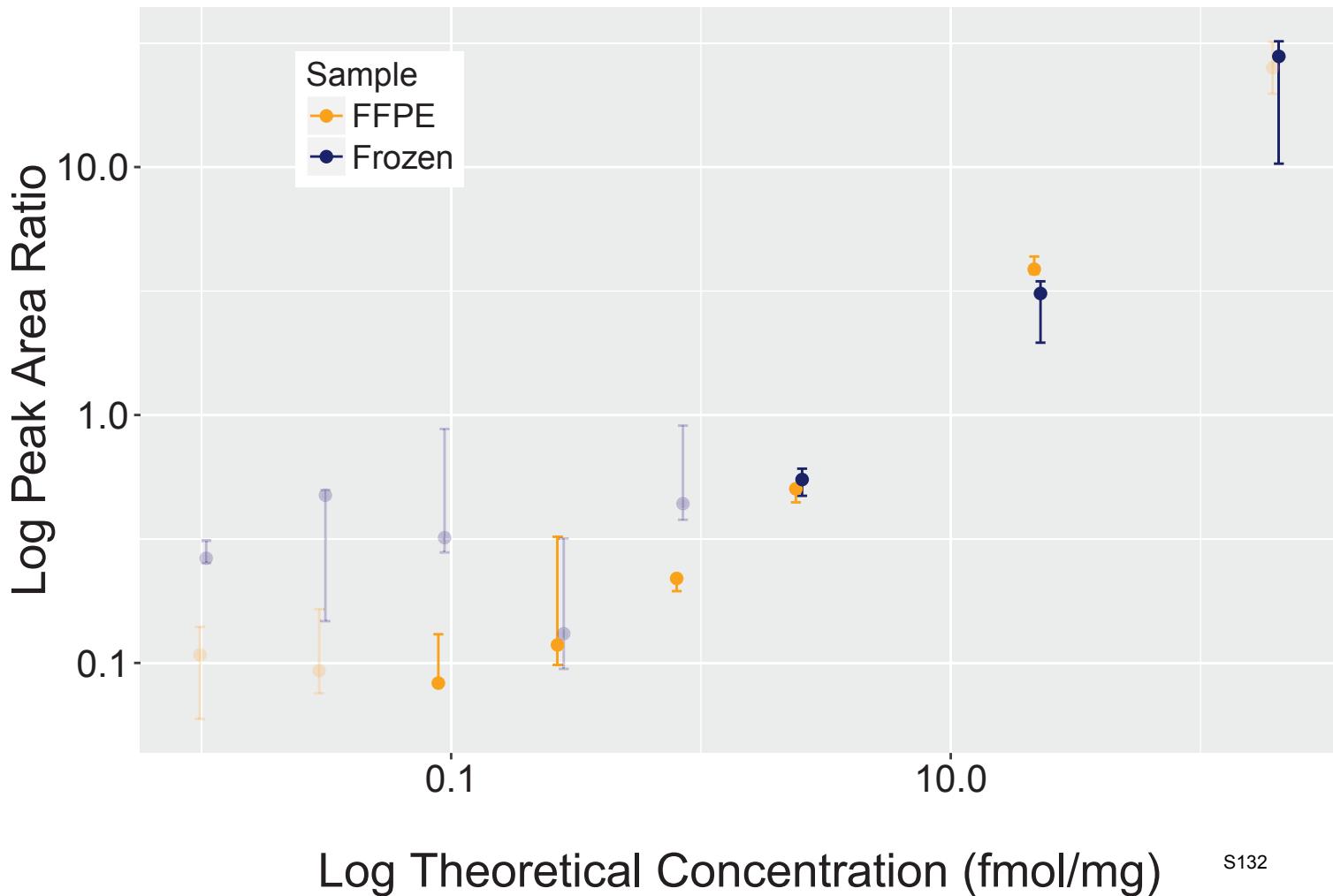
S130

Analyte: NSFL1C.DLIHDQDEEEEEEGQR

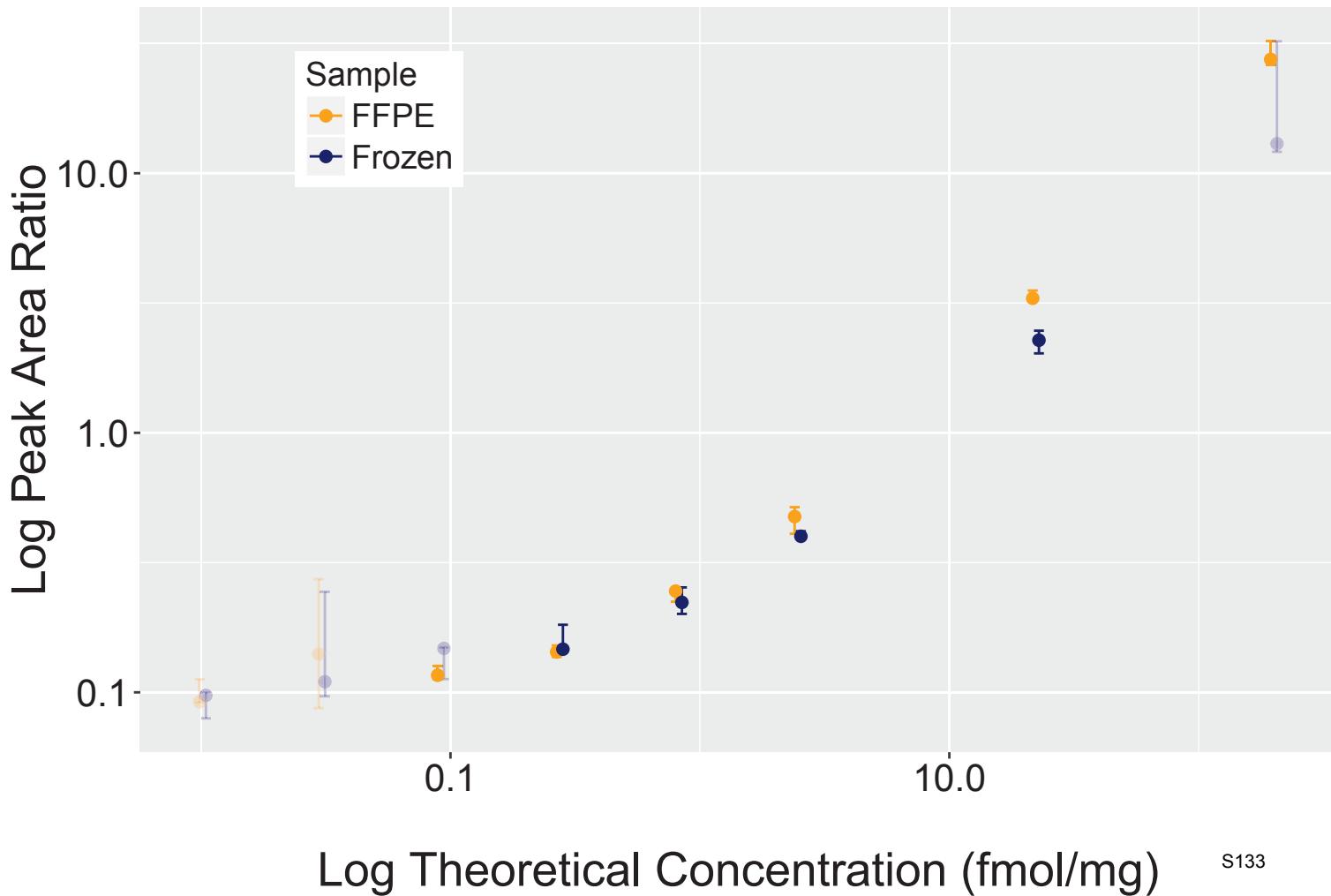


S131

Analyte: SEC22B.DLQQYQSQAK

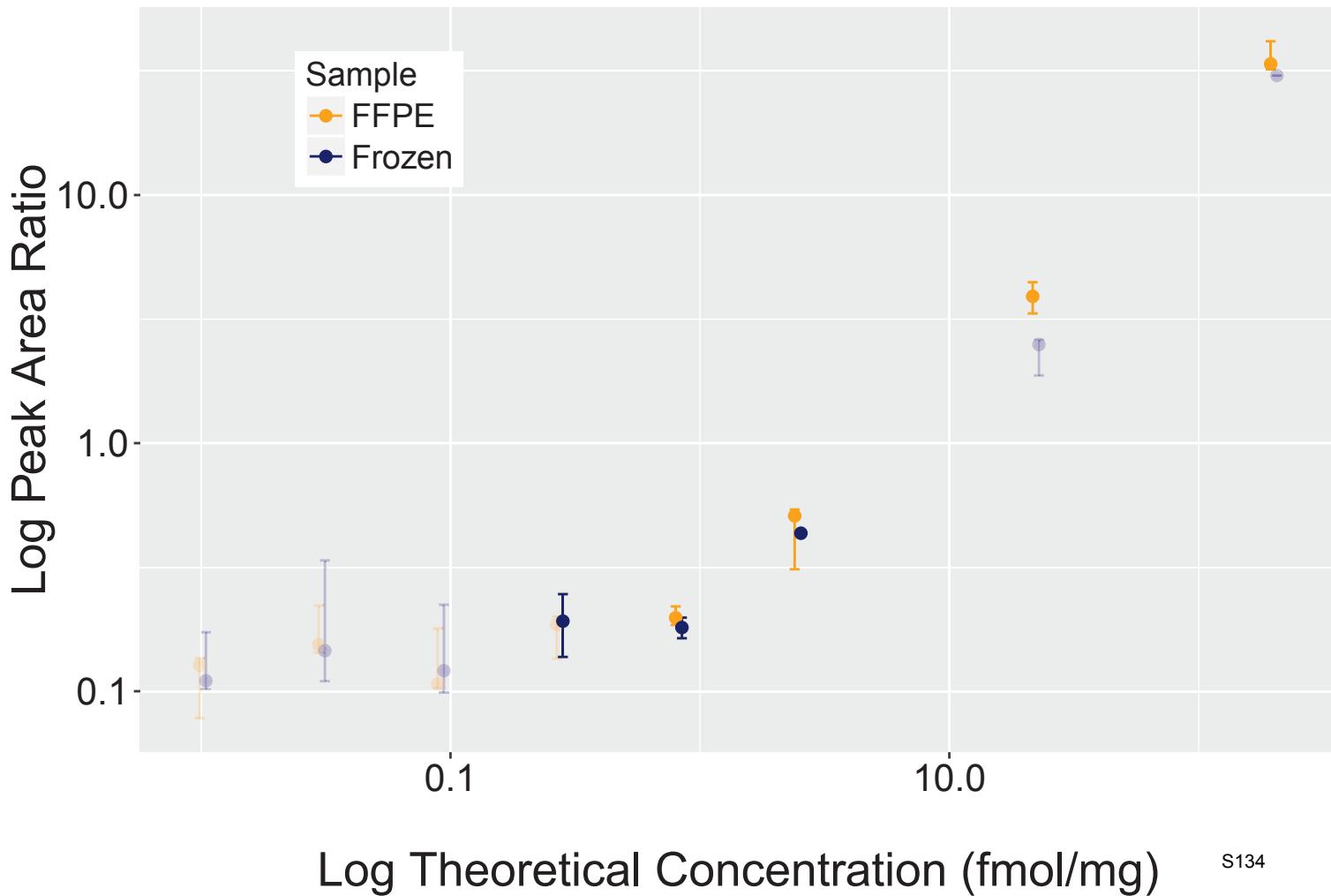


Analyte: PCNA.DLSHIGDAVVIS[+57]AK

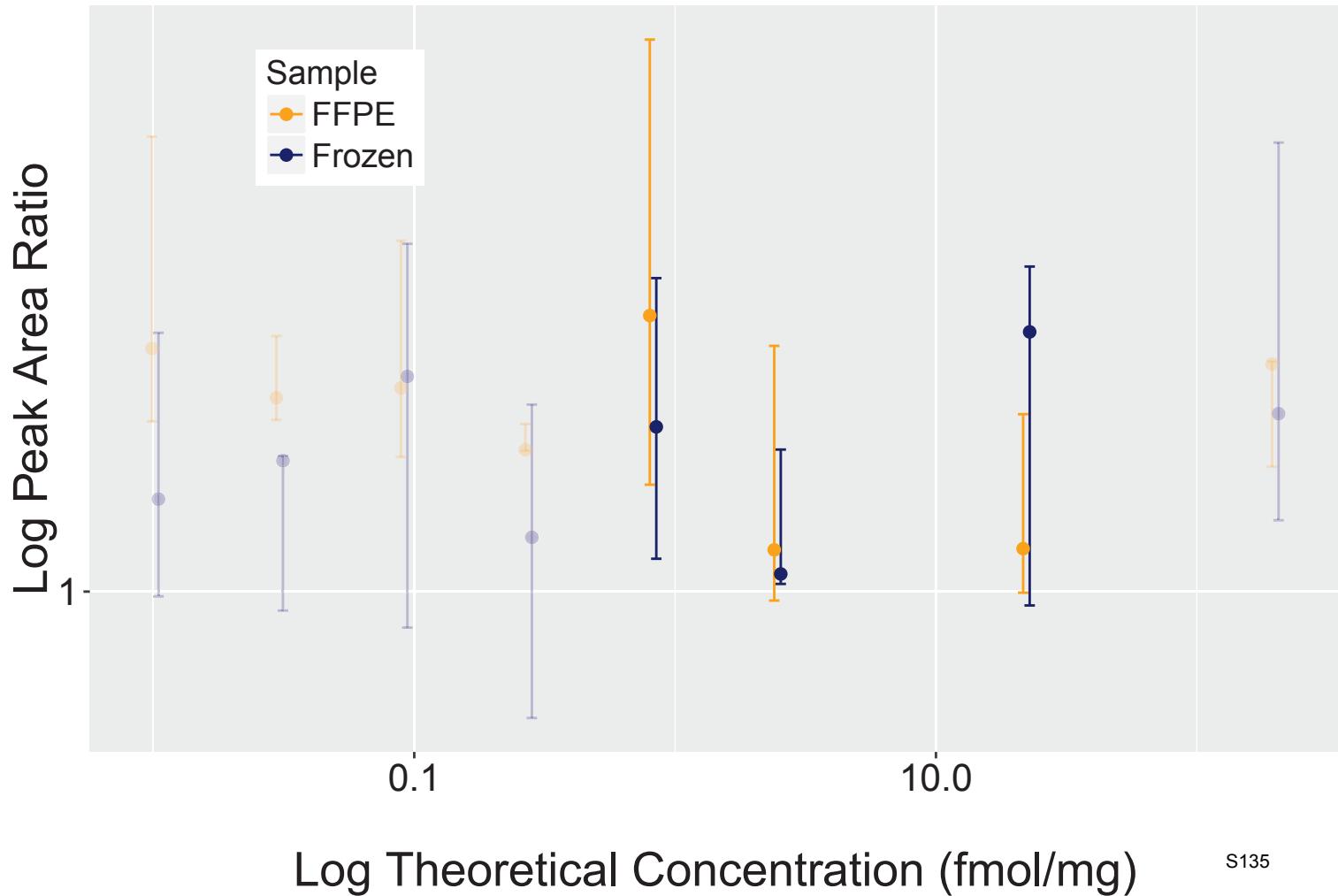


S¹³³

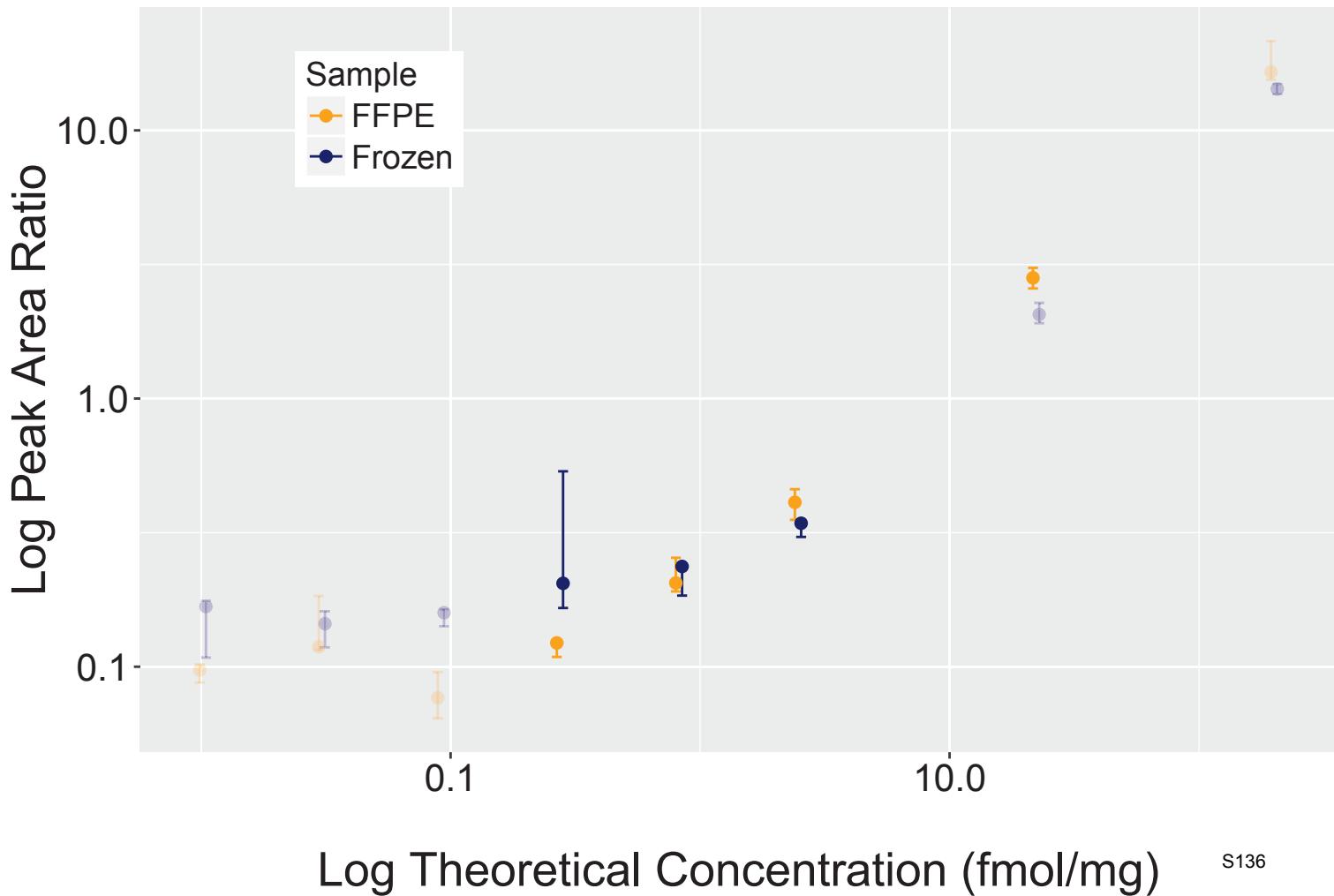
Analyte: LTA4H.DLSSHQLNEFLAQTLQR



Analyte: FASN.DNLEFFLAGIGR

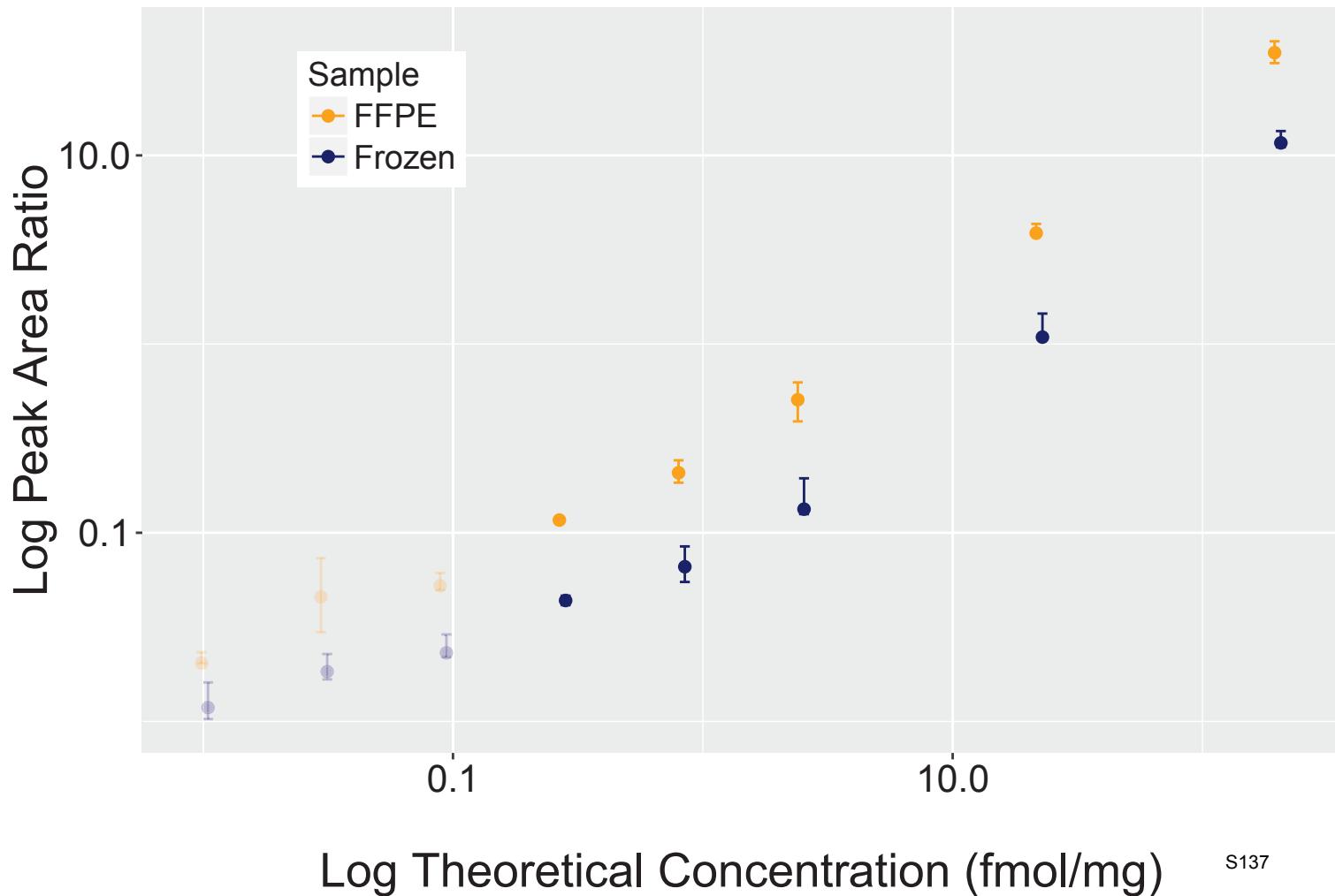


Analyte: ARPC2.DNTINLIHTFR

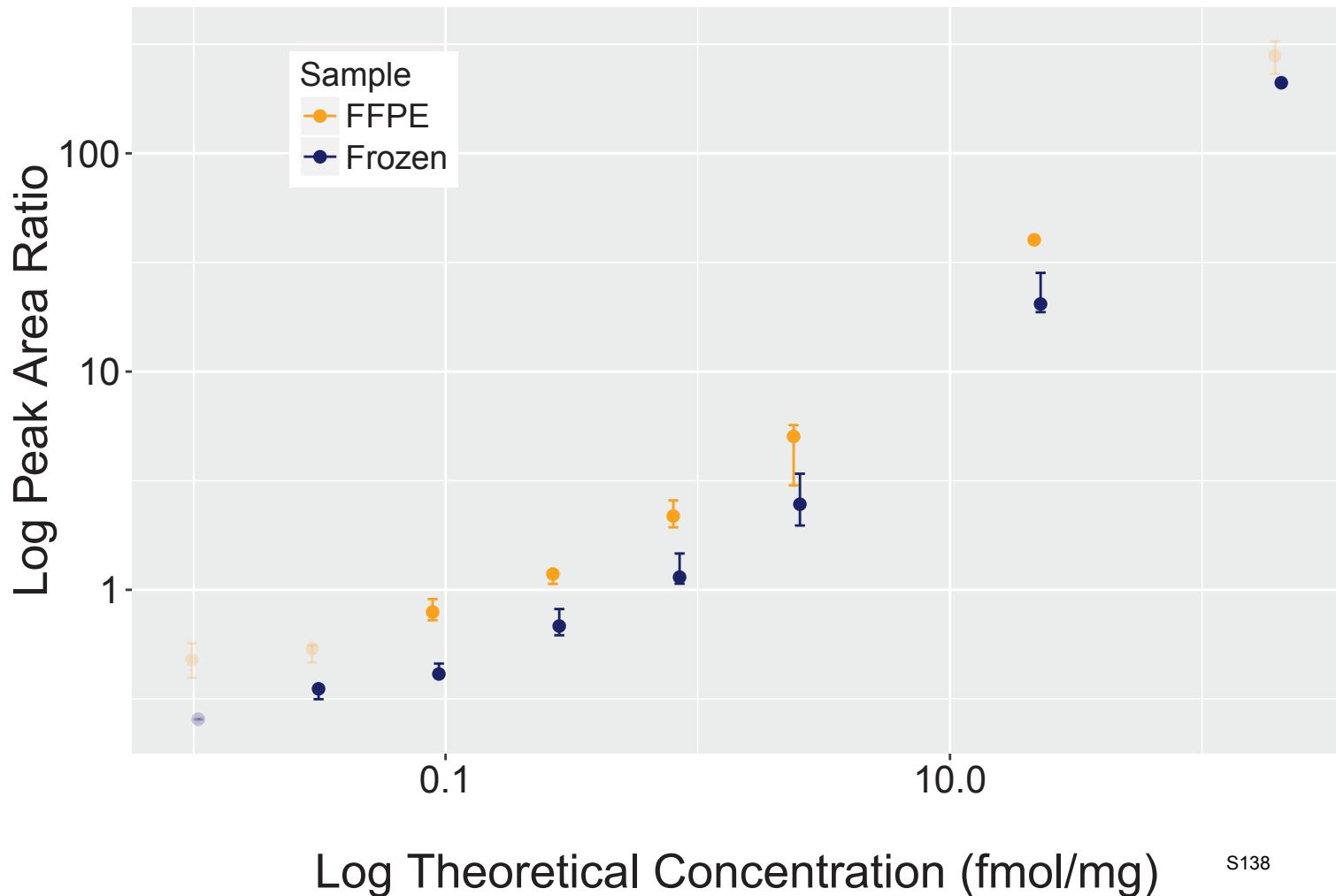


S136

Analyte: LDHA.DQLIYNLLK

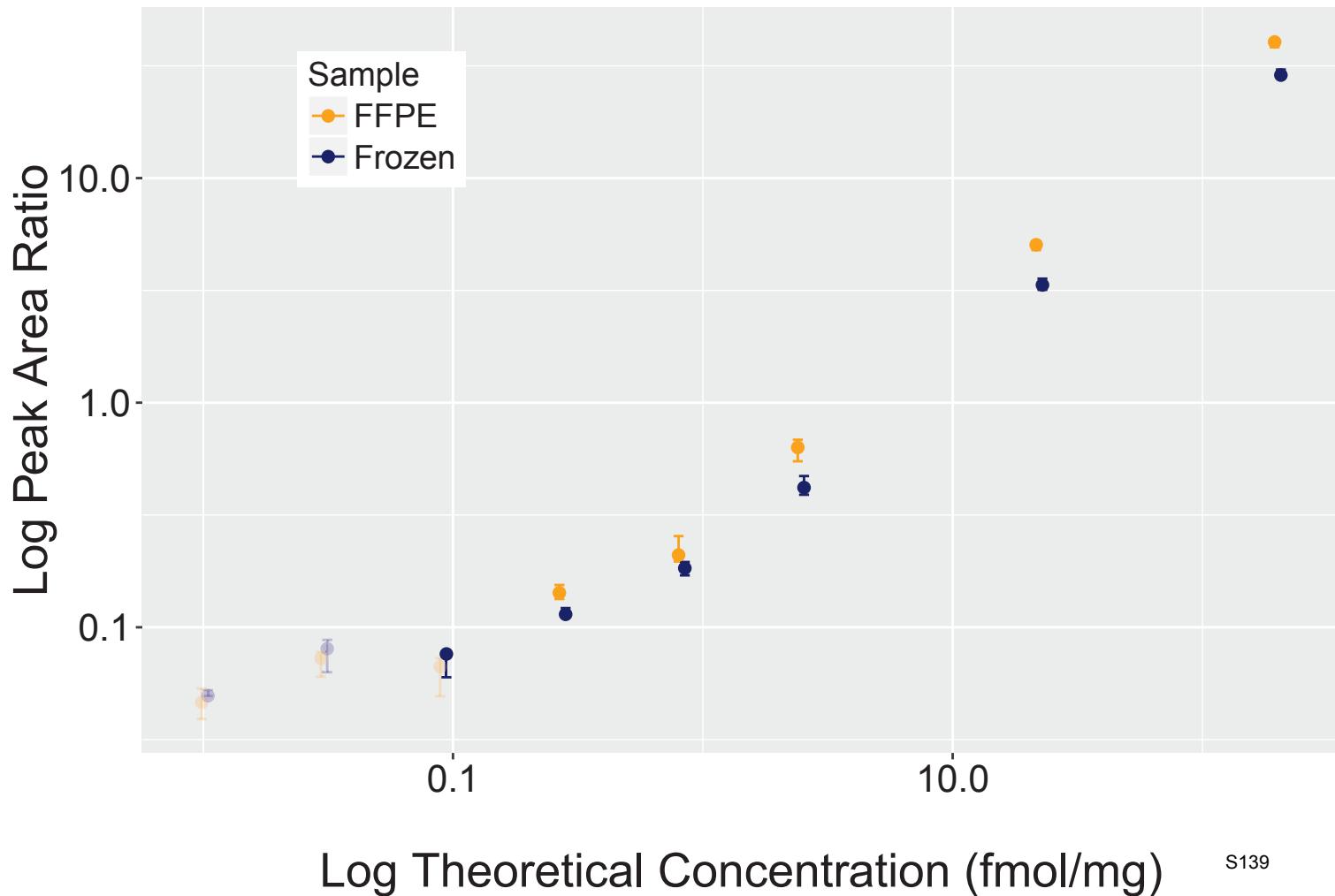


Analyte: IDH2.DQTDDQVTIDSALATQK



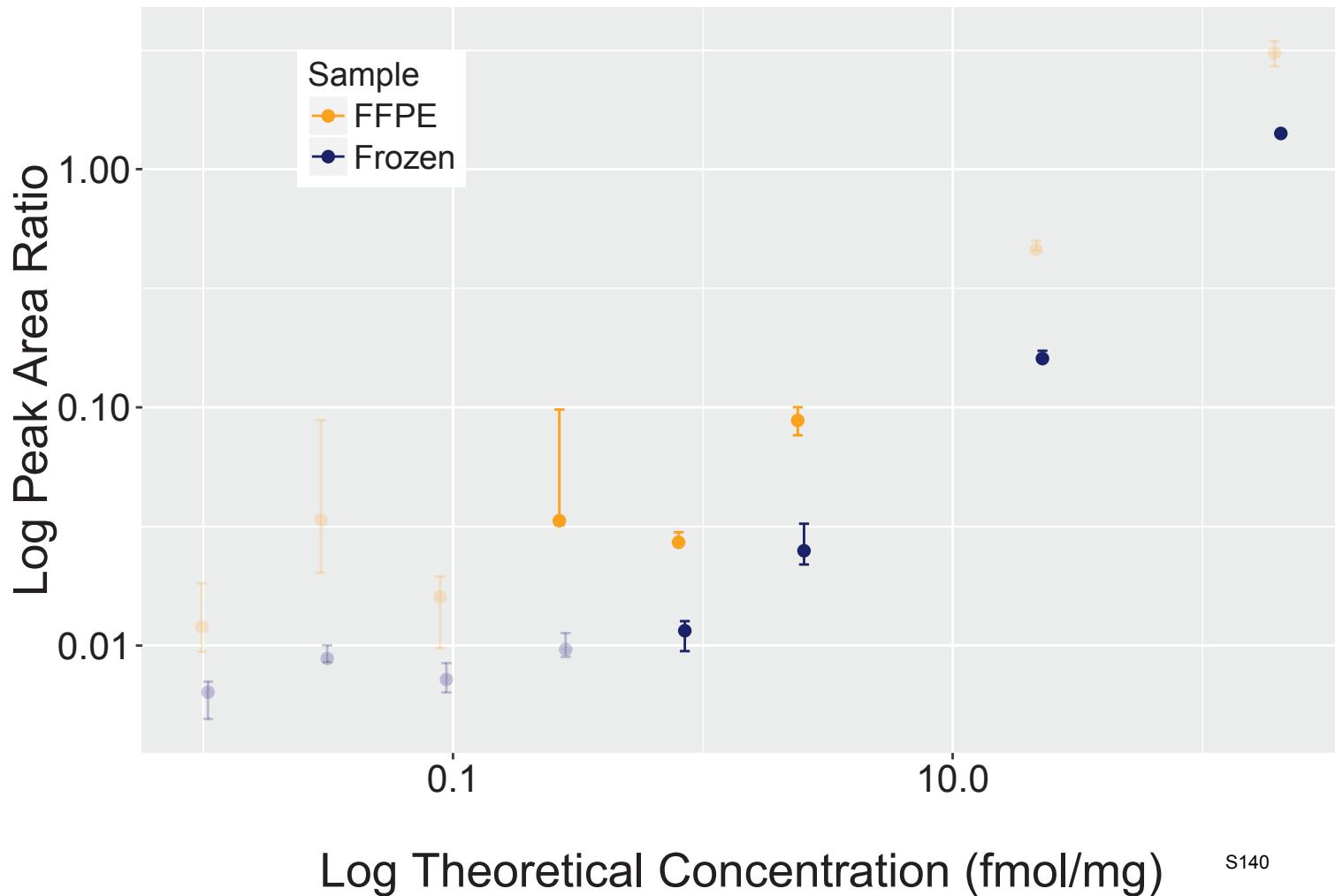
S138

Analyte: CMBL.DSEDIYNLK



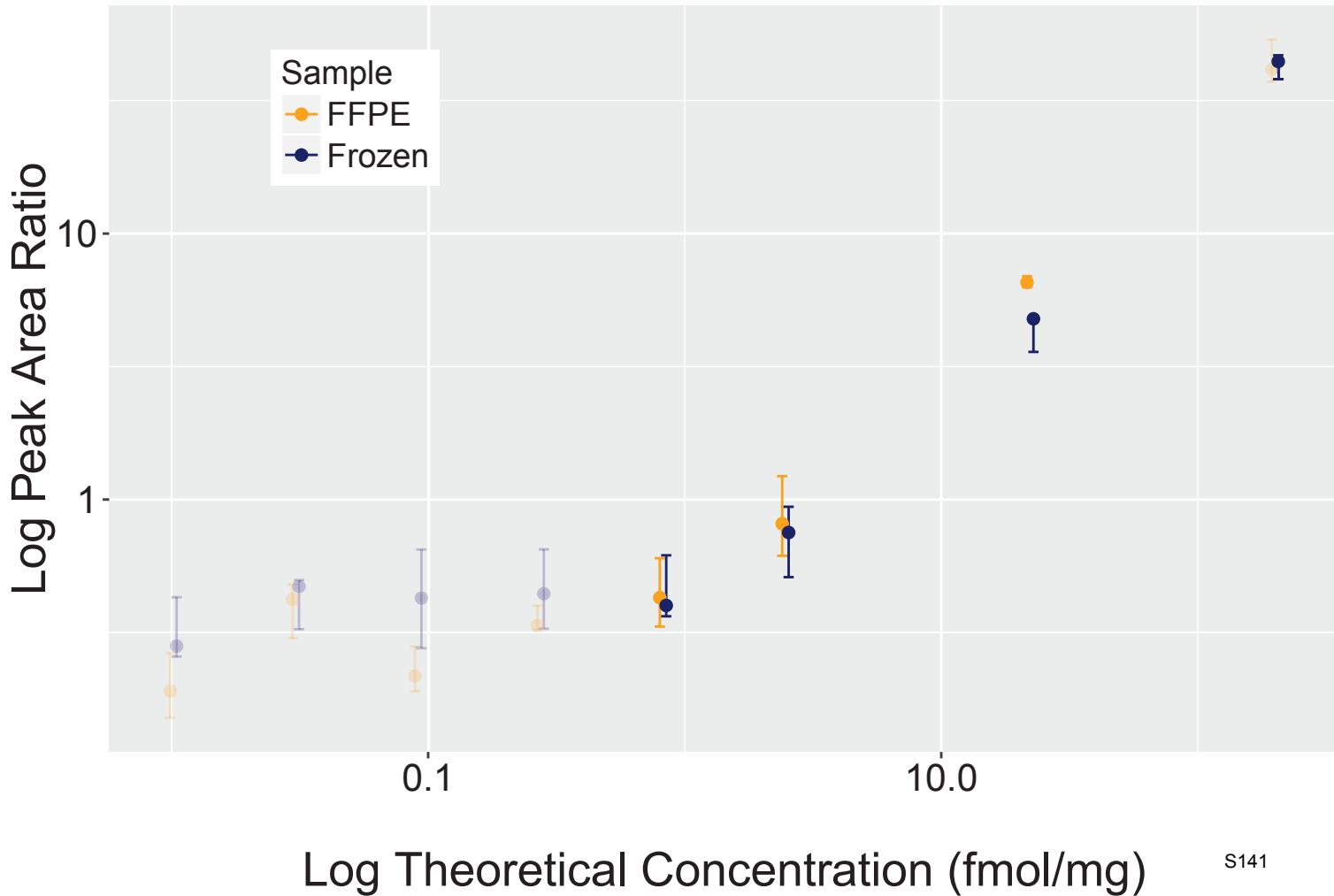
S¹³⁹

Analyte: PFN1.DSPSVWAAVPGK

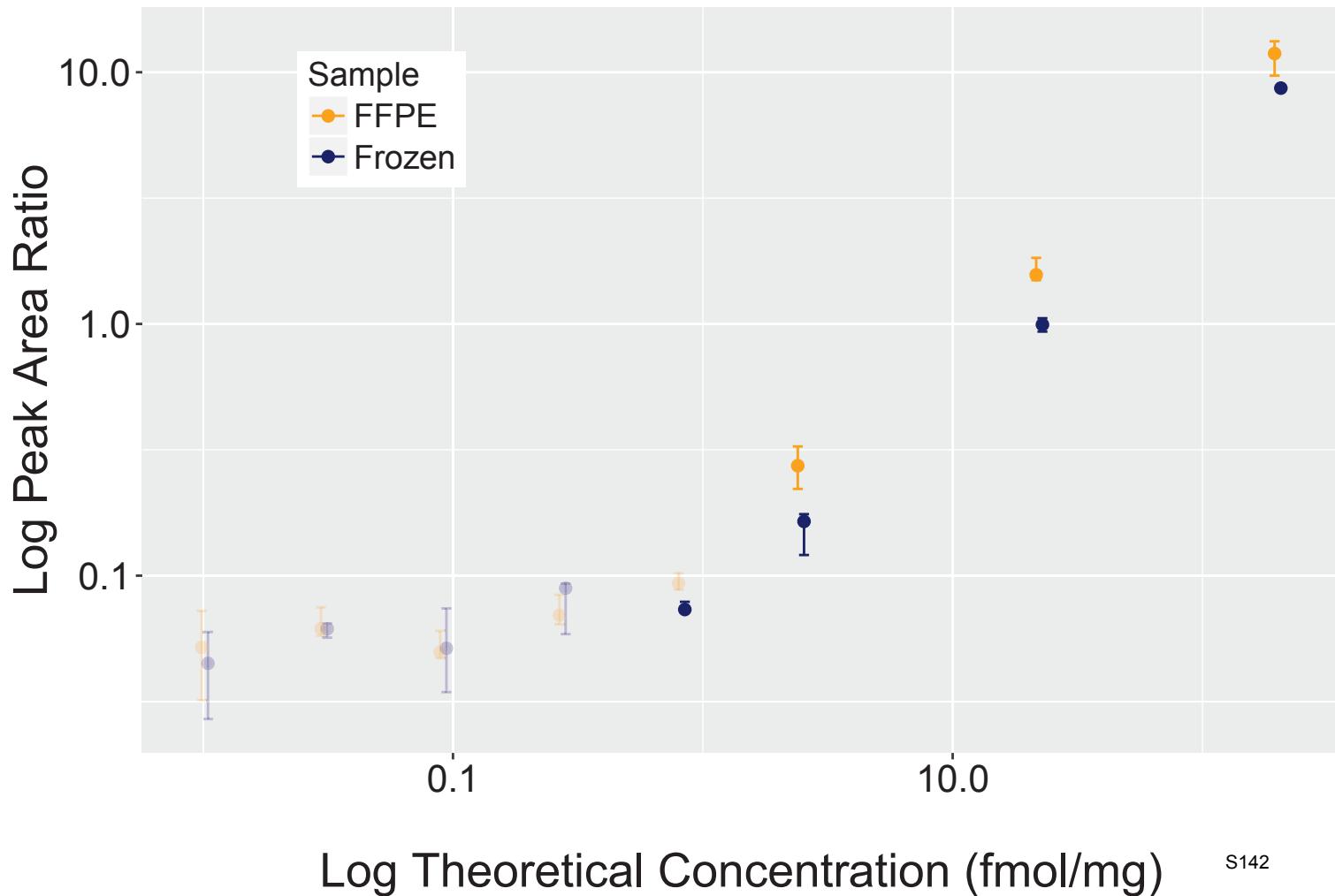


S140

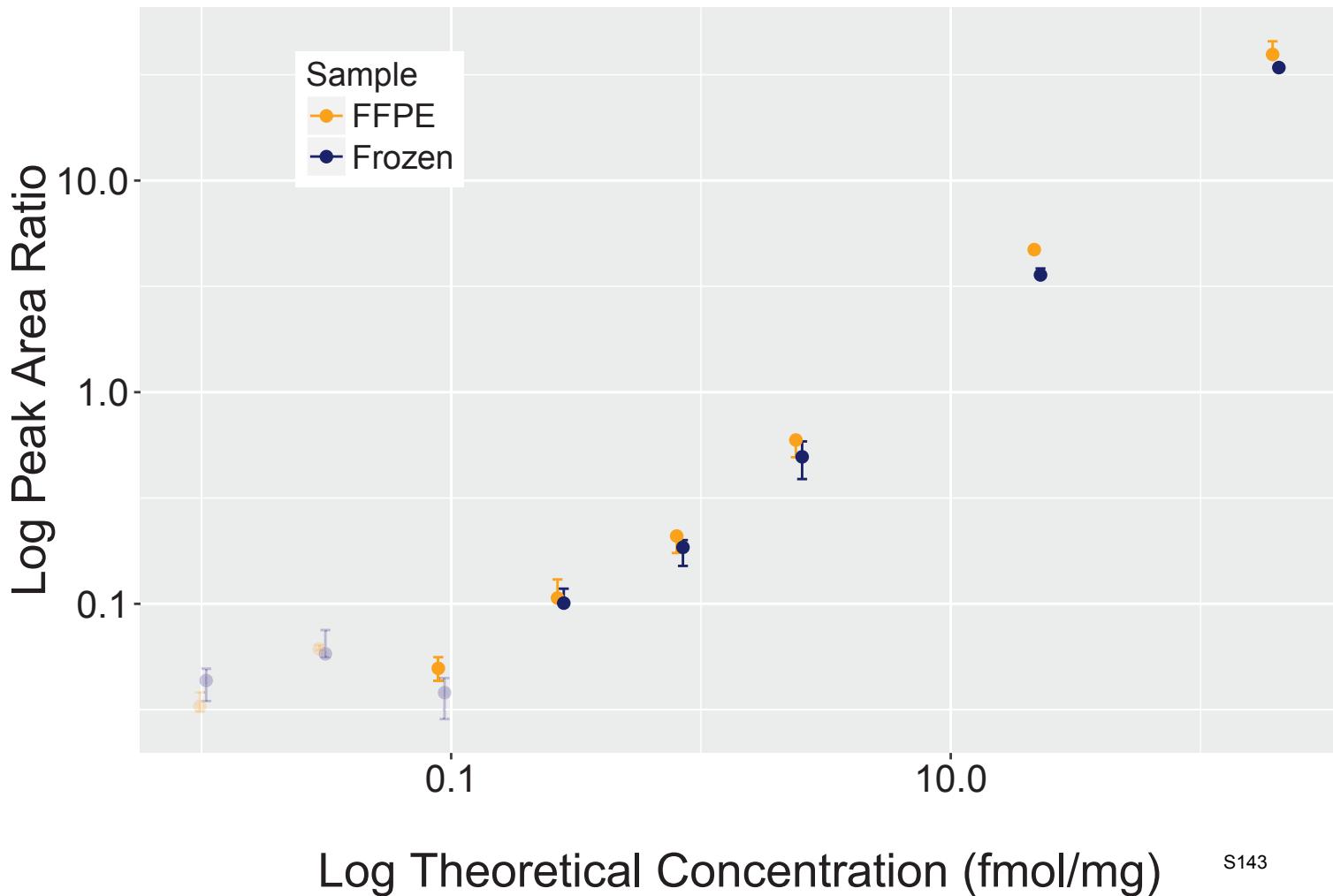
Analyte: DNM1L.DTLQSELVGQLYK



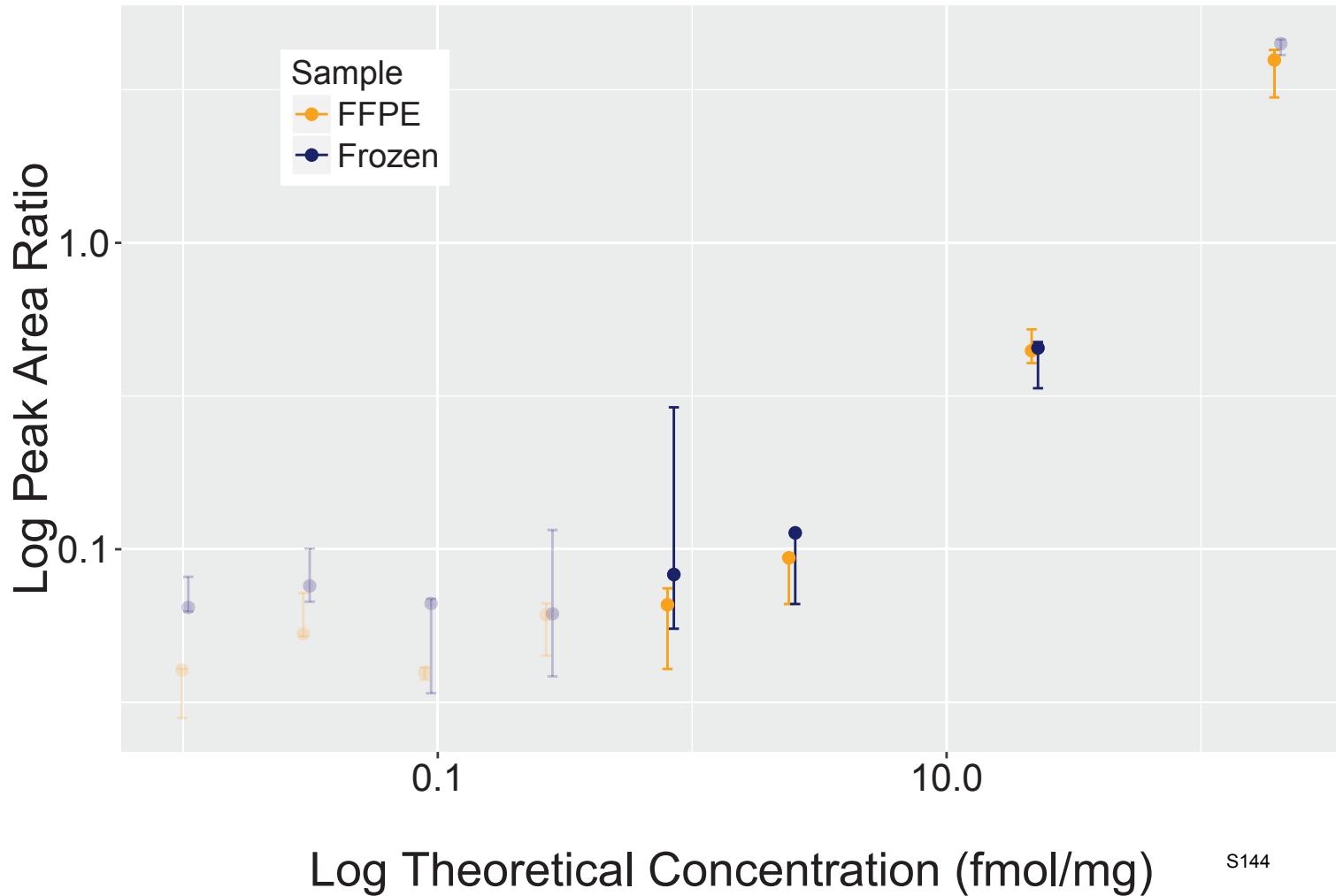
Analyte: SERPINH1.DTQSGSLLFIGR



Analyte: EPHX1.DVELLYPVK

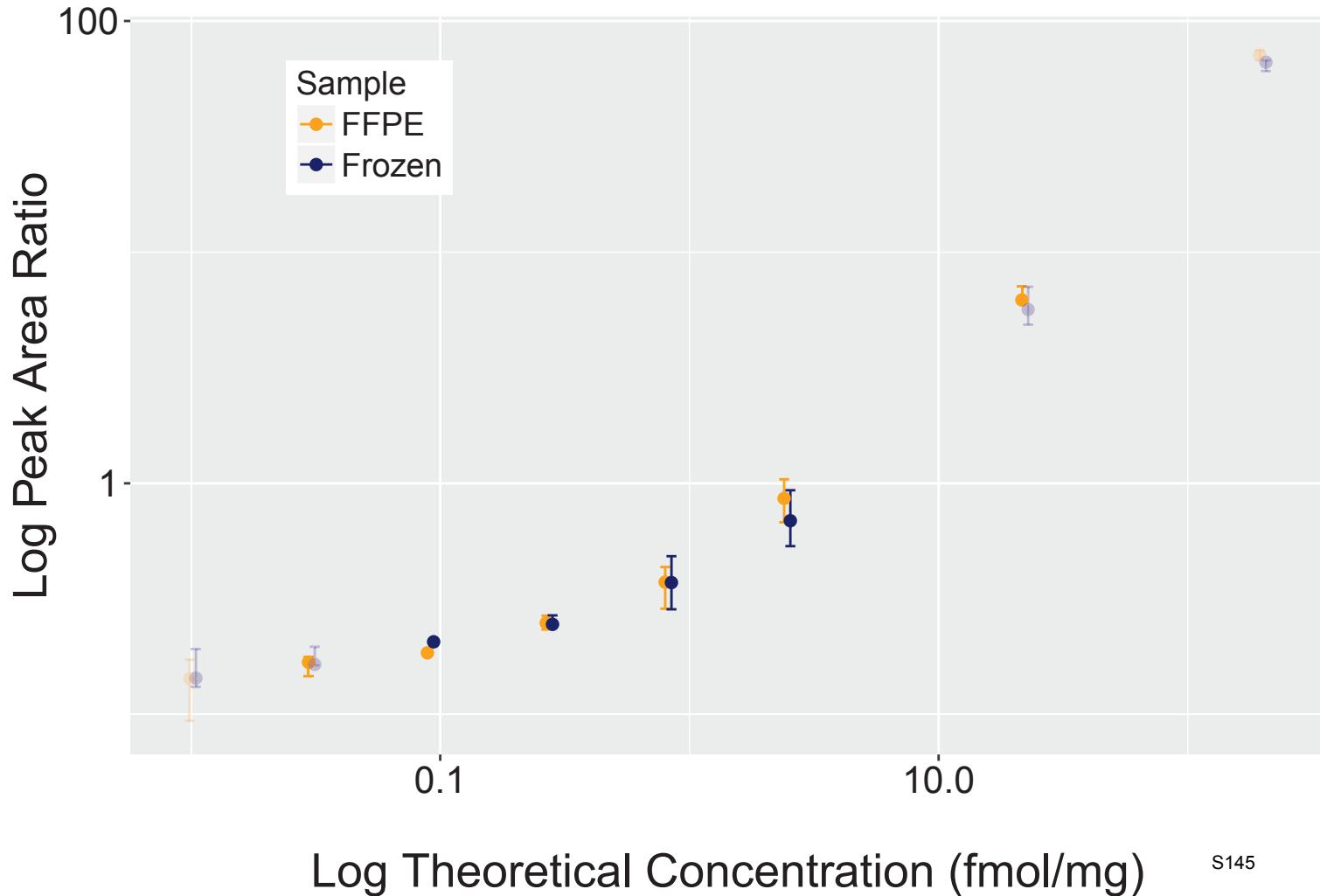


Analyte: GNB2L1.DVLSVAFSSDNR

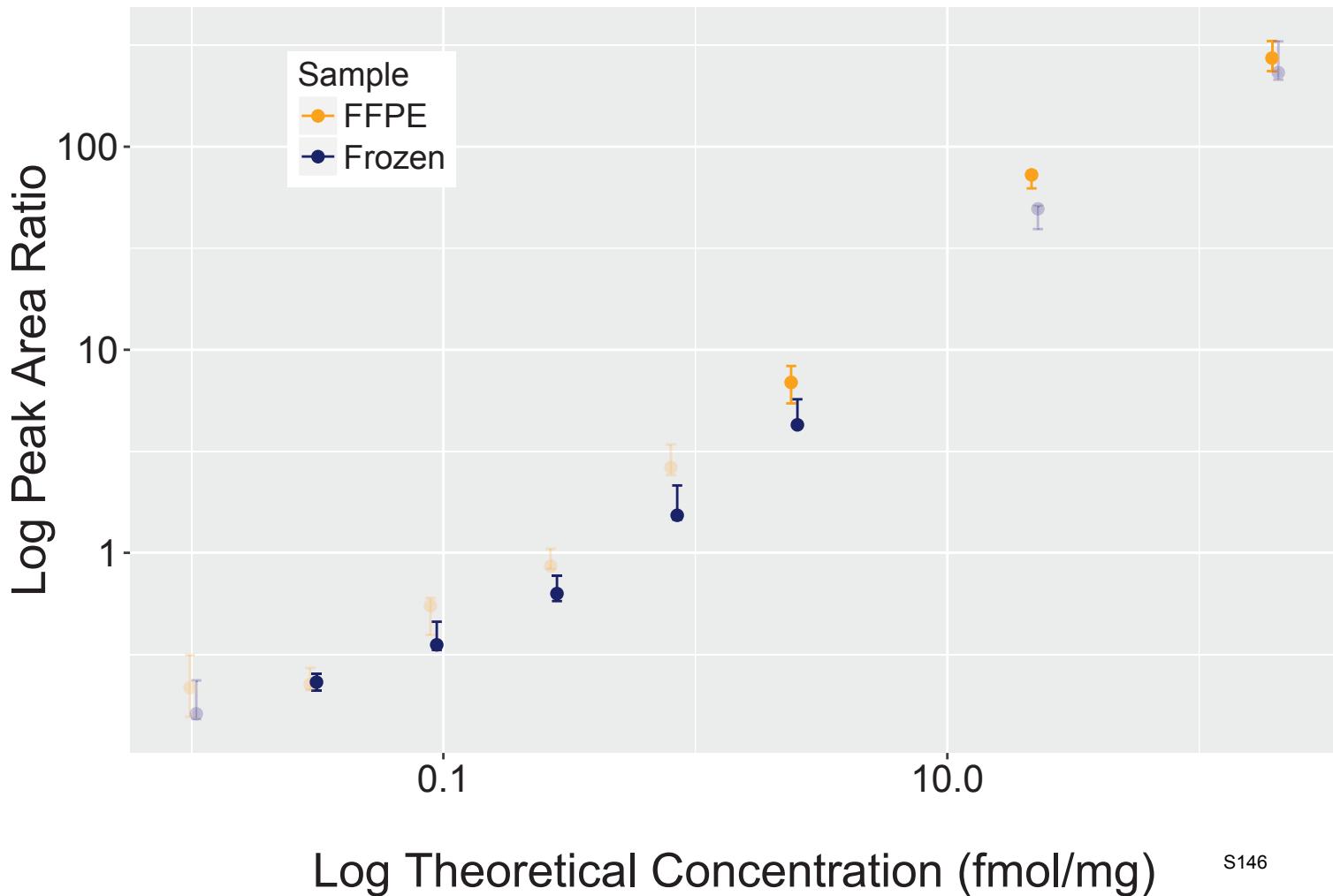


S144

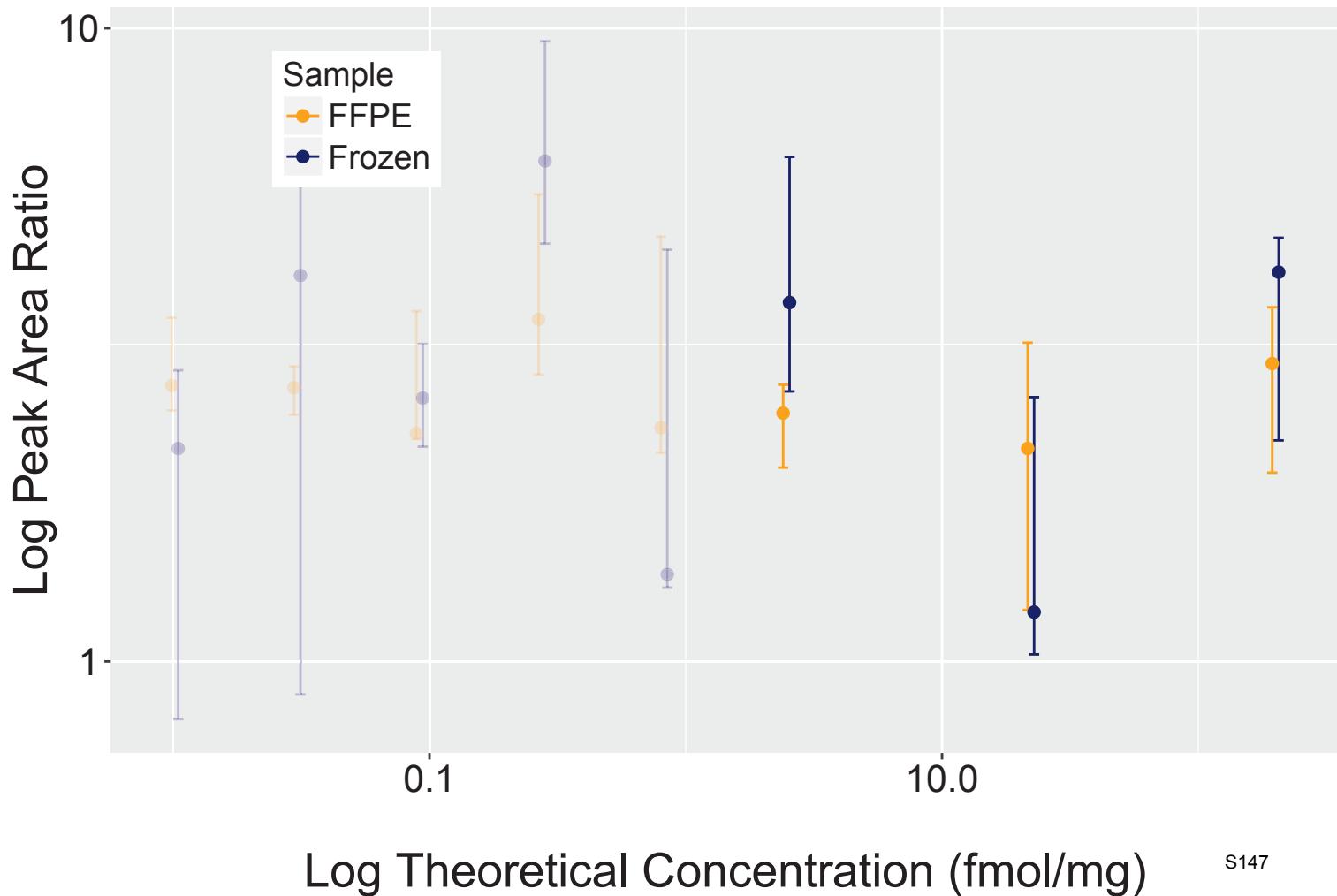
Analyte: SERPINB5.DVPFGFQTVTSDVNK



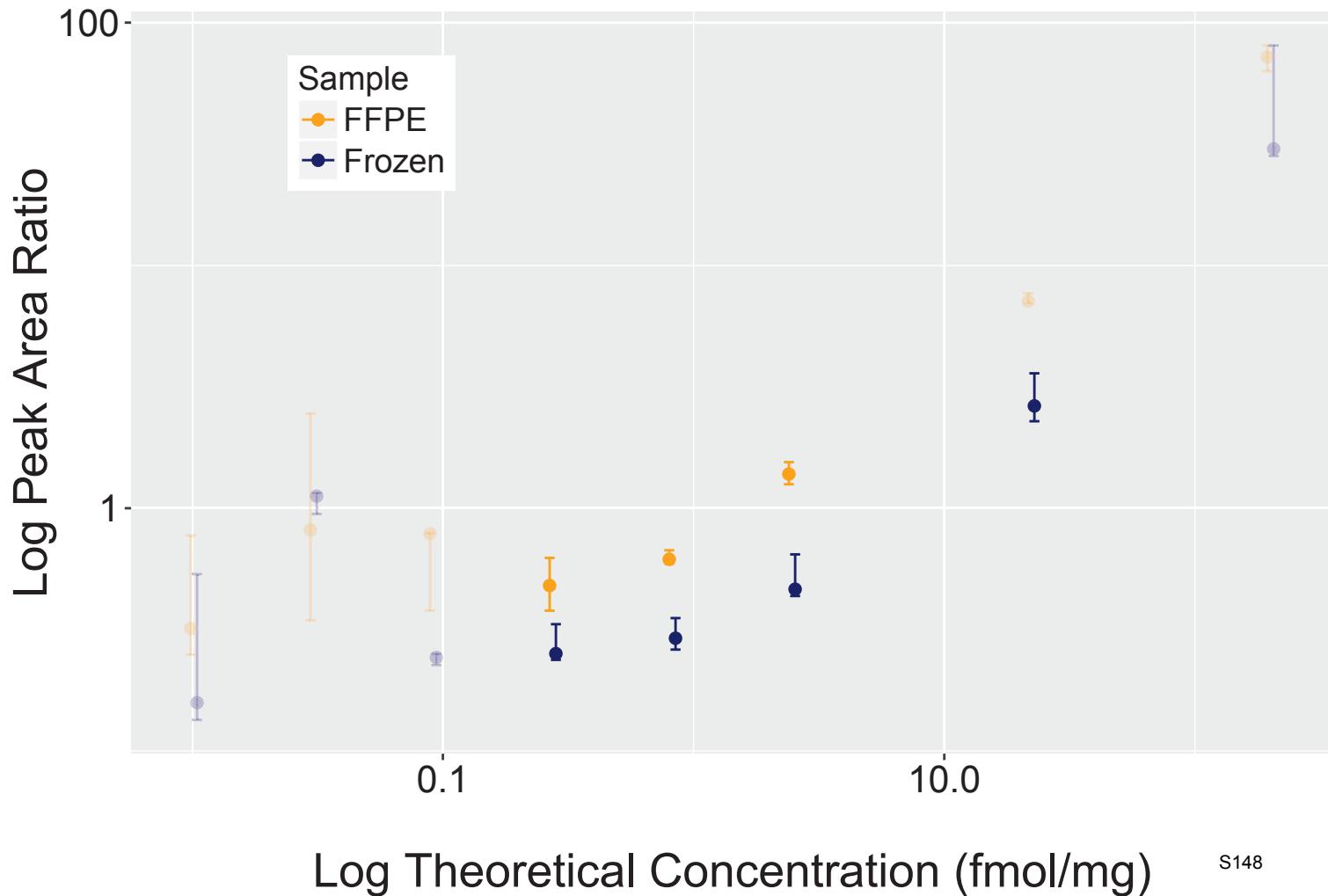
Analyte: HSD17B10.DVQTALALAK



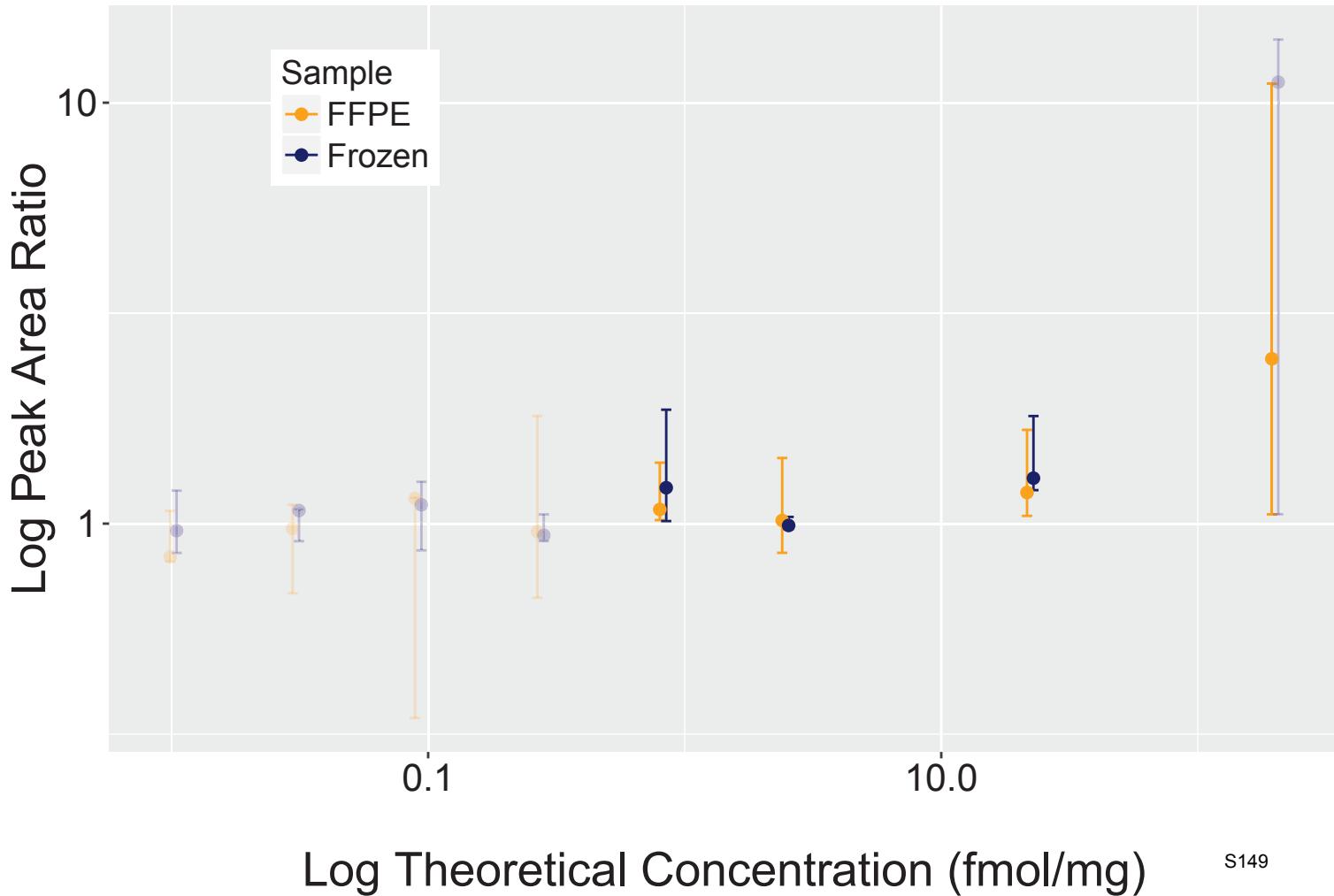
Analyte: DDX17.DWVLNEFR



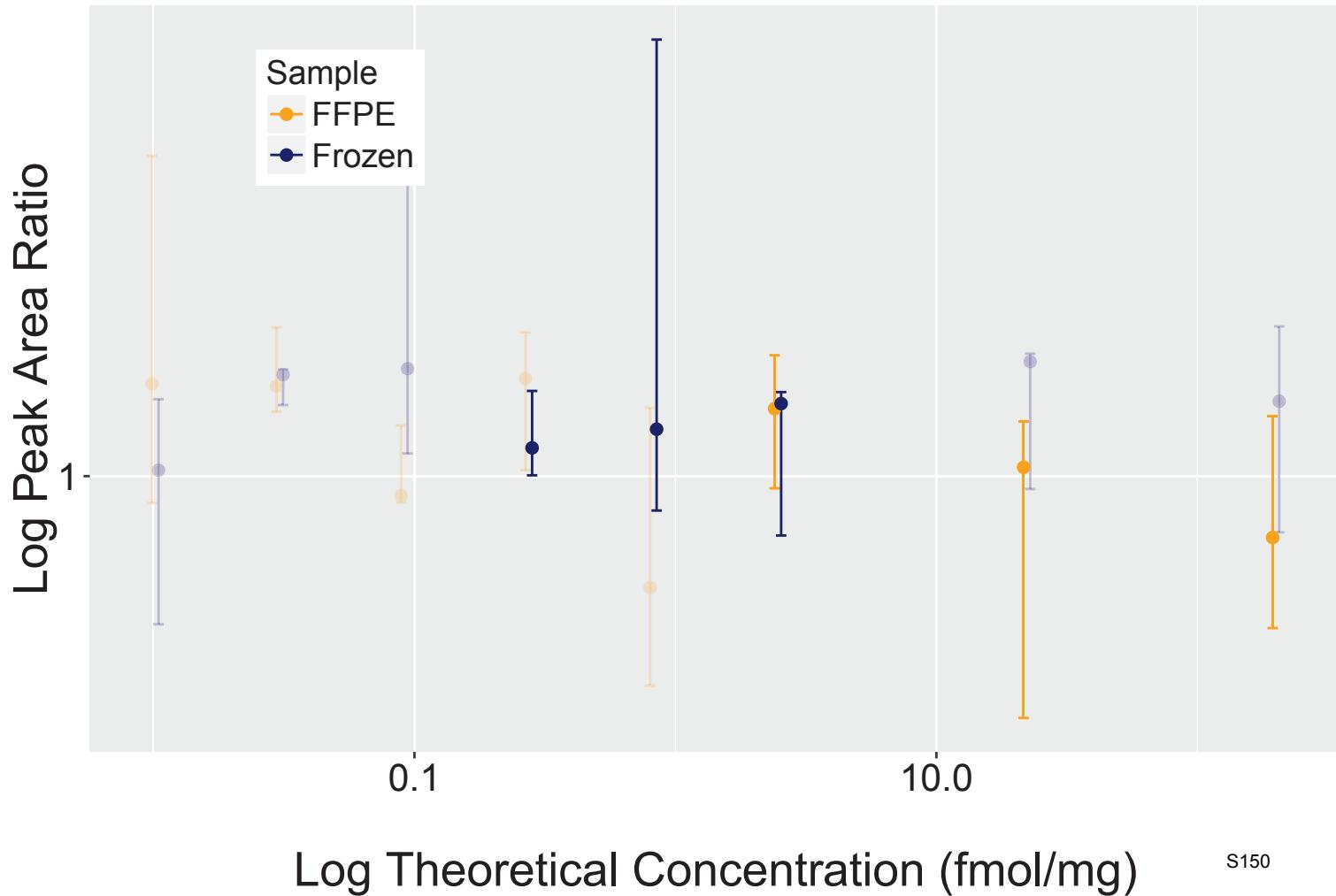
Analyte: PLEC1.DYELQLVTYK



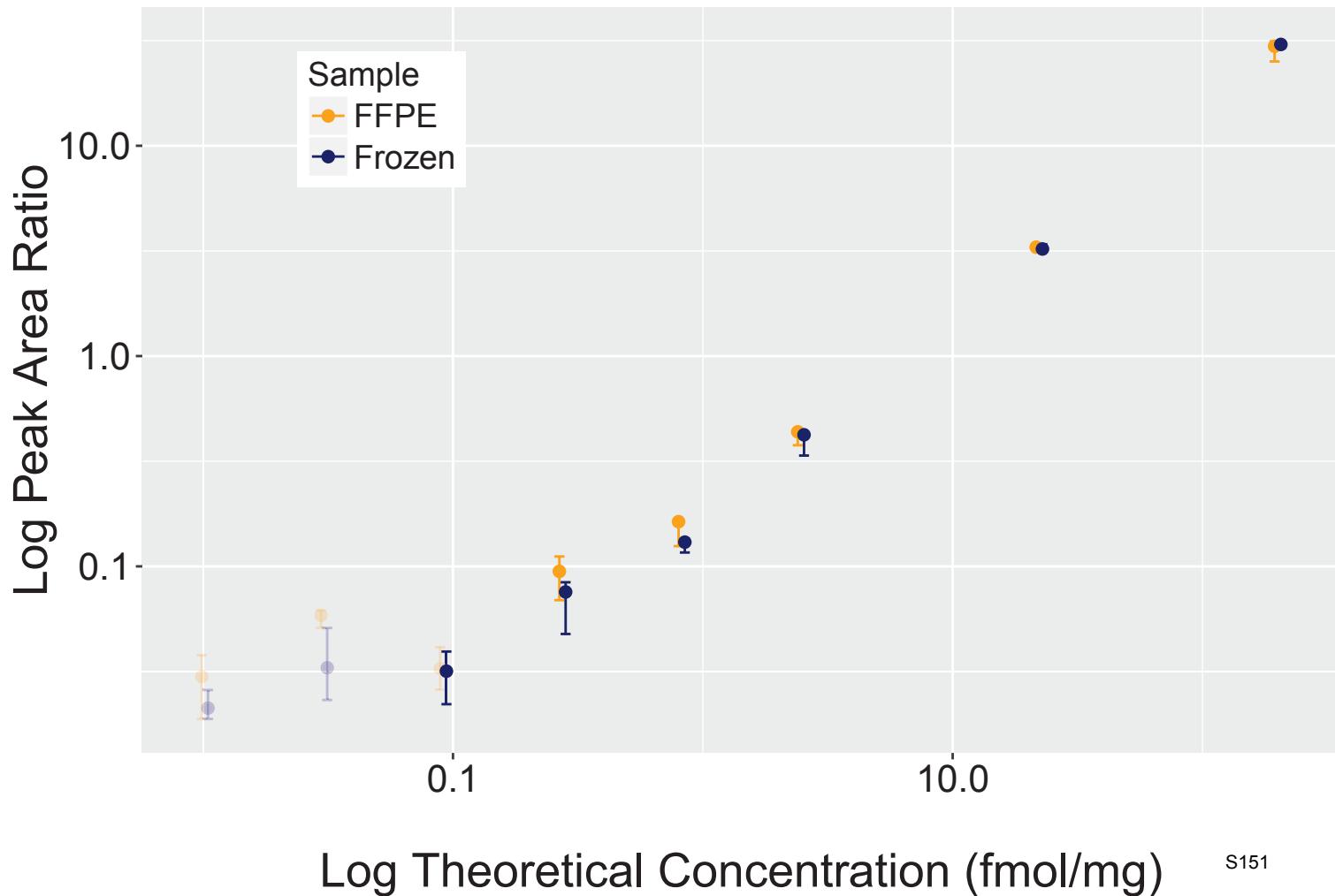
Analyte: ITGB4.DYIPVEGELLFQPGEAWK



Analyte: ENO1.DYPVVSIEDPFDQDDWGAWQK

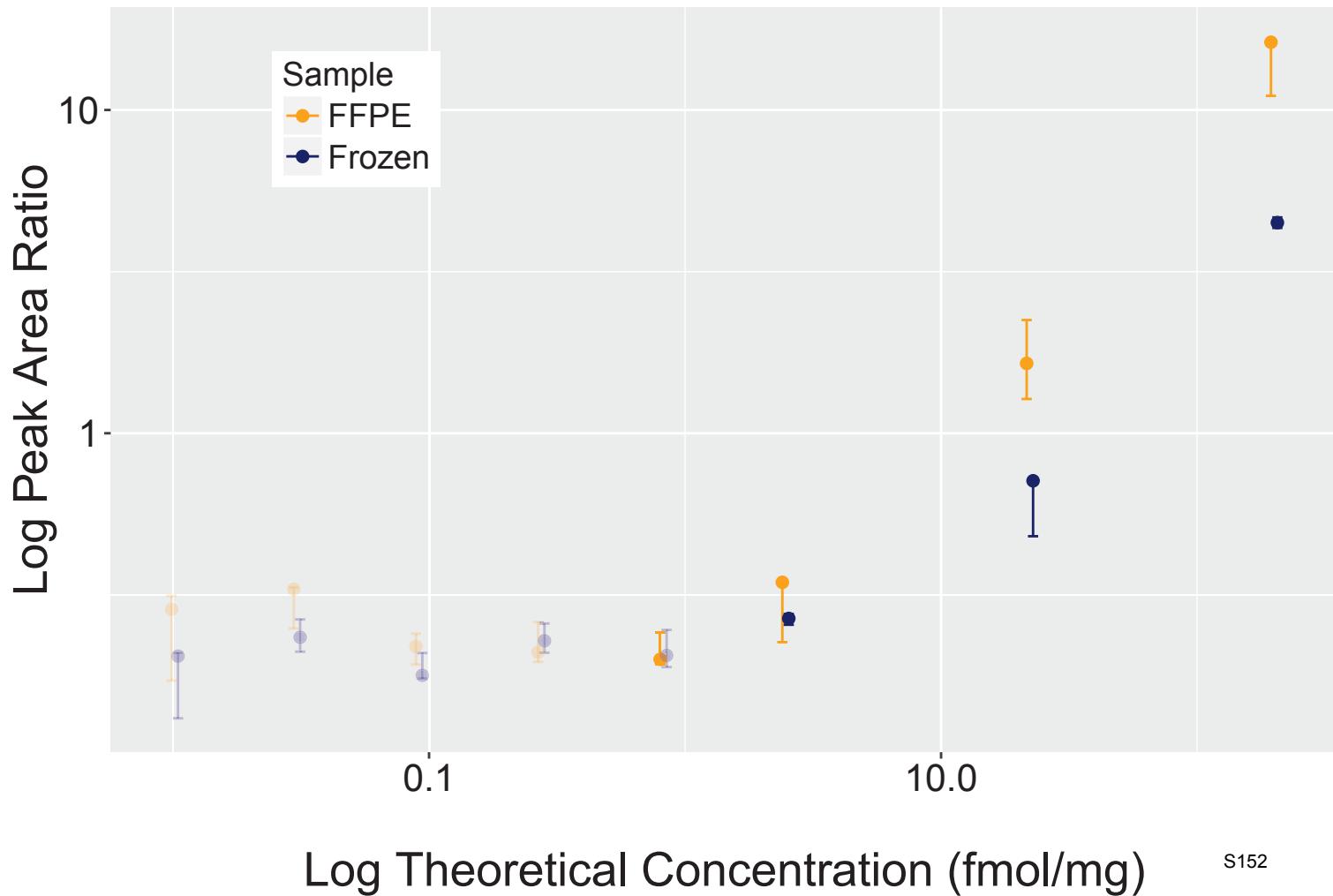


Analyte: QARS.EAATQAAQQTLGSTIDK



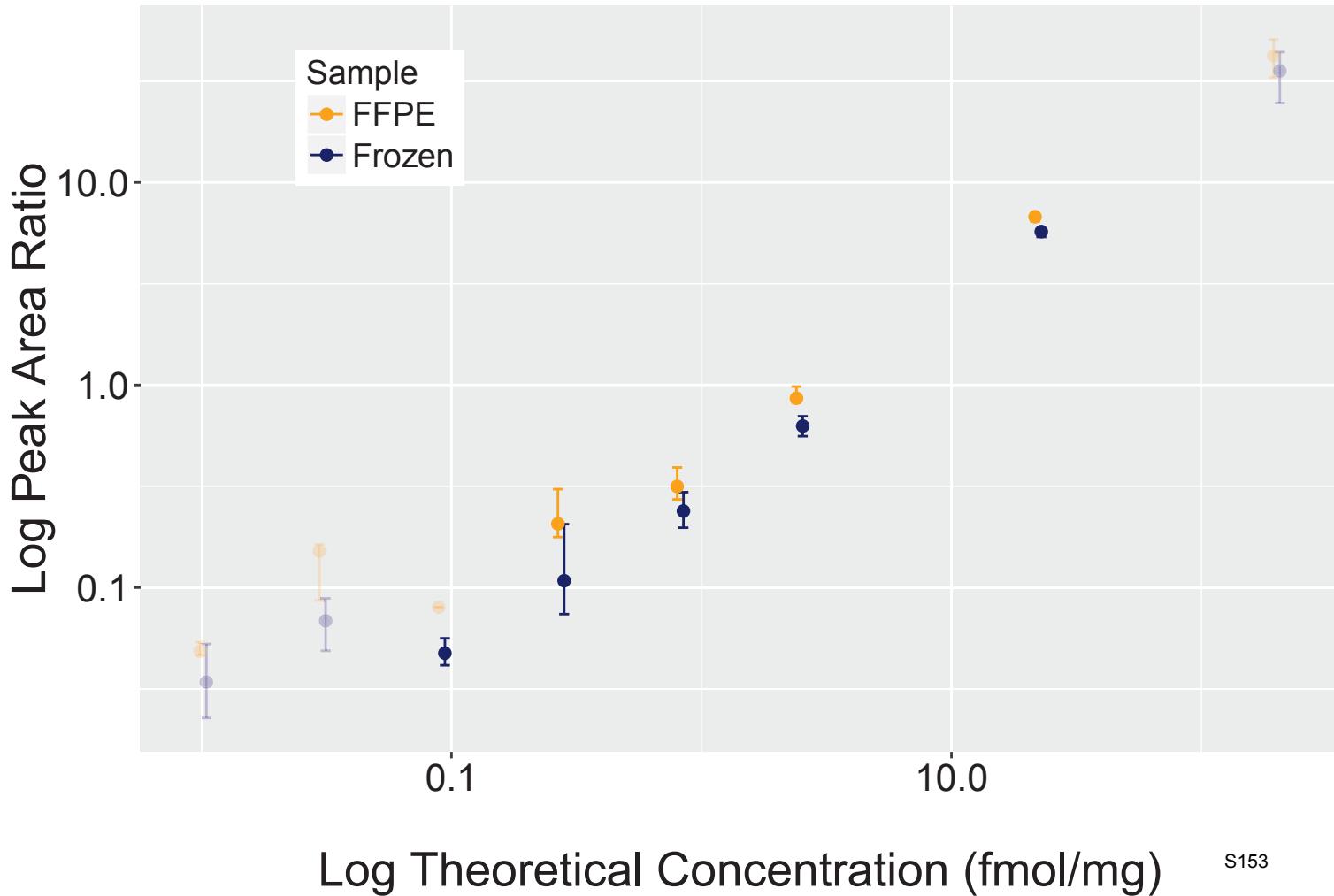
S151

Analyte: TLN1.EADESLNFEQILEAAK

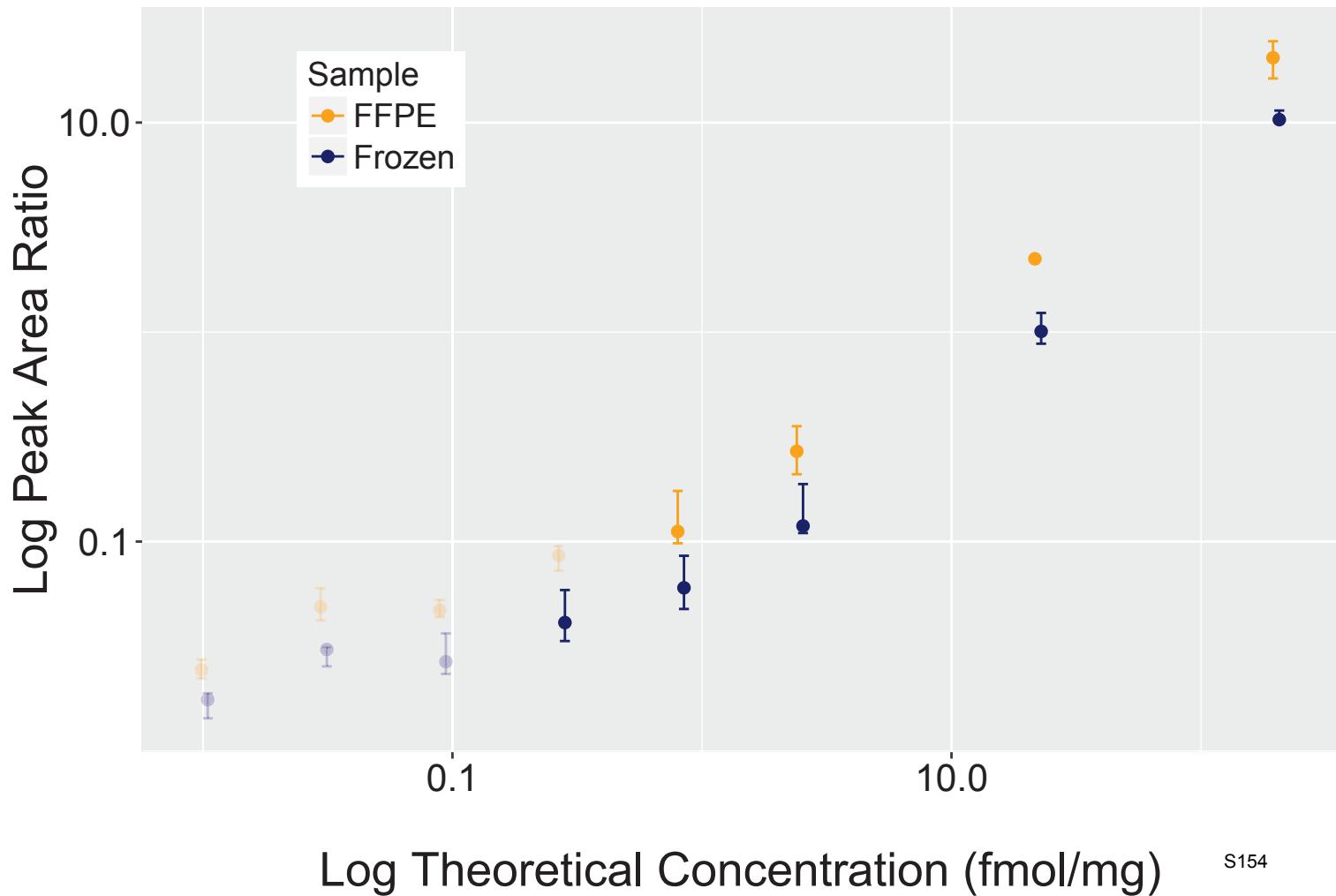


S152

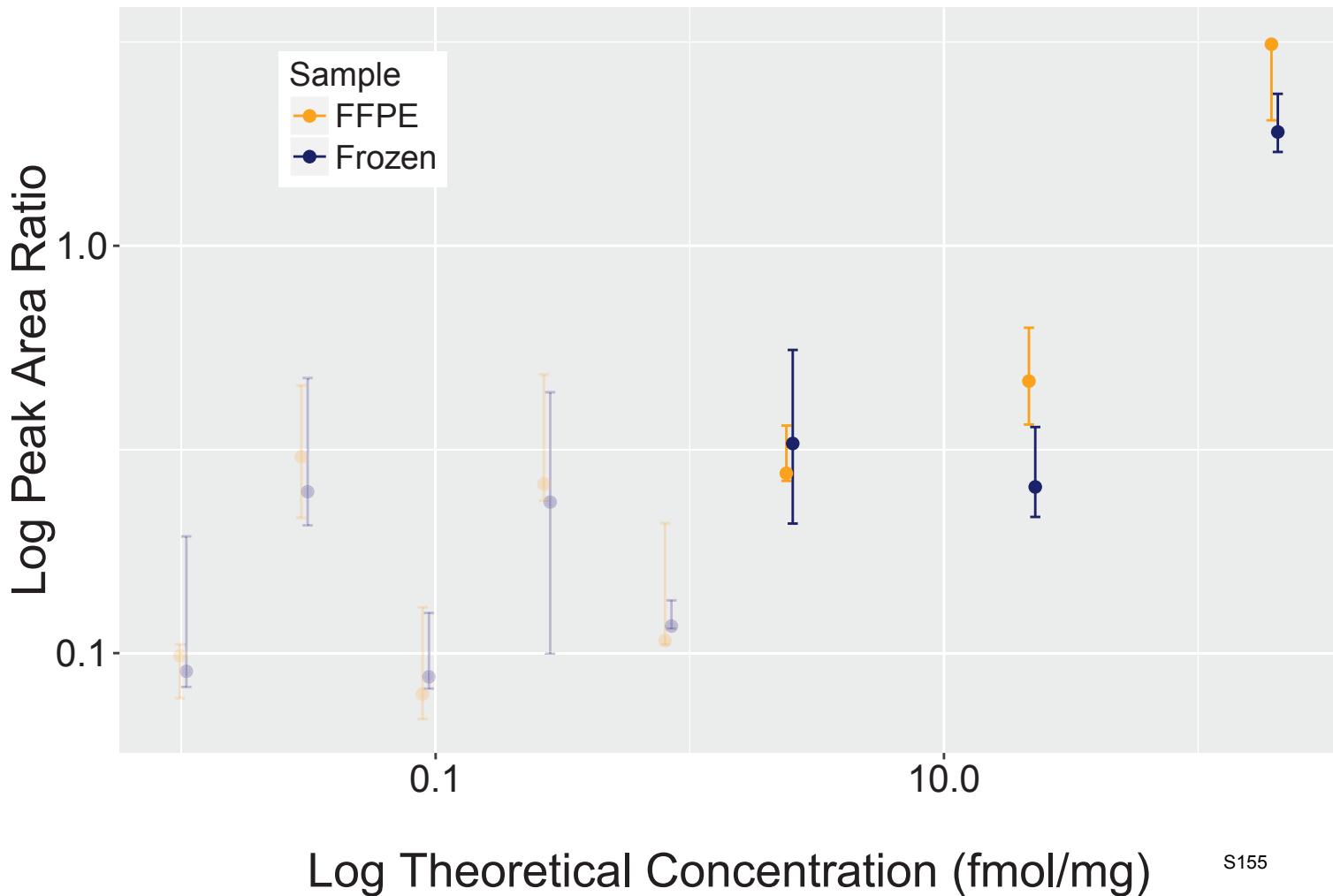
Analyte: SFRS9.EAGDVC[+57]YADVQK



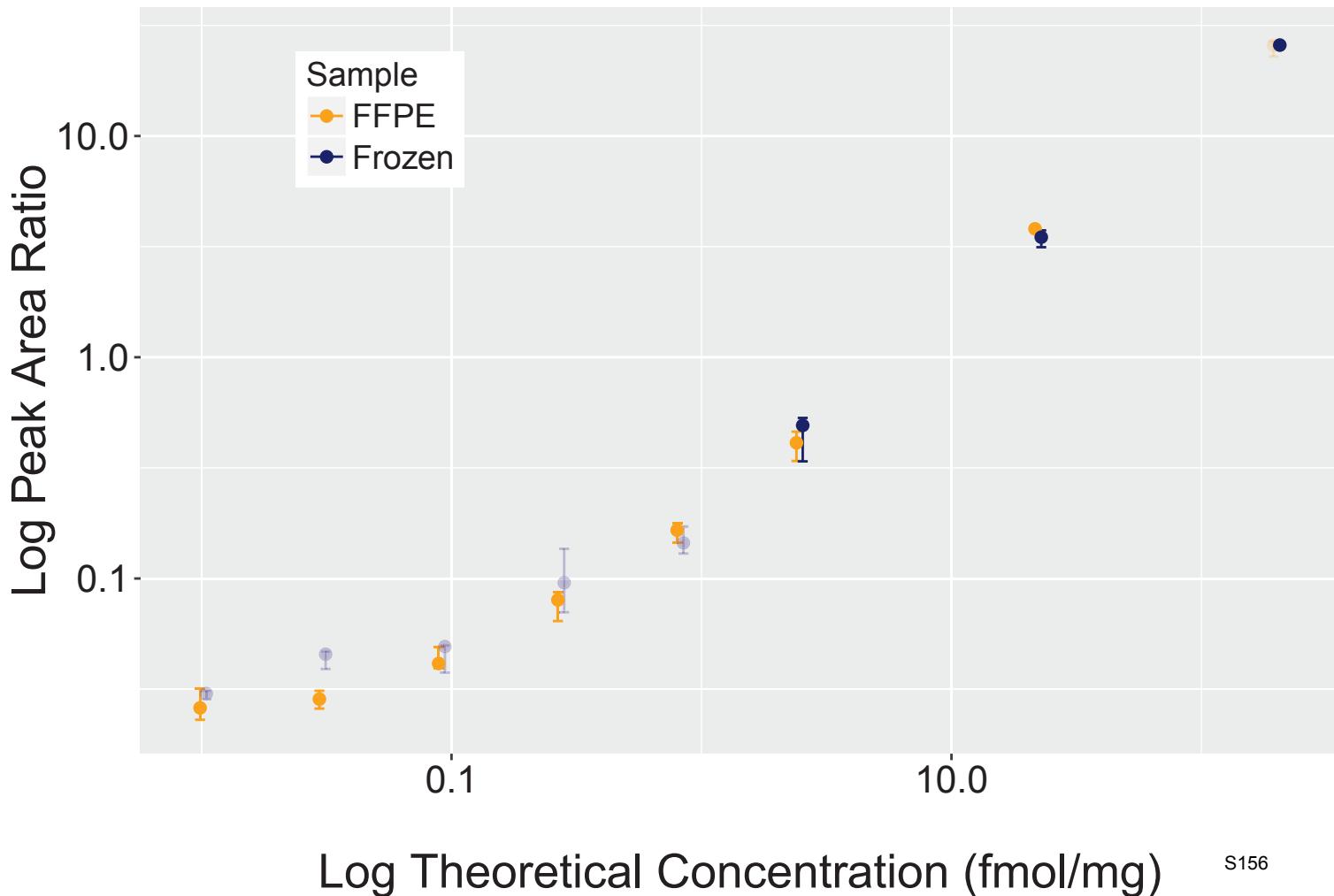
Analyte: ANXA6.EAILDIITSR



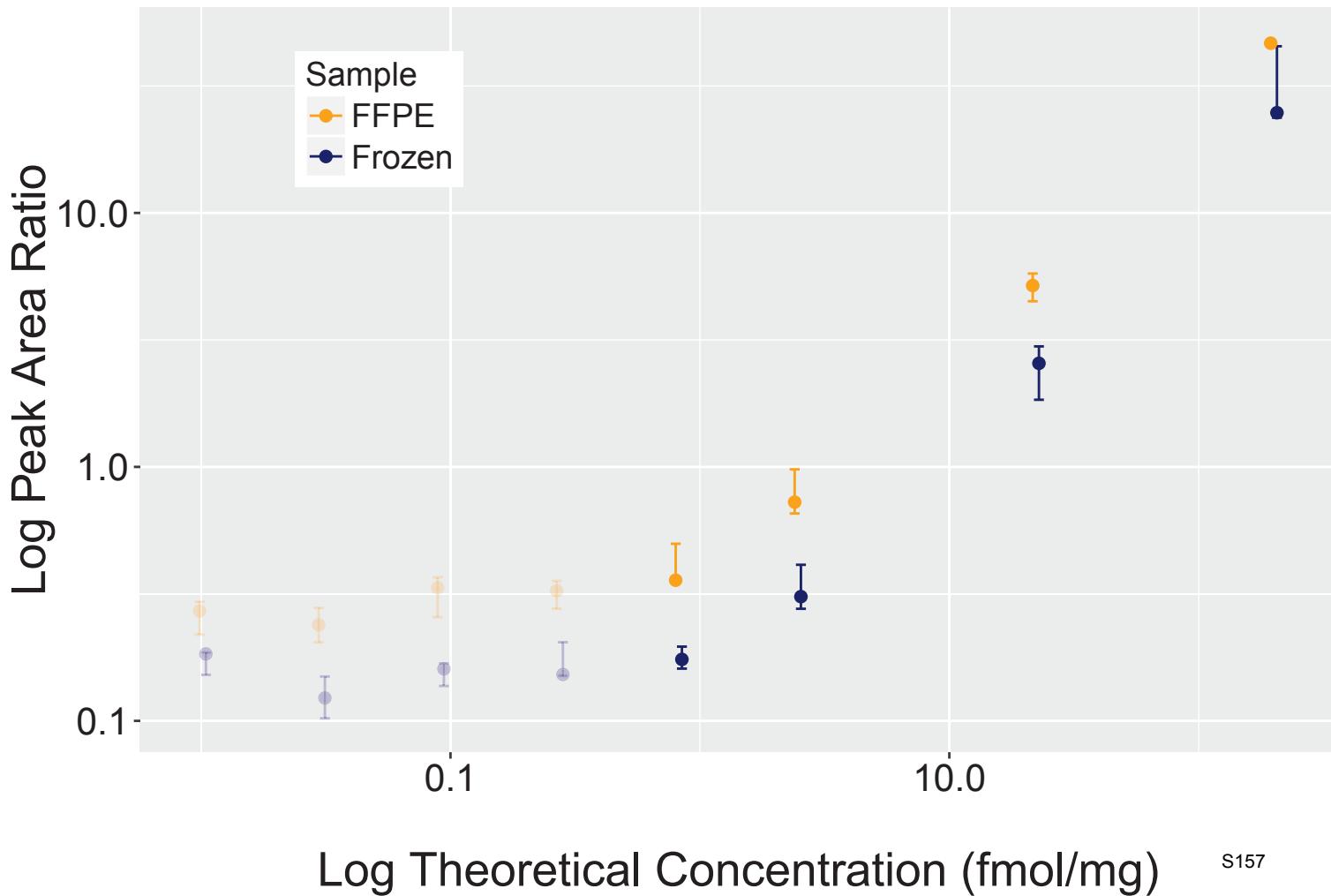
Analyte: FAM129B.EALLQISIPFLLK



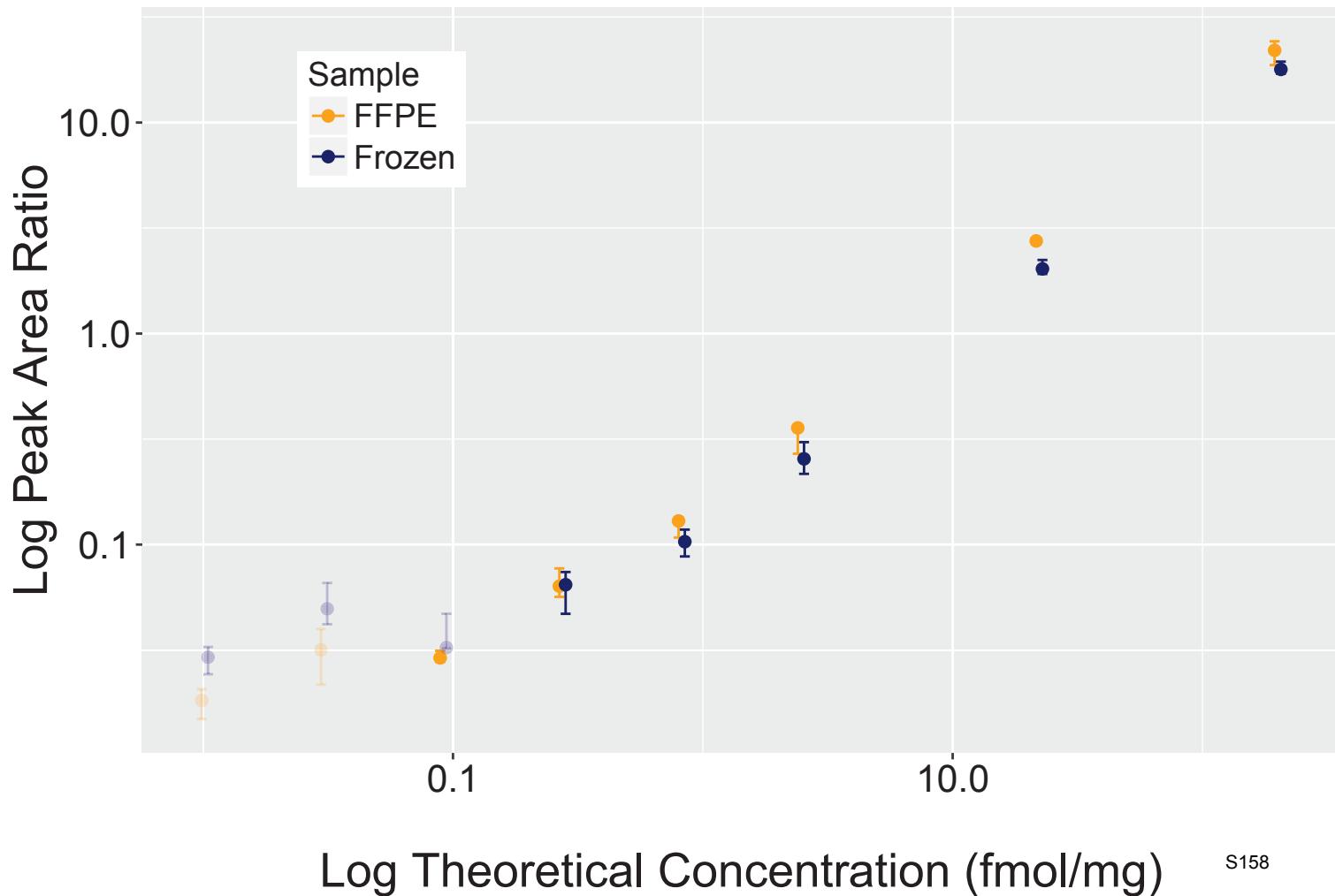
Analyte: CAPS.EAVIAAAFAK



Analyte: NIT2.EC[+57]SIYLLIGGSIPEEDAGK

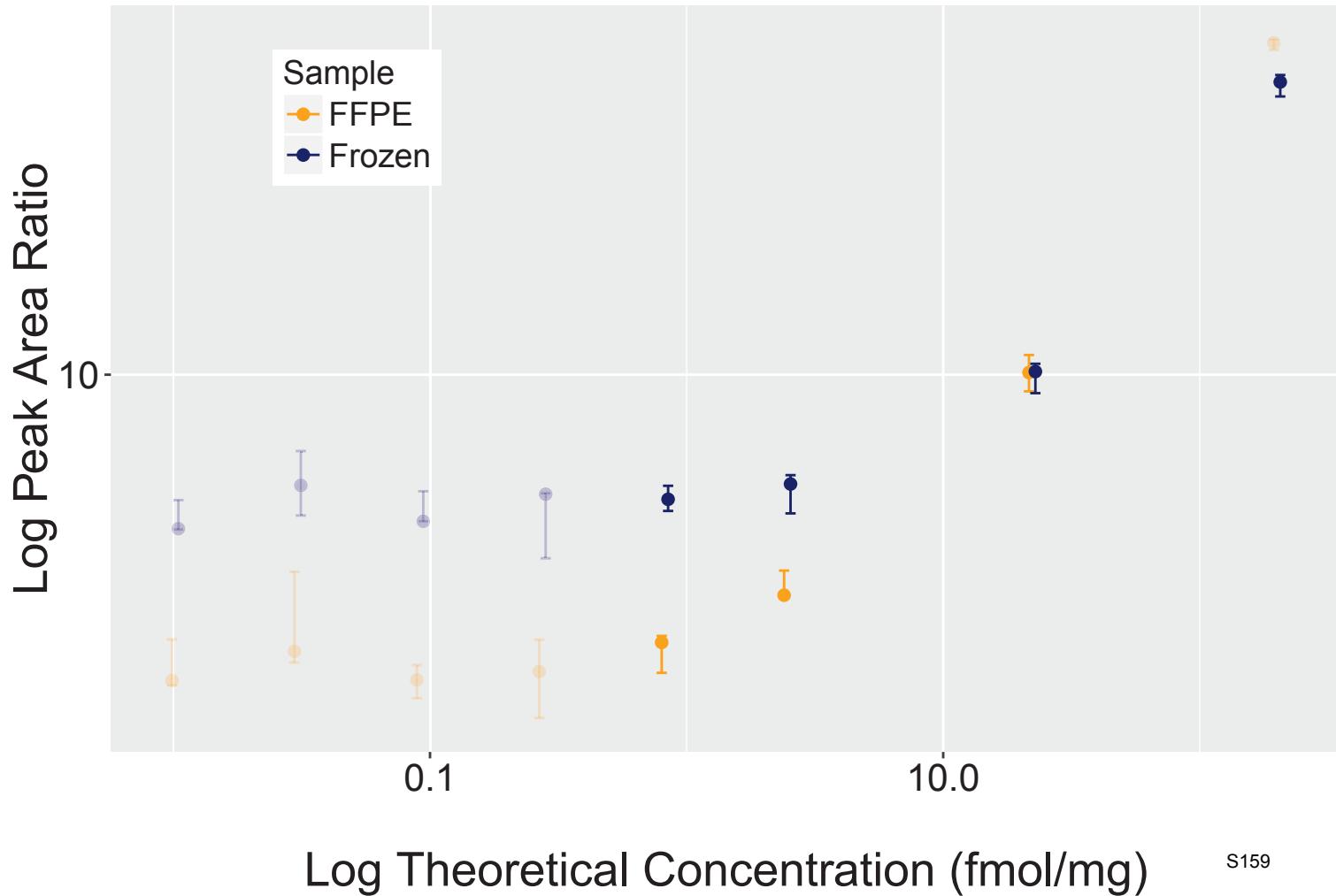


Analyte: MSN.EDAVLEYLK

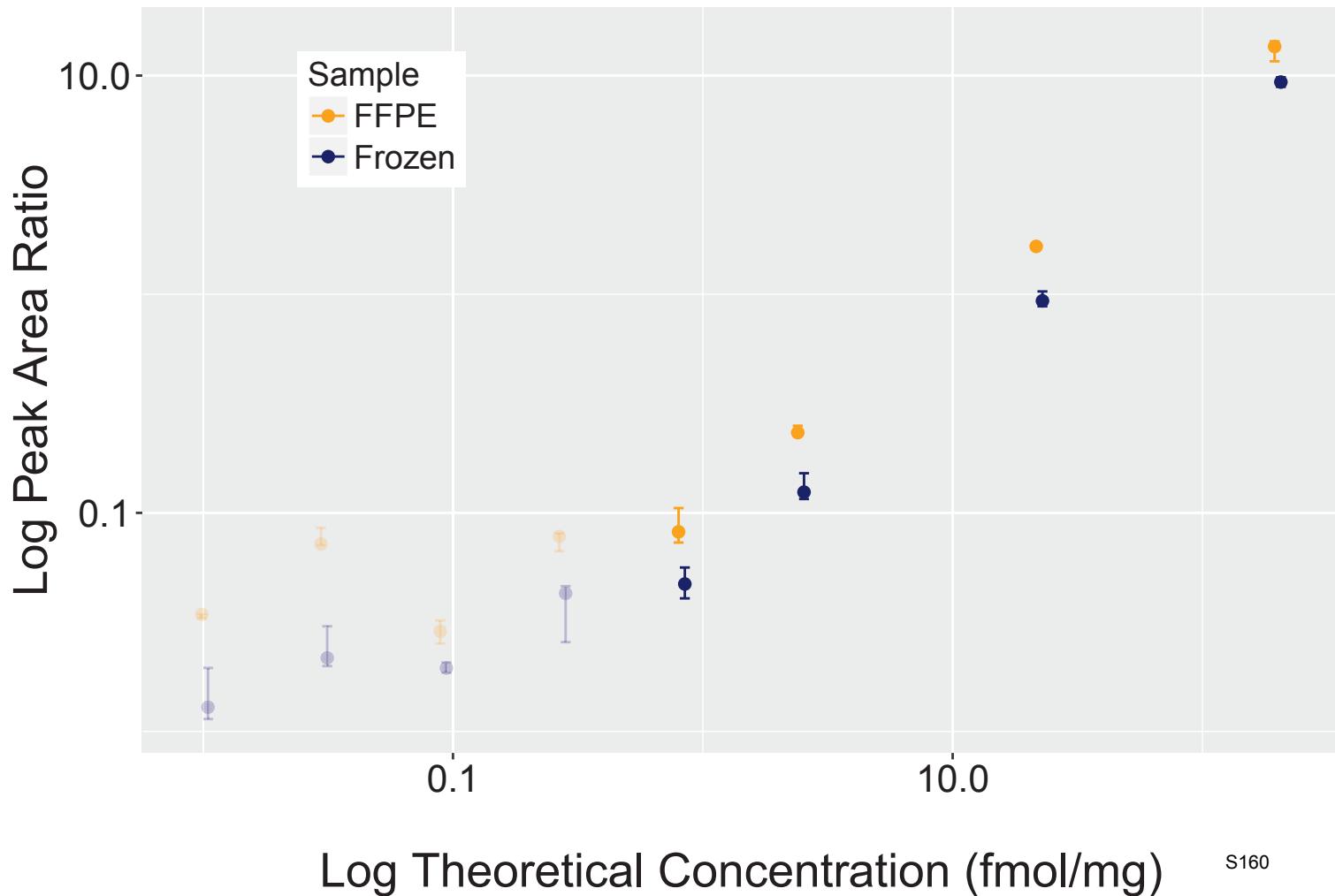


S158

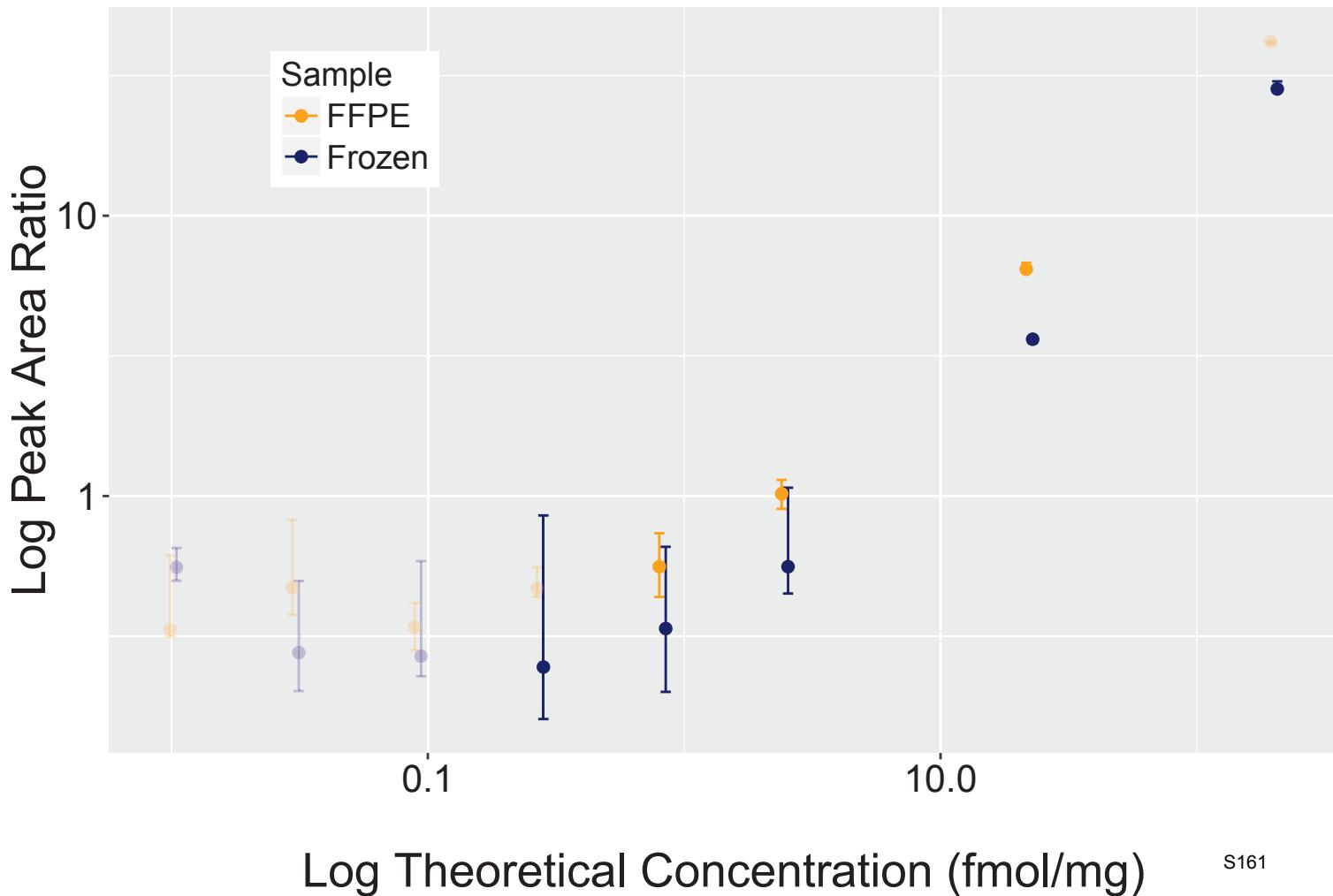
Analyte: LTA4H.EDDLNSFNATDLK



Analyte: FASN.EDGLAQQQTQLNLR

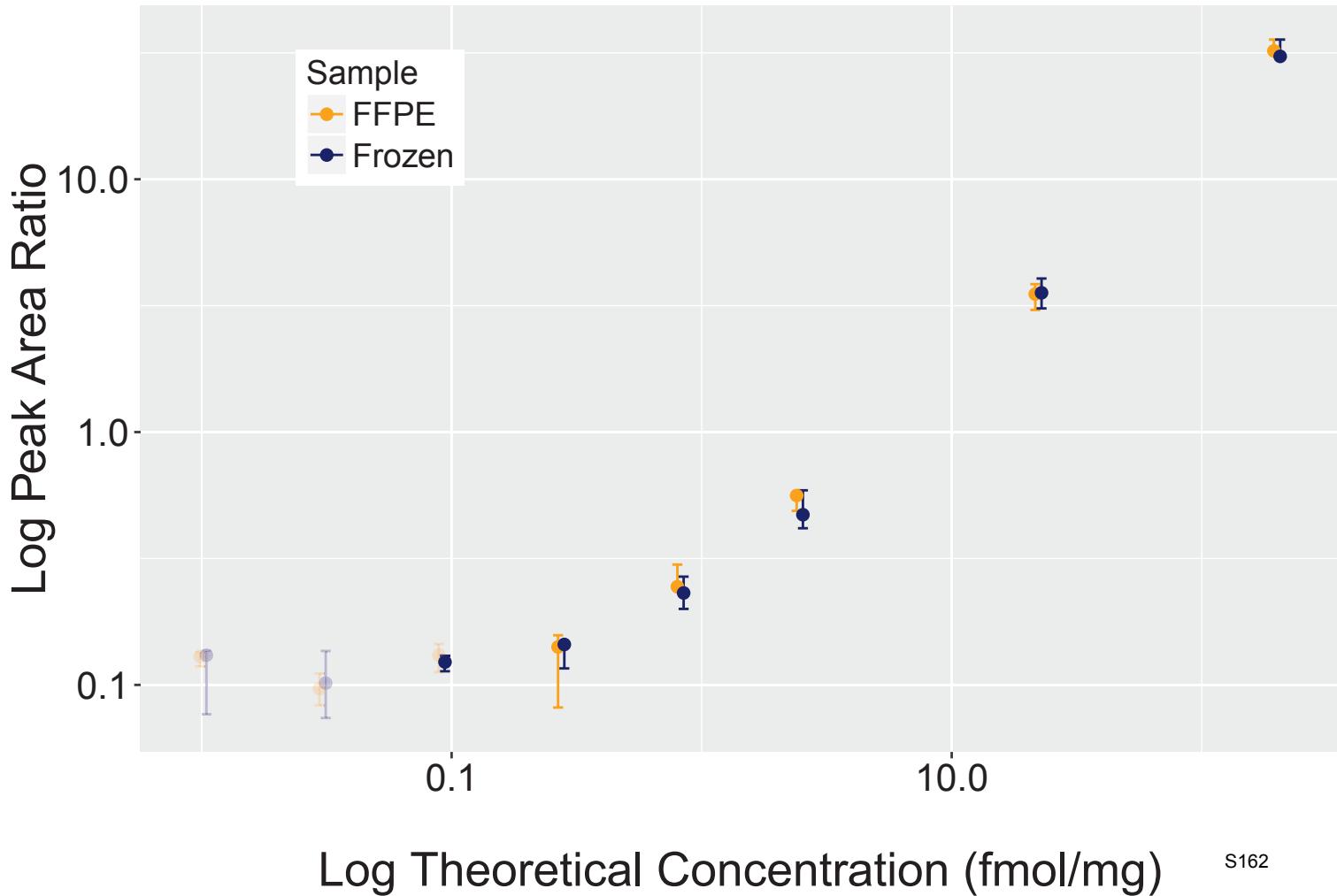


Analyte: GSTO1.EDPTVSVALLTSEK



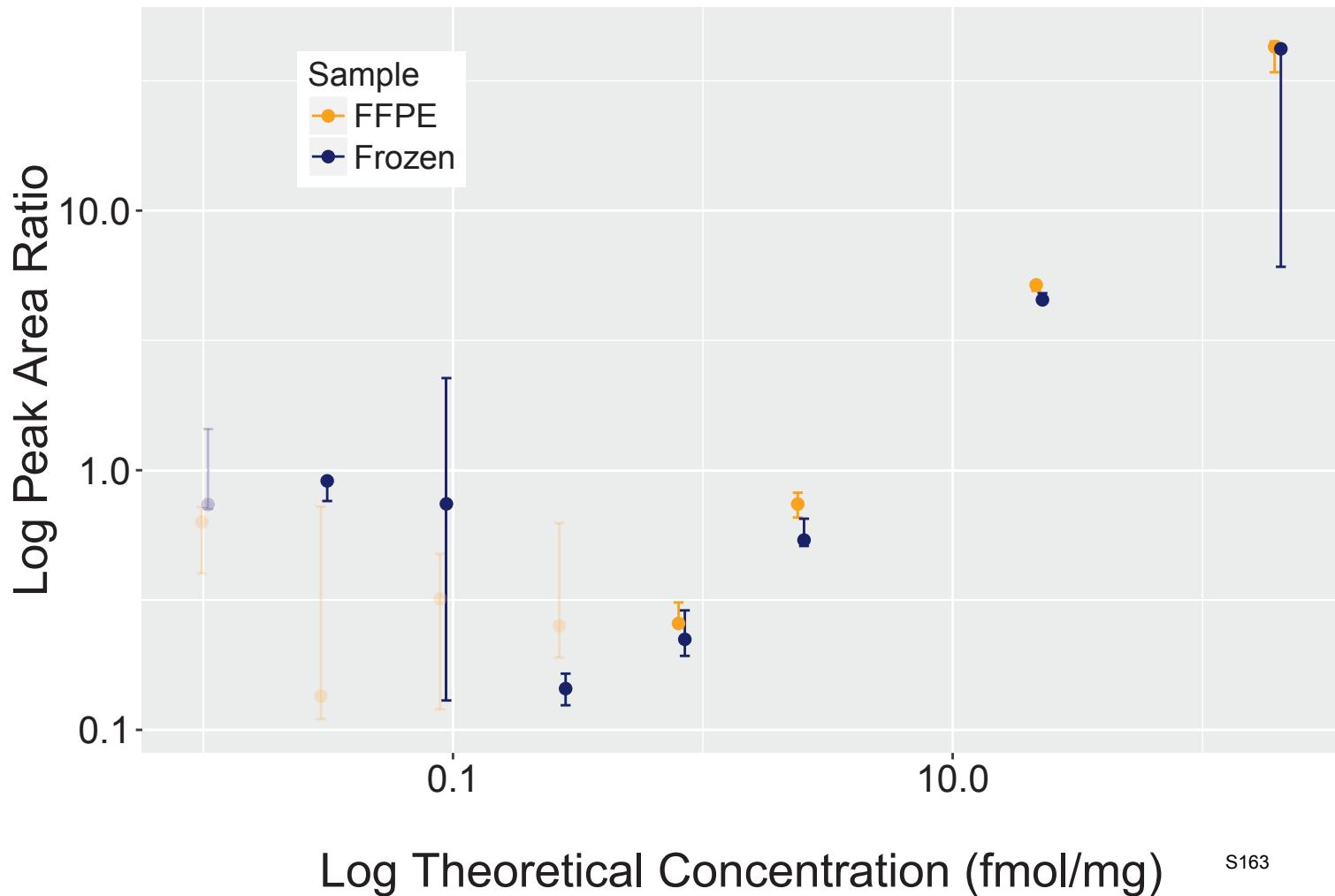
S161

Analyte: FKBP5.EEQC[+57]ILYLGPR

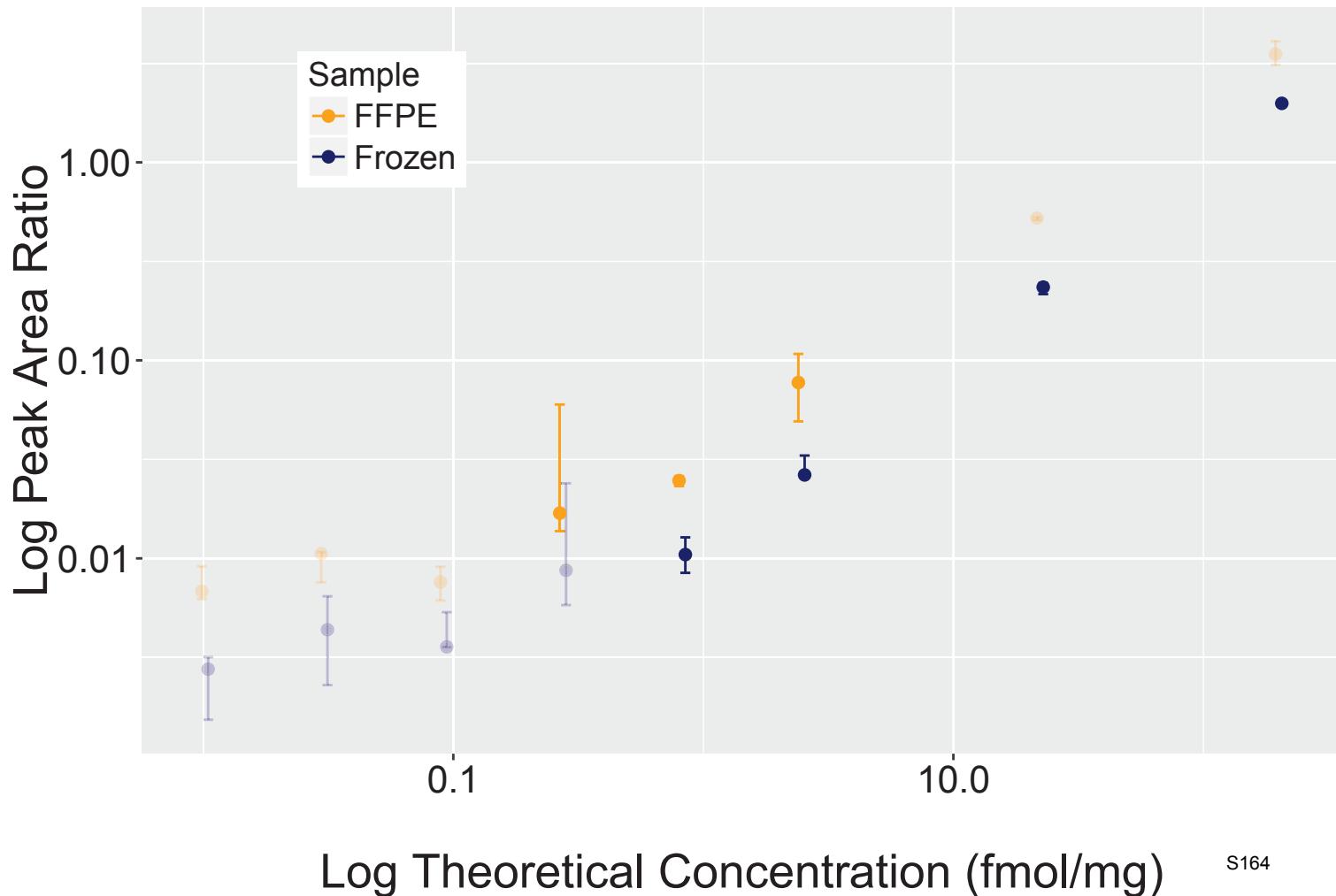


S162

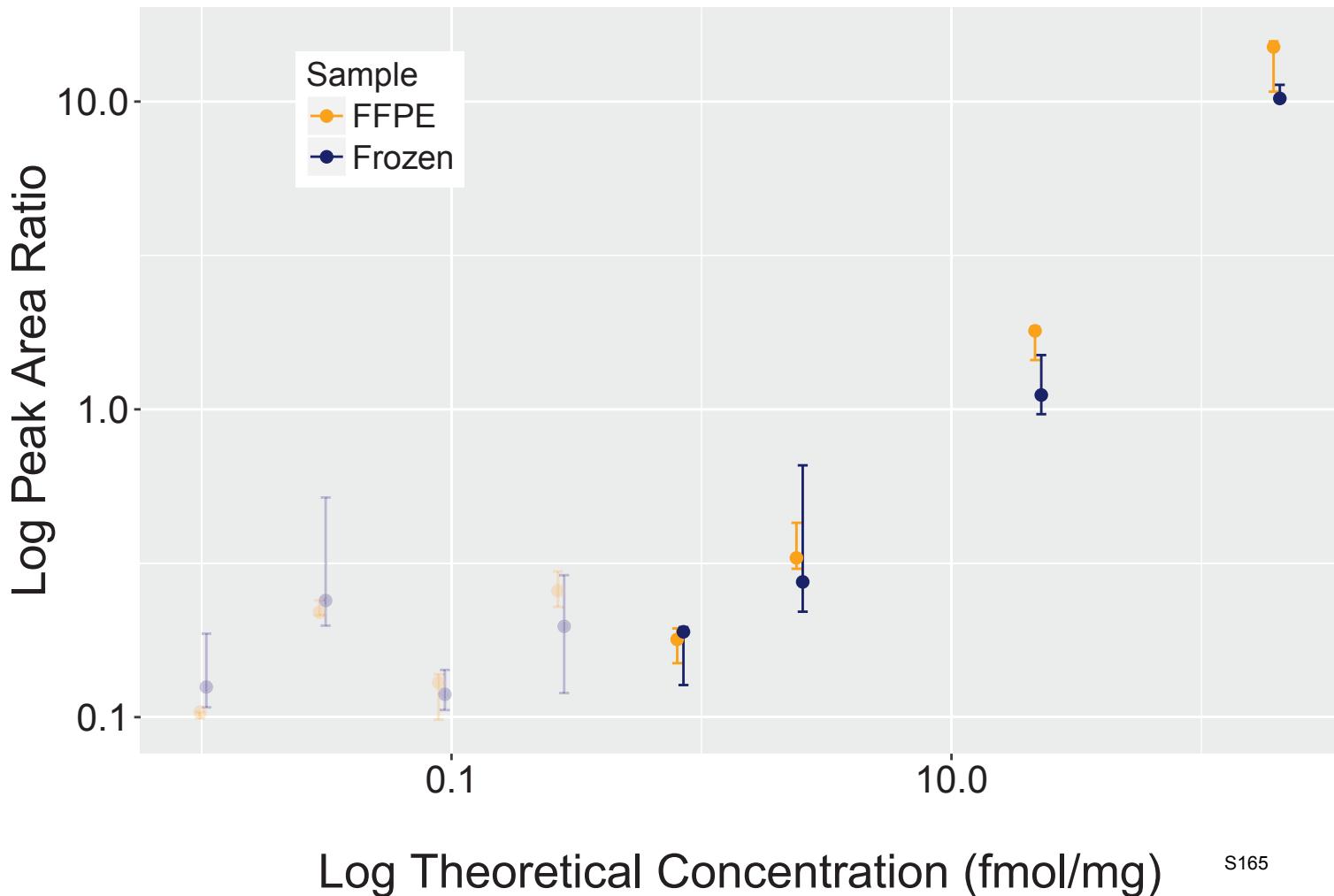
Analyte: PPP2R1A.EFC[+57]ENLSADC[+57]R



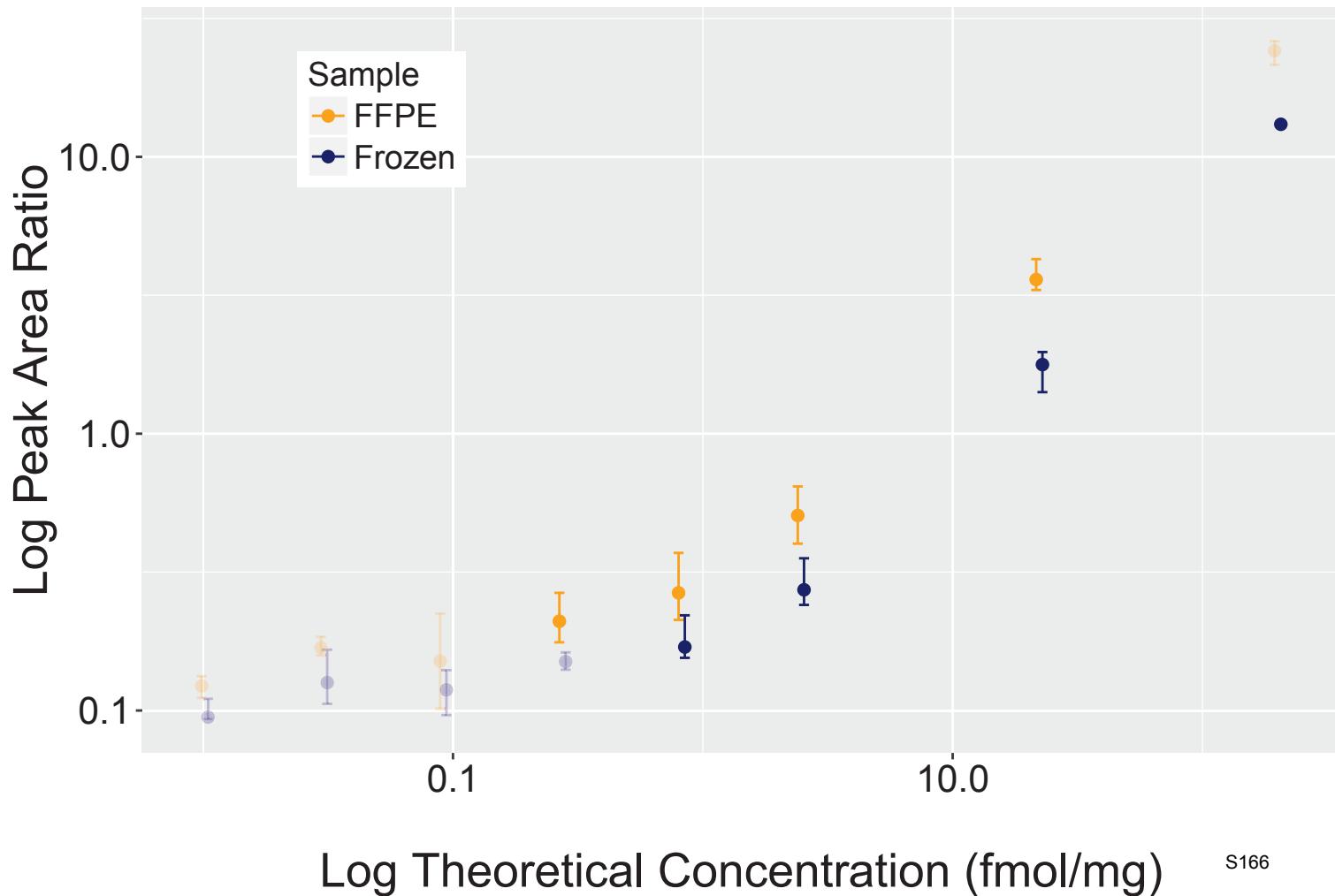
Analyte: TAGLN.EFTESQLQEGK



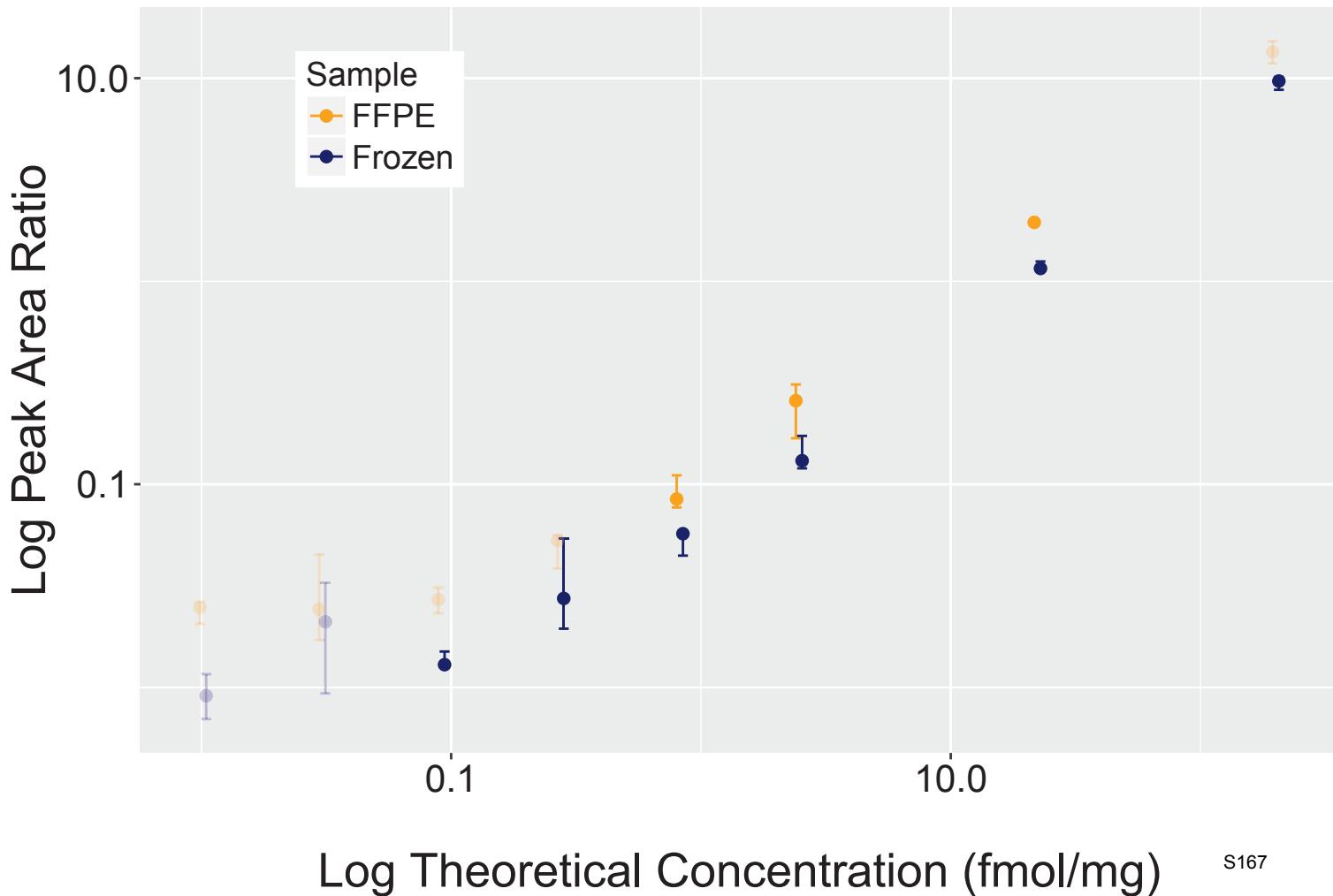
Analyte: CNDP2.EGG SIPV TLTF QEATGK



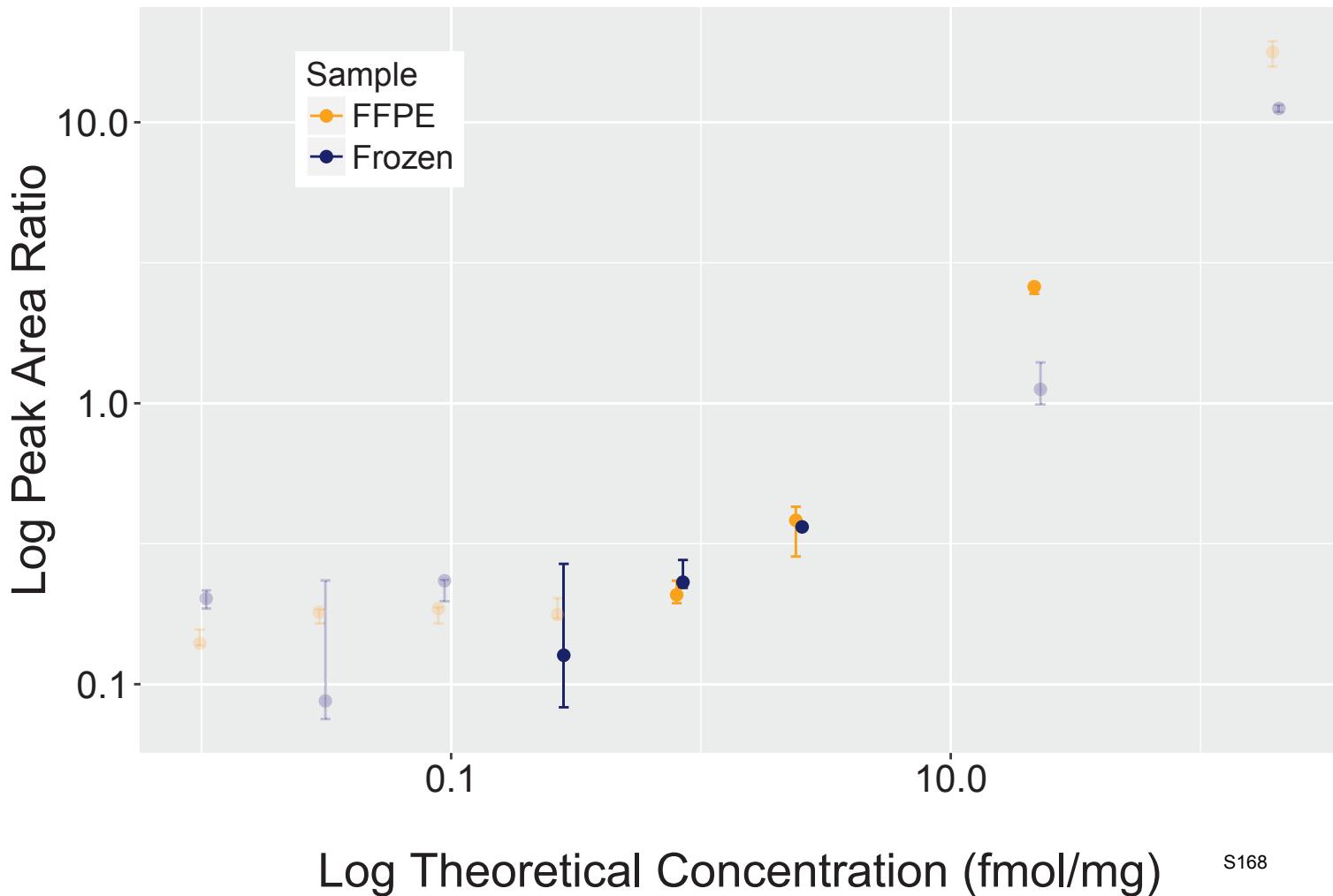
Analyte: GSS.EGIAQTVFLGLNR



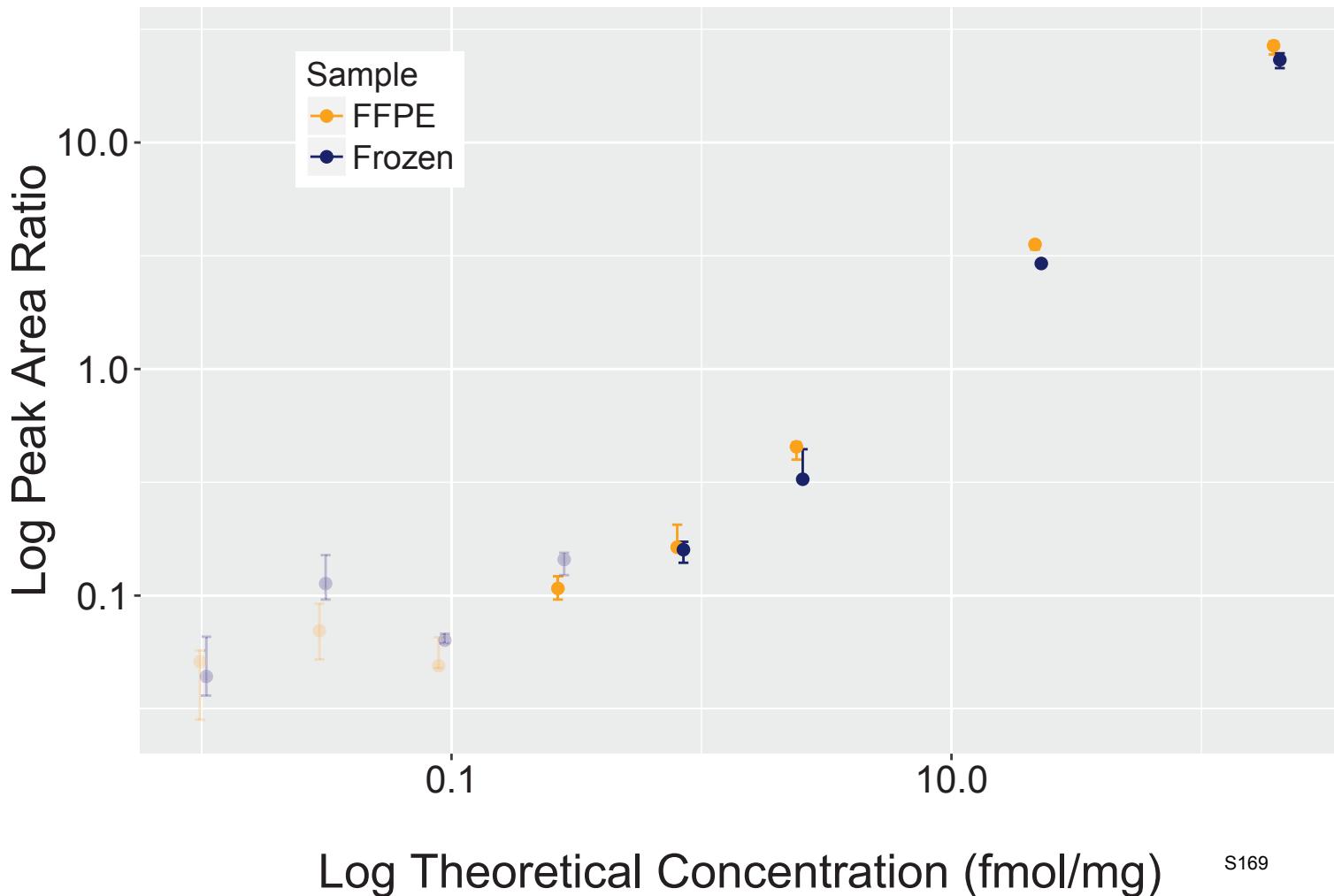
Analyte: CAPG.EGNPEEDLTADK



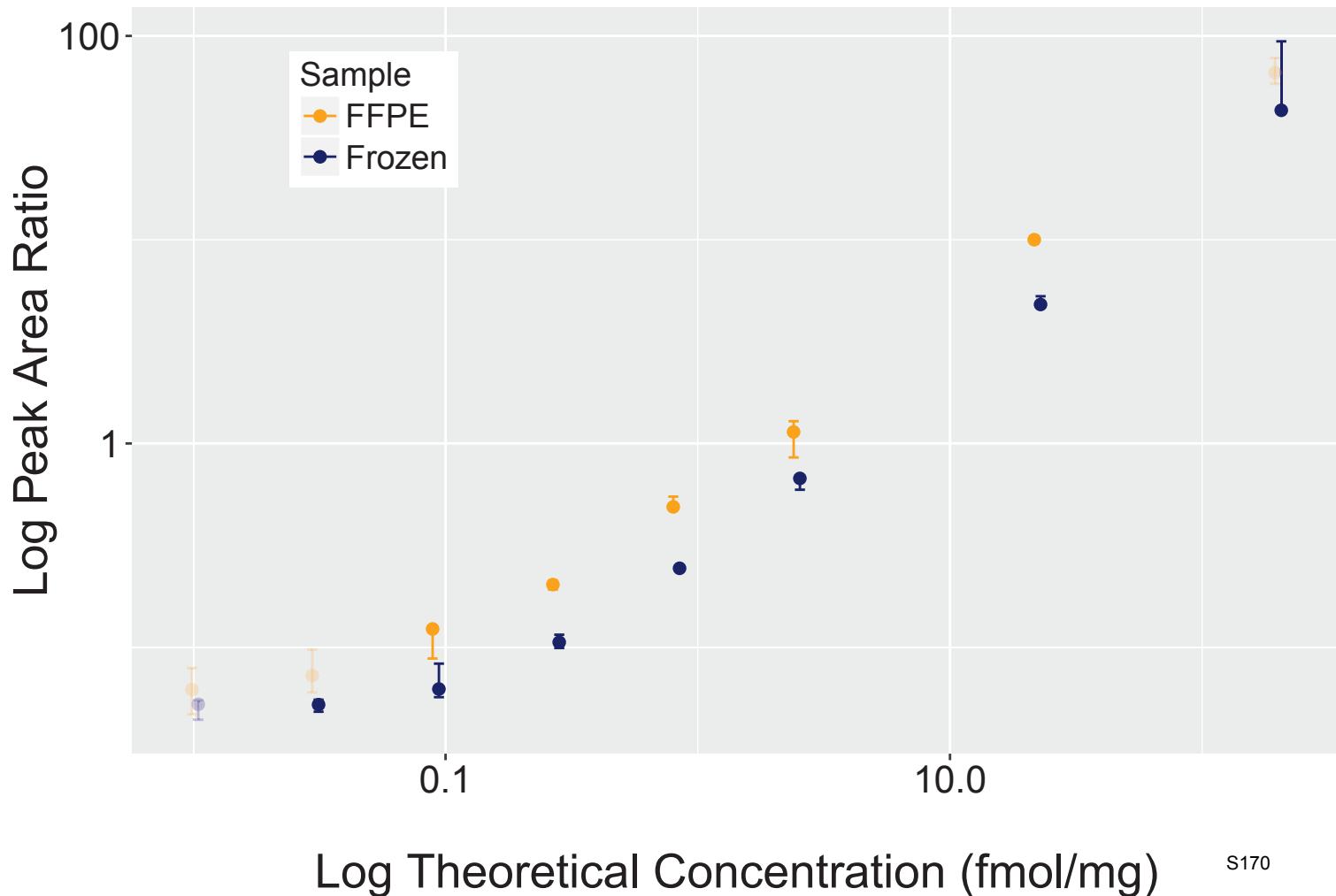
Analyte: MUC1.EGTINVHDVETQFNQYK



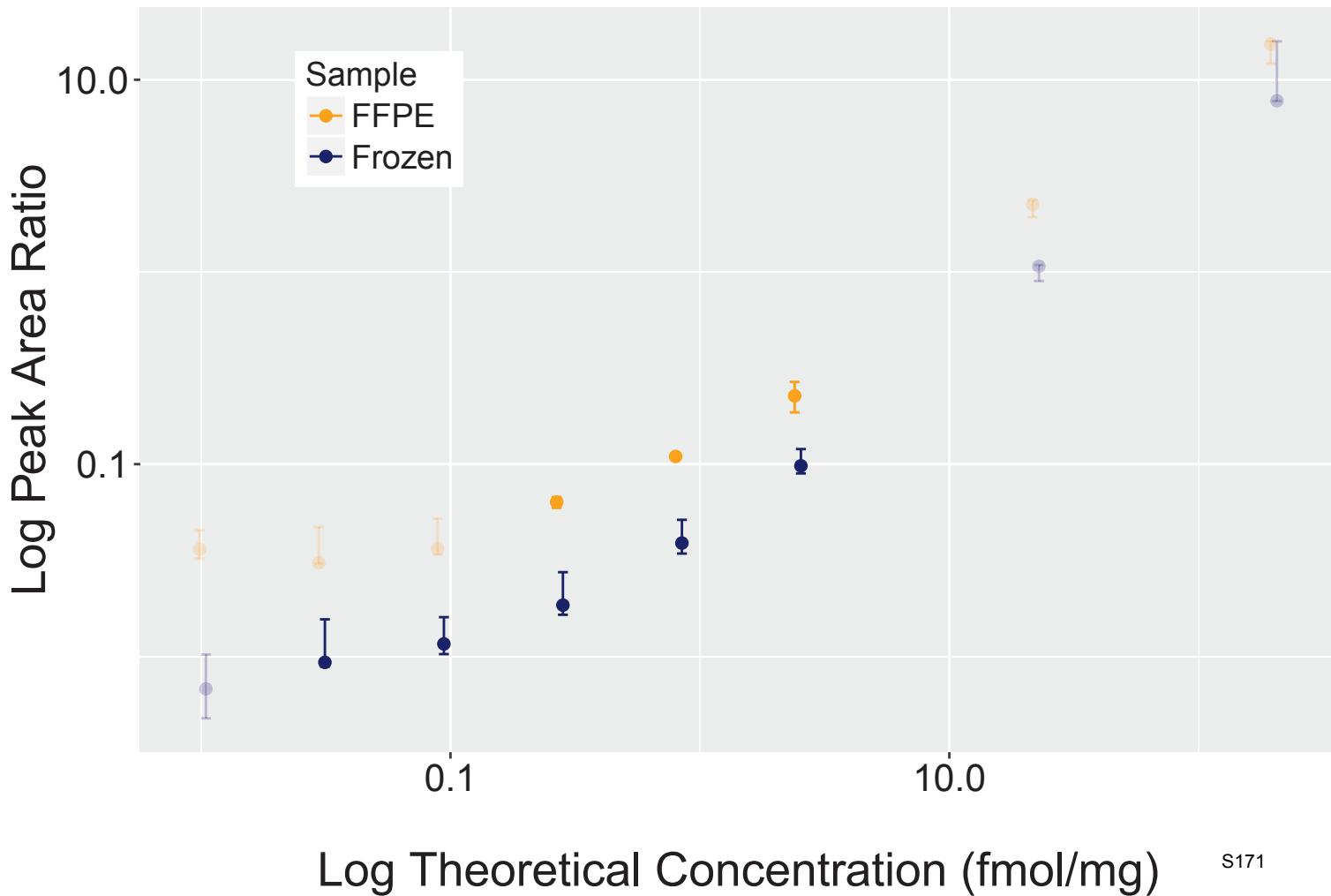
Analyte: APEX1.EGYSGVGLLSR



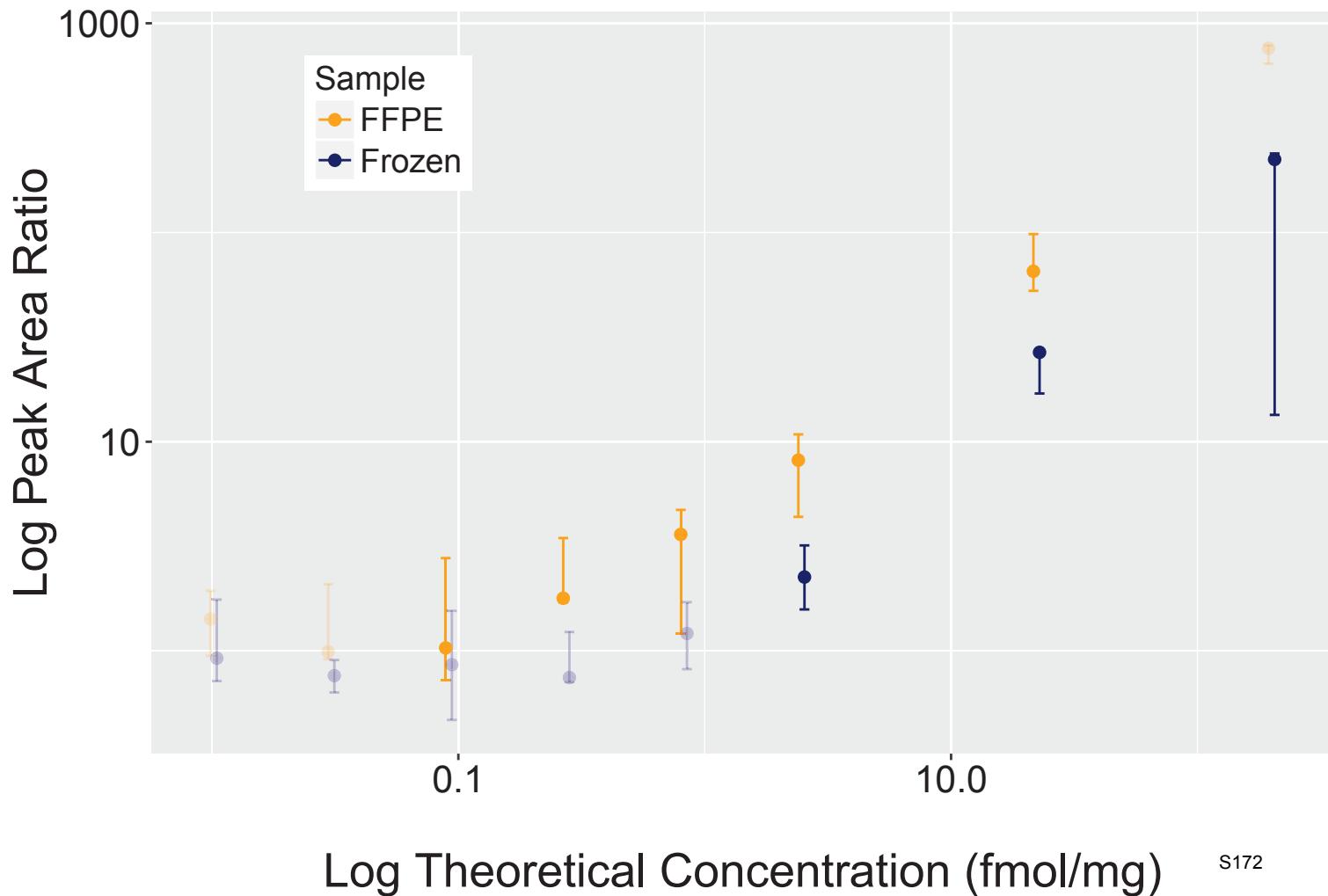
Analyte: TUBA4A.EIIDPVLDL



Analyte: CLU.EILSVDC[+57]STNNNPSQAK

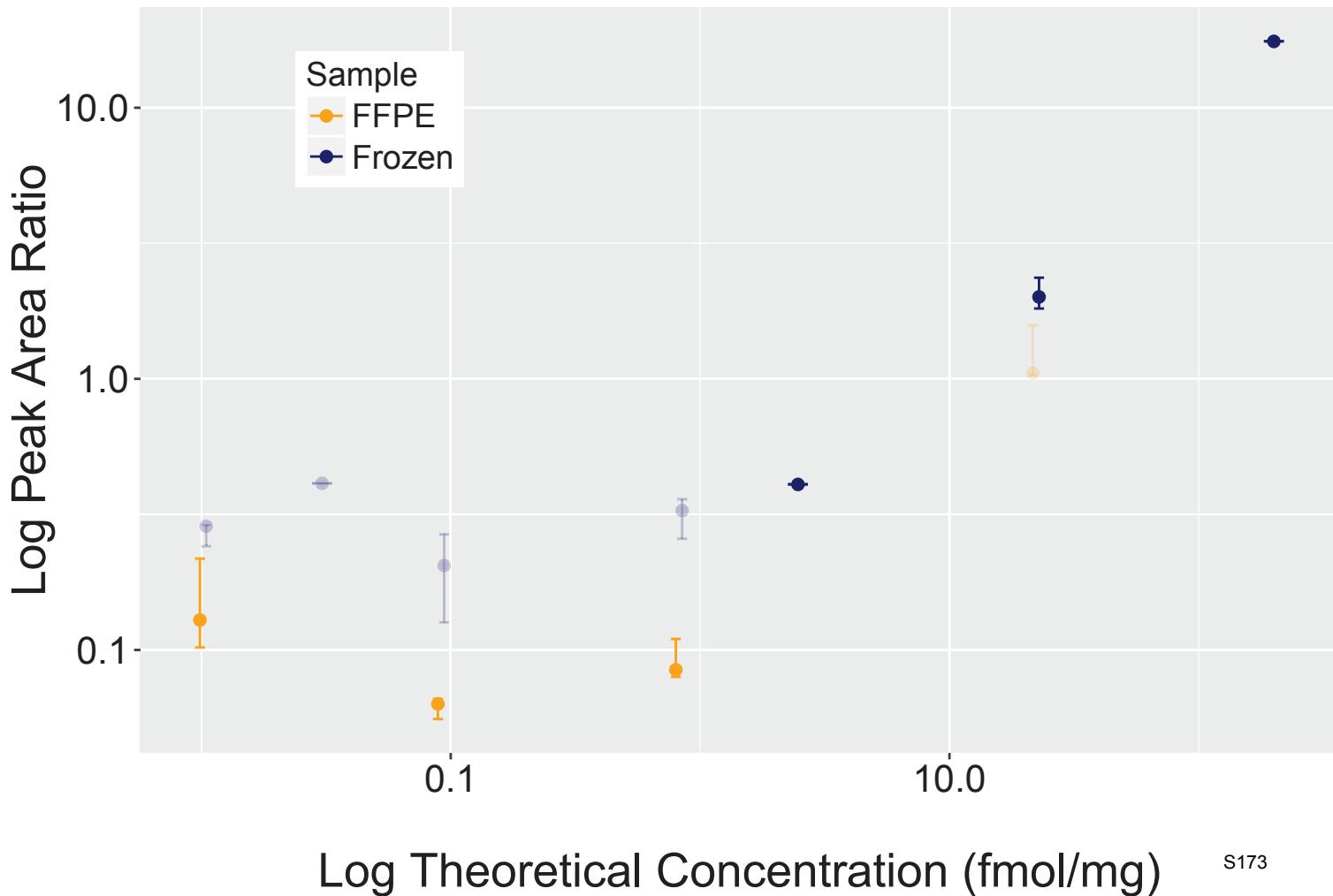


Analyte: RCN1.EIVVLETLEDIDK

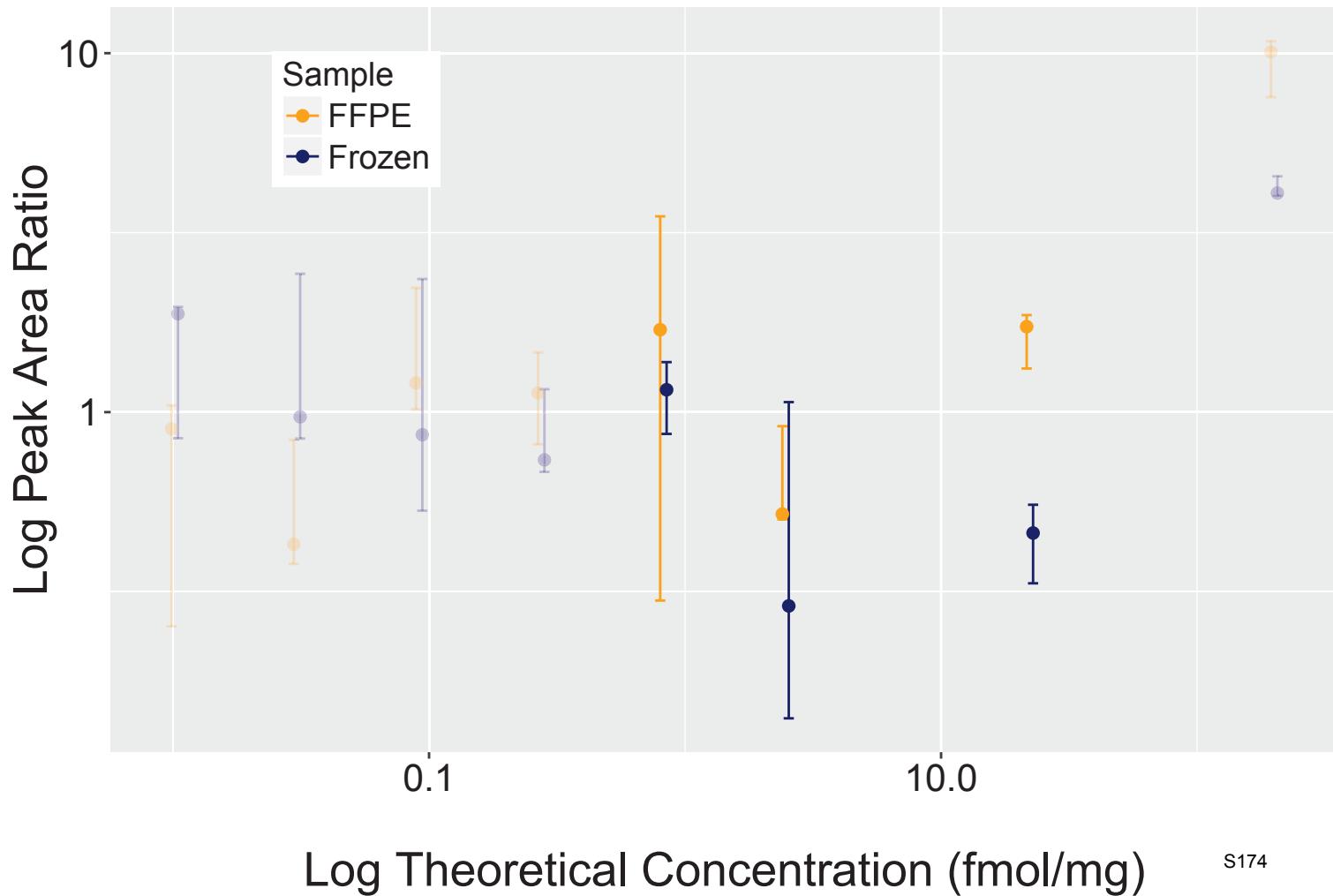


S172

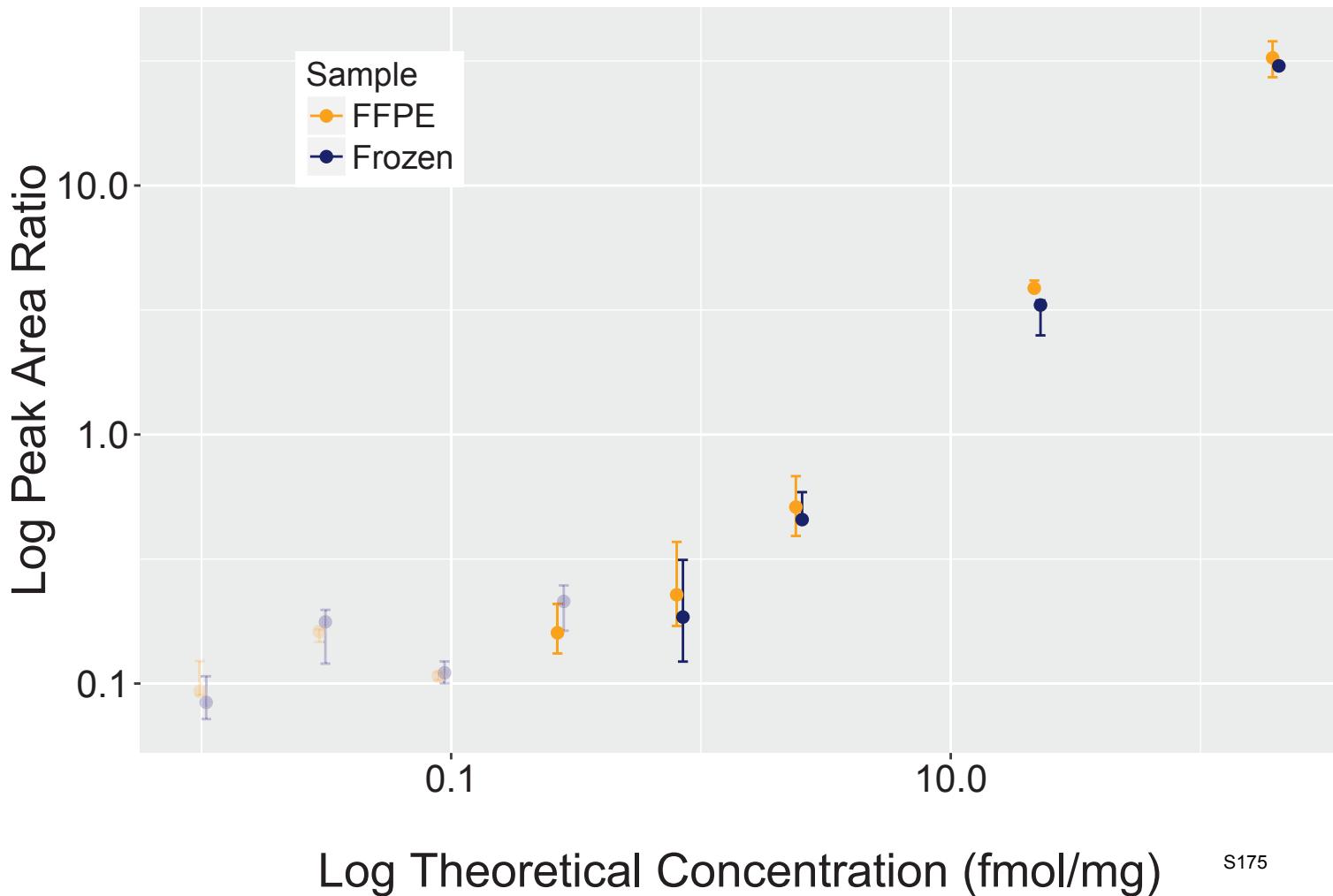
Analyte: RPS19.ELAPYDENWFYTR



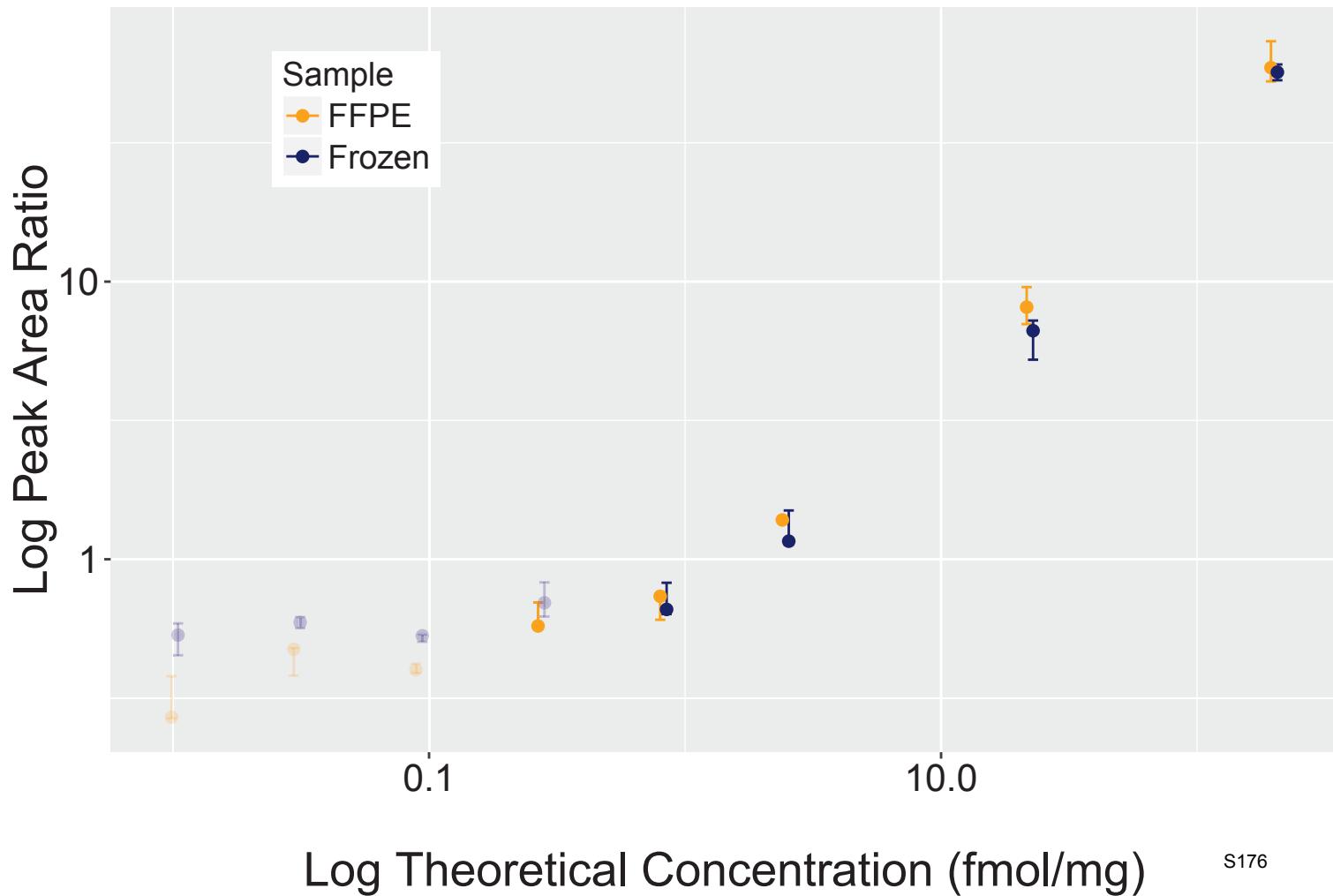
Analyte: DDX17.ELAQKVQQVADDYGK



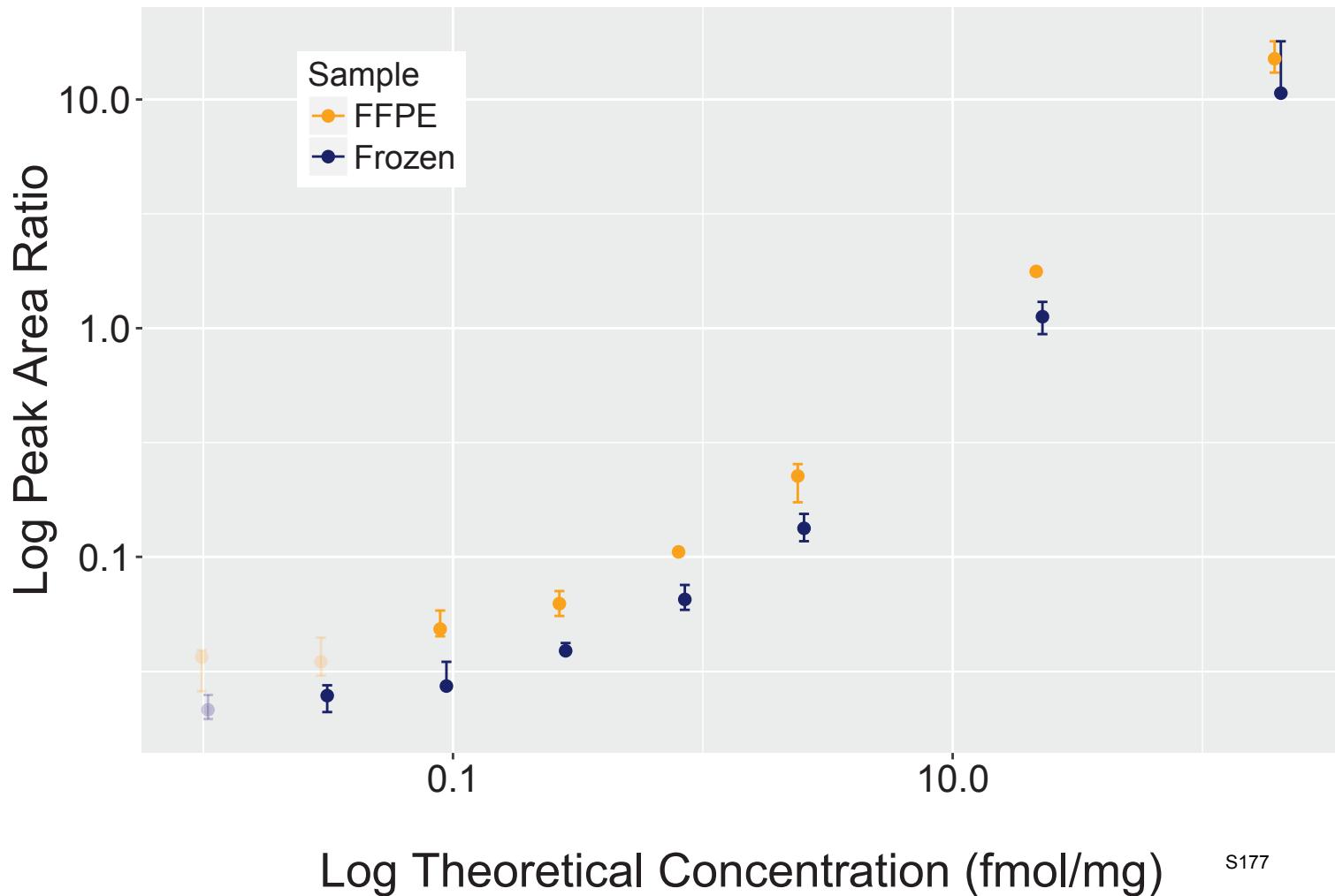
Analyte: DHX9.ELDALDANDELTPLGR



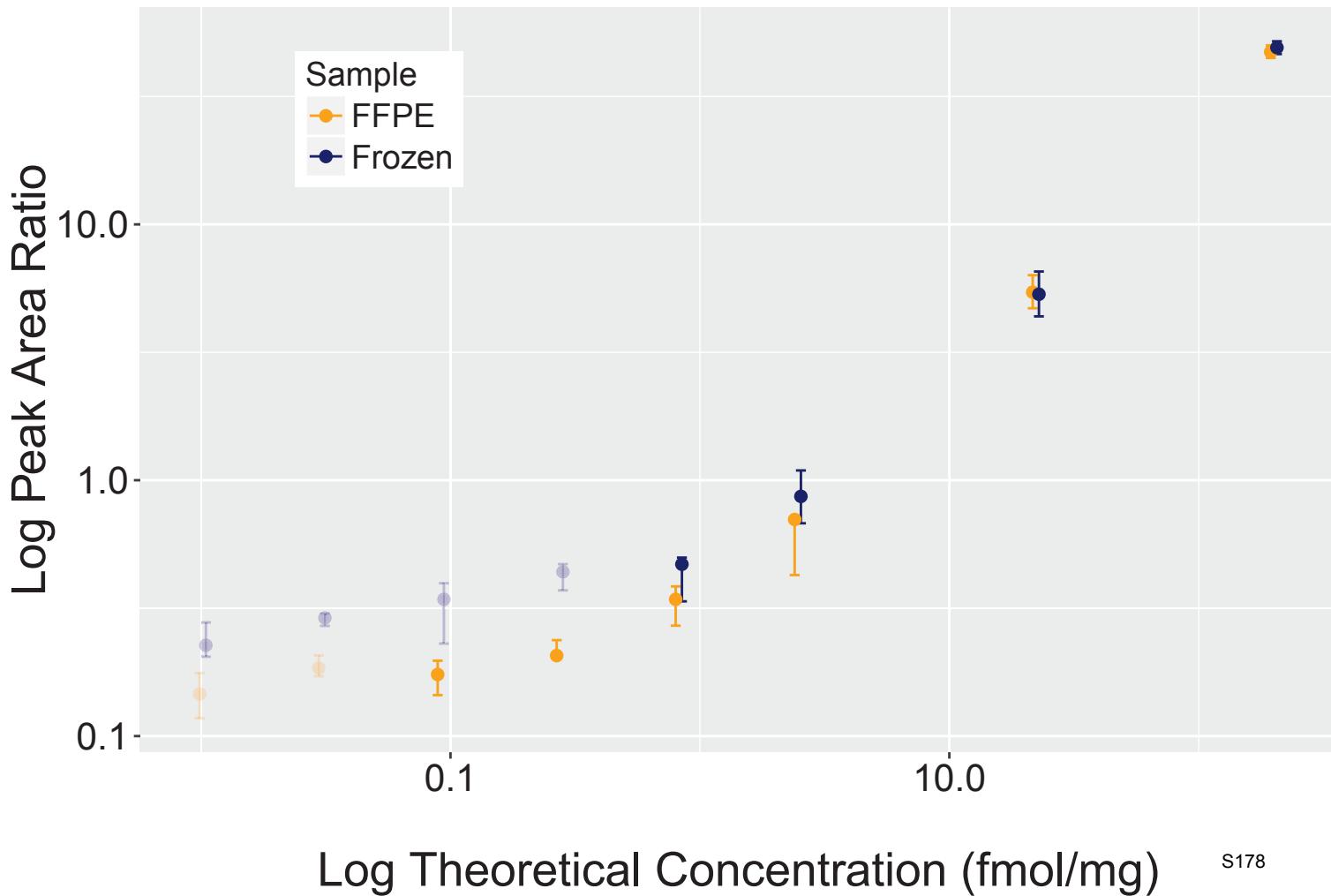
Analyte: GLRX3.ELEASEELDTIC[+57]PK



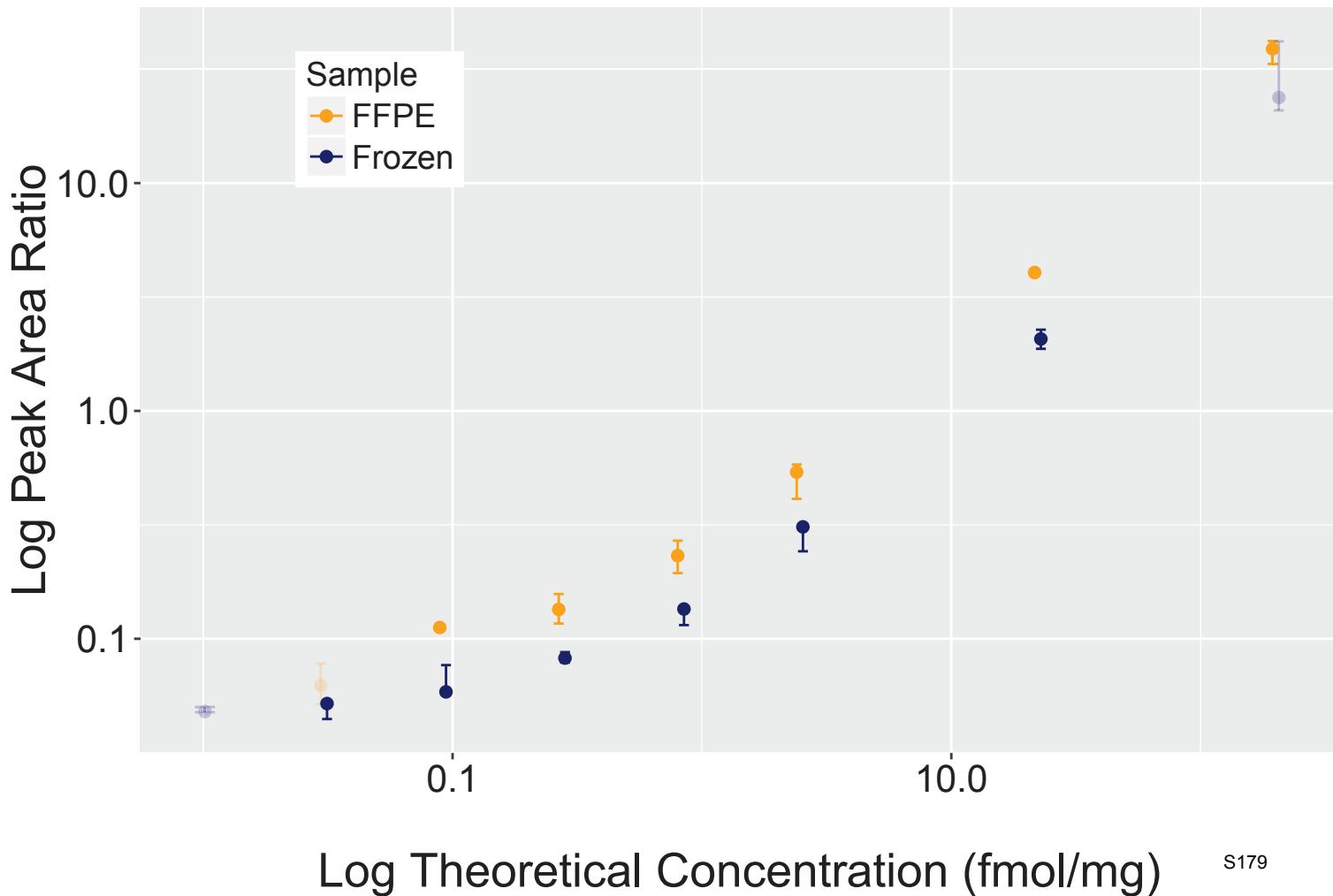
Analyte: HSPA5.ELEEIVQPIISK



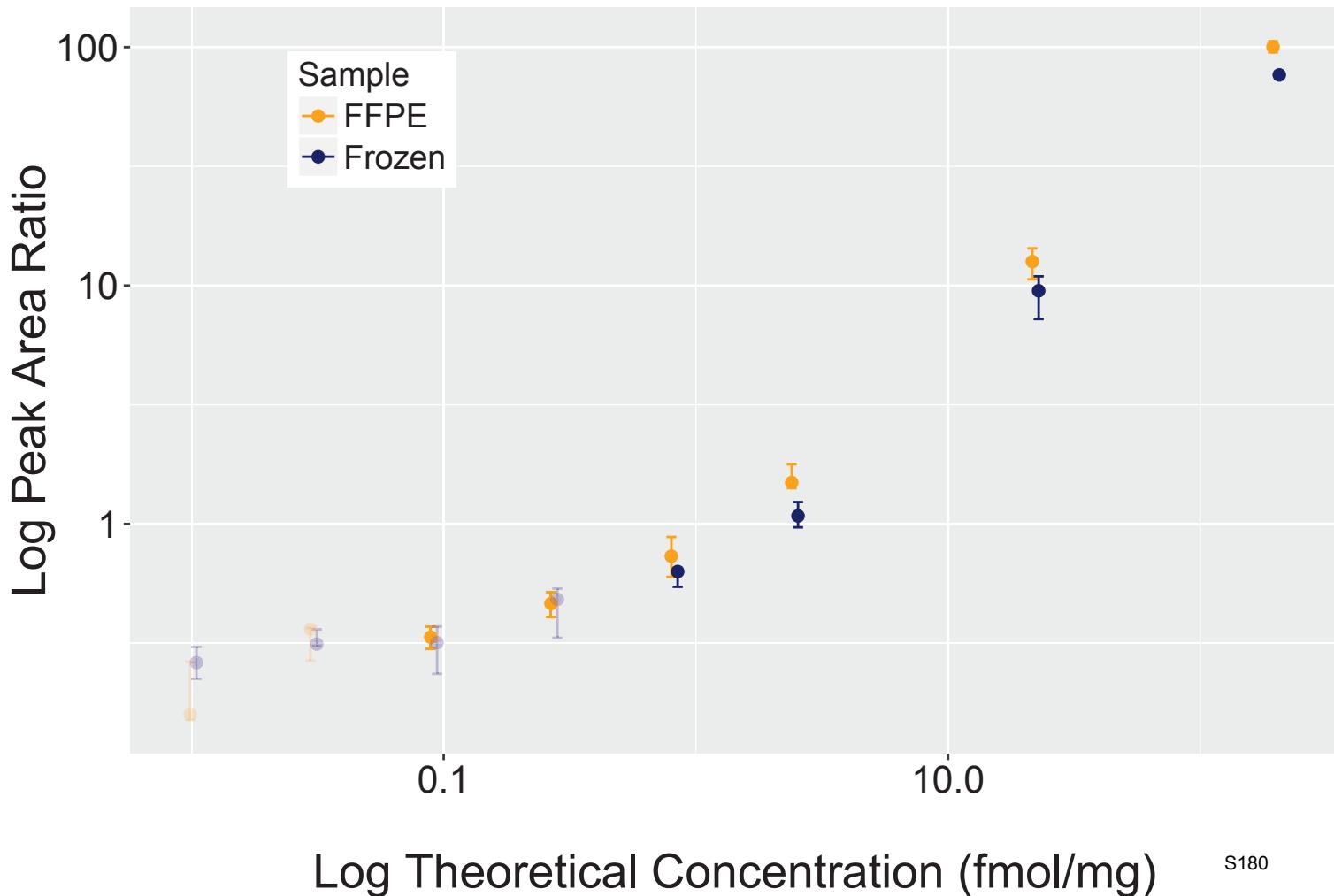
Analyte: METTL7A.ELFSNLQEFAGPSGK



Analyte: CCT3.ELGIWEPLAVK

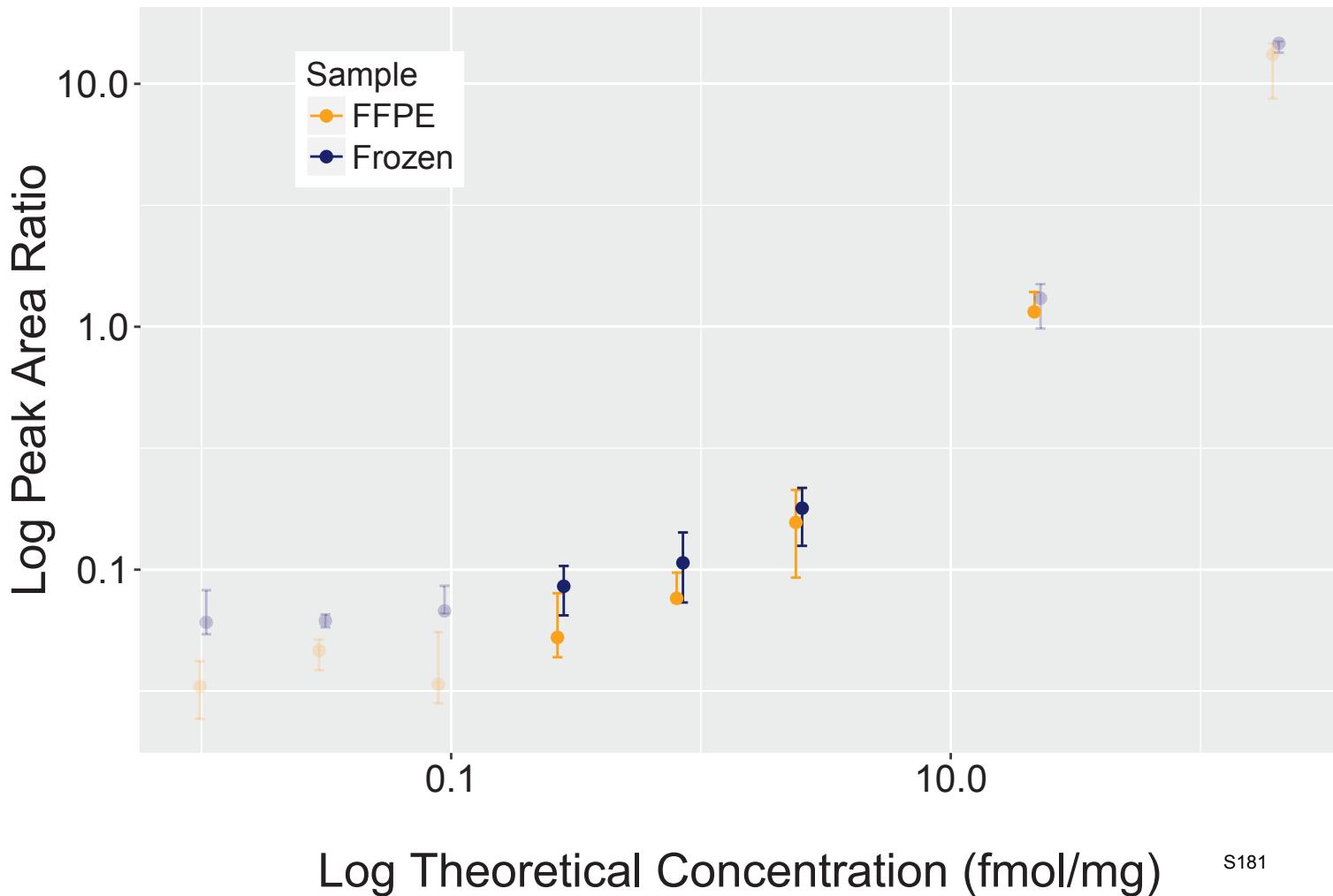


Analyte: BAG3.ELLALDSVDPEGR



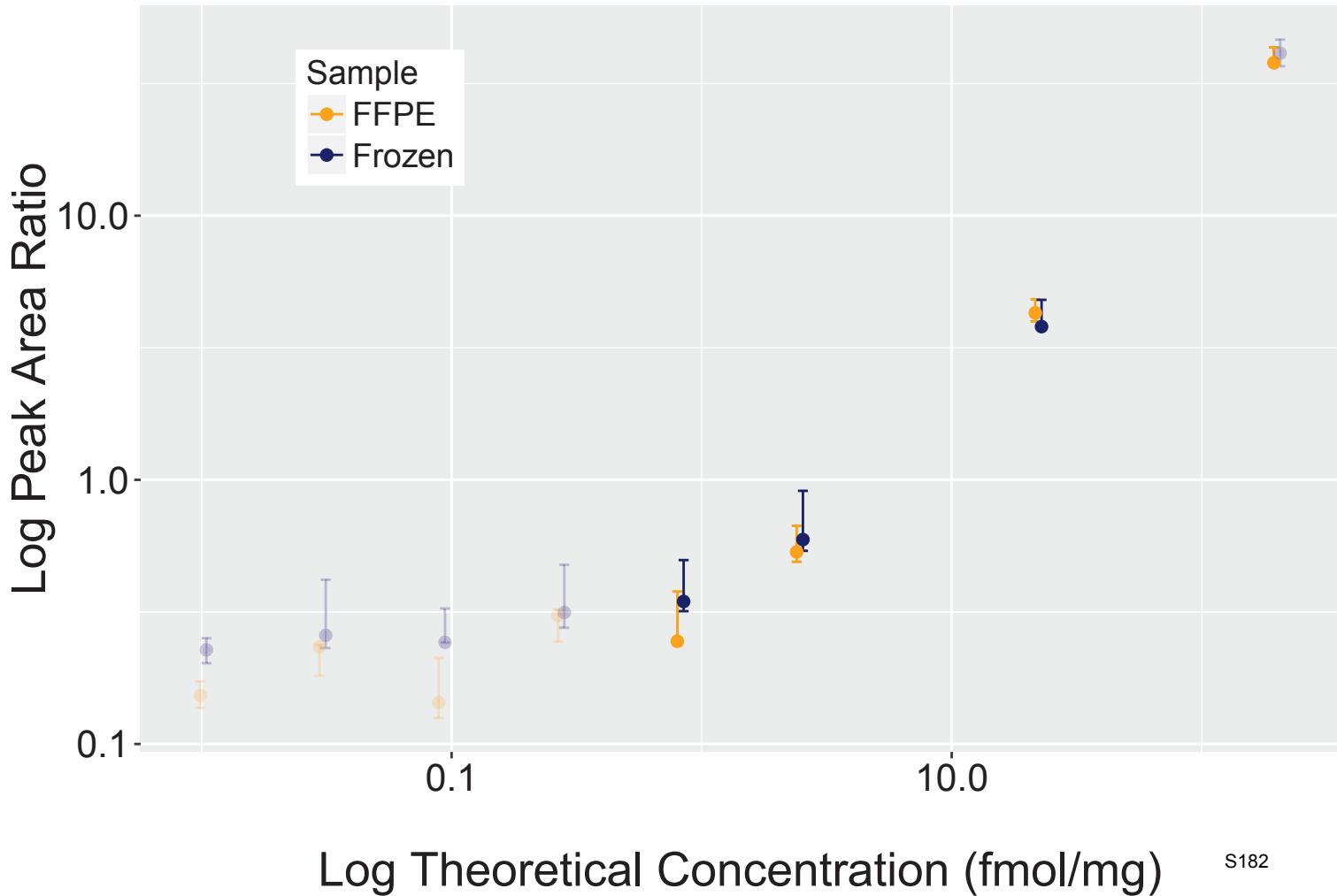
S180

Analyte: LGALS3BP.ELSEALGQIFDSQR



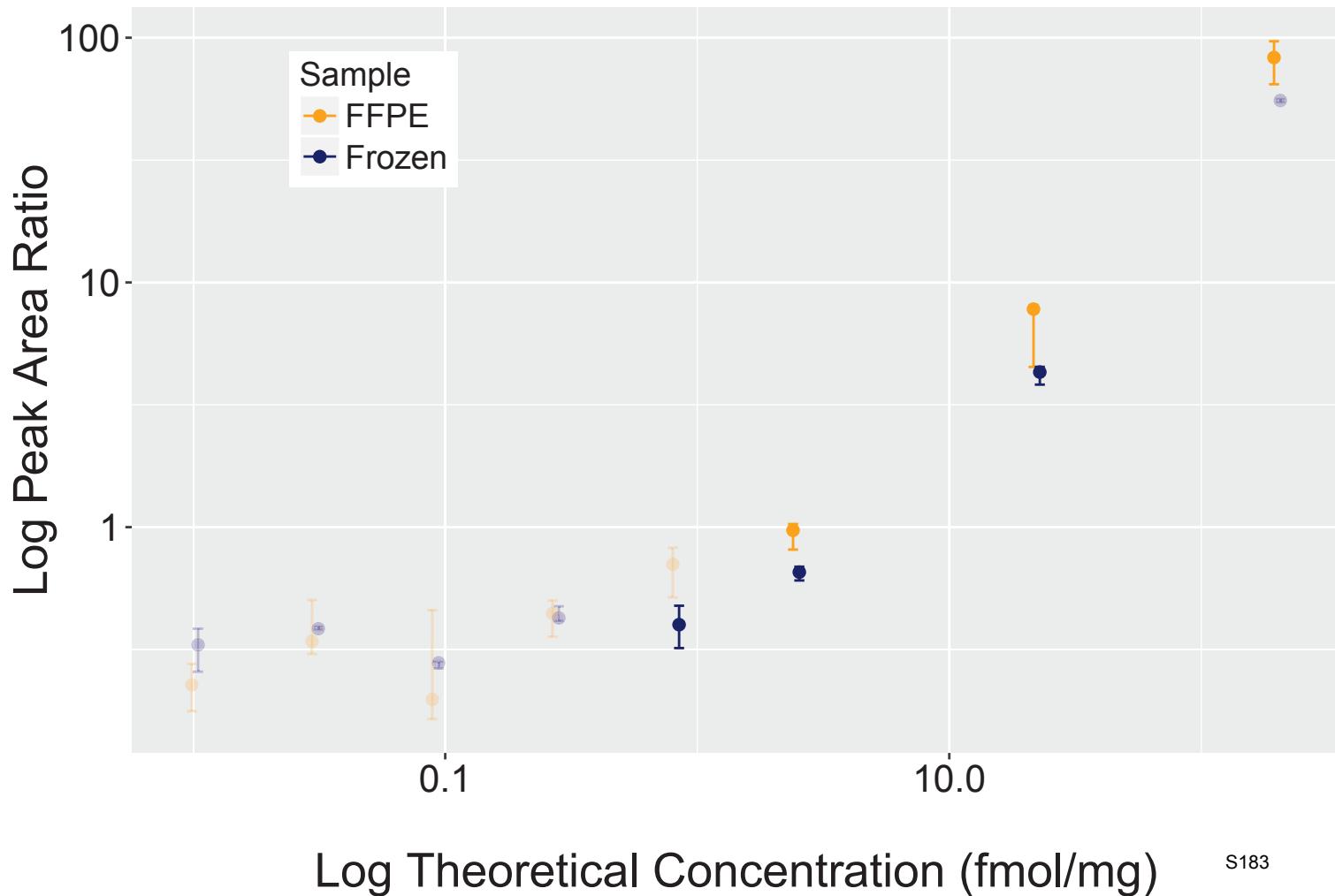
S181

Analyte: IARS2.ELSNFYFSIIK



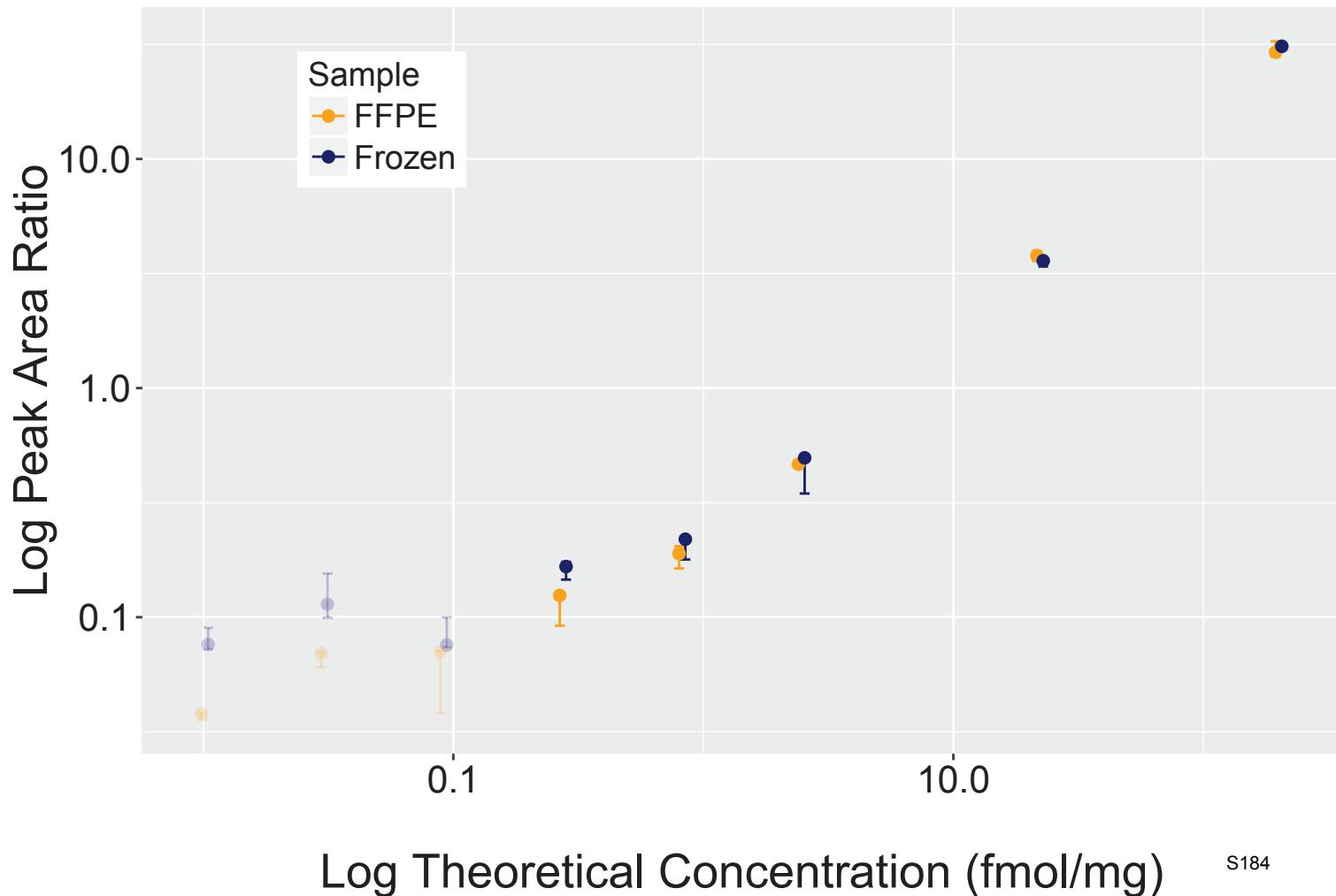
S¹⁸²

Analyte: MYH14.ELSSTEAQLHDAQELLQEETR

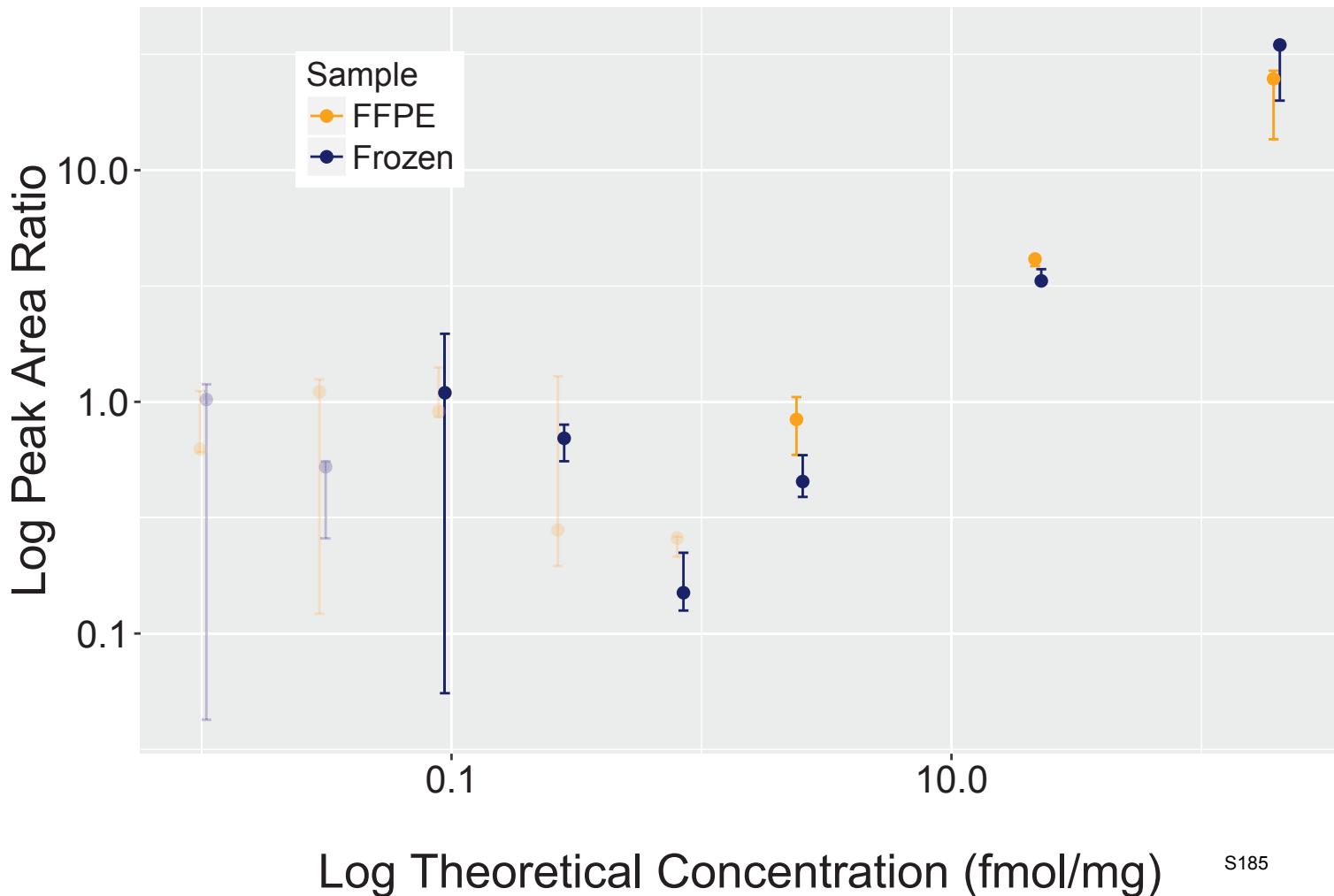


S¹⁸³

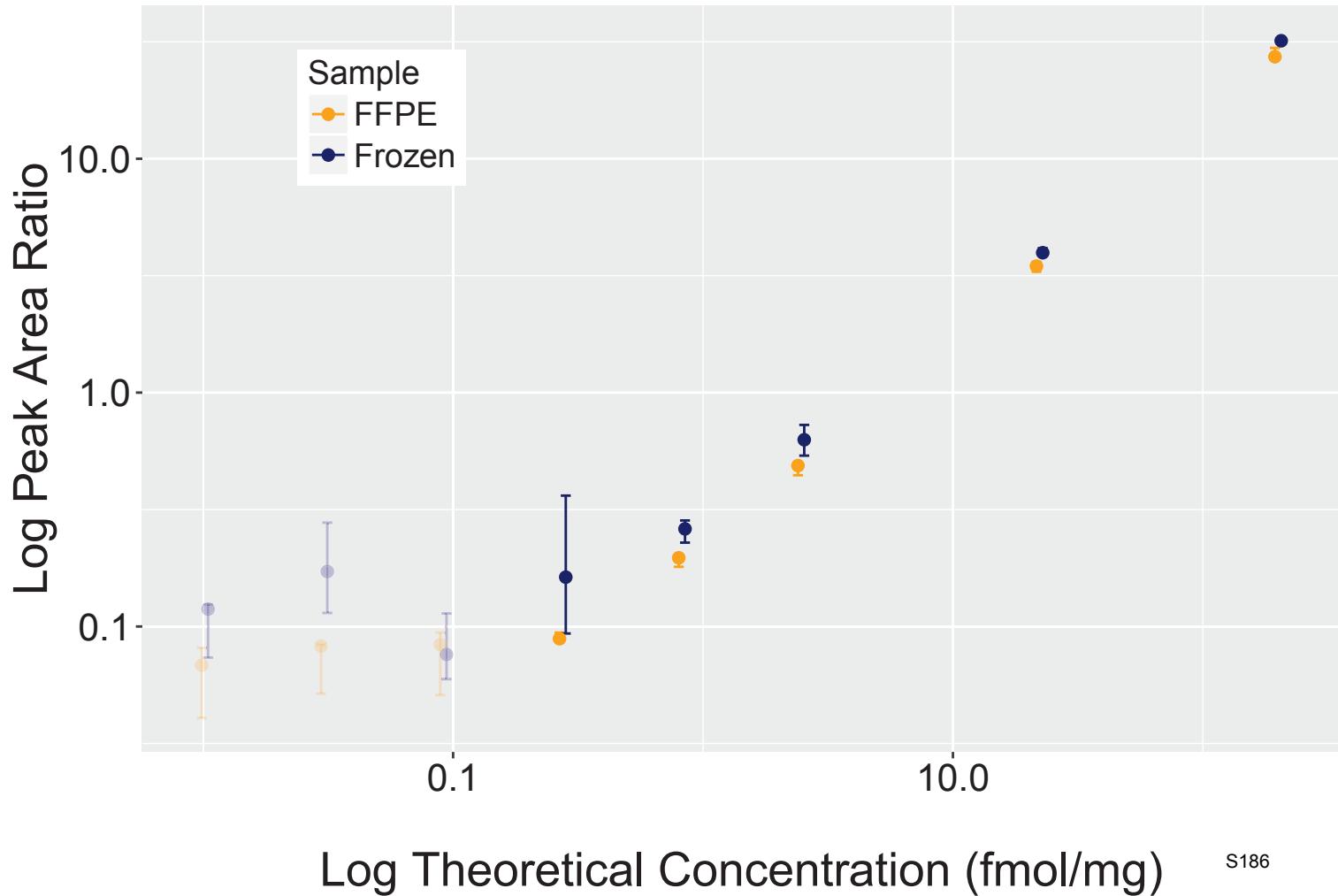
Analyte: EHD1.ELVNNLGEIYQK



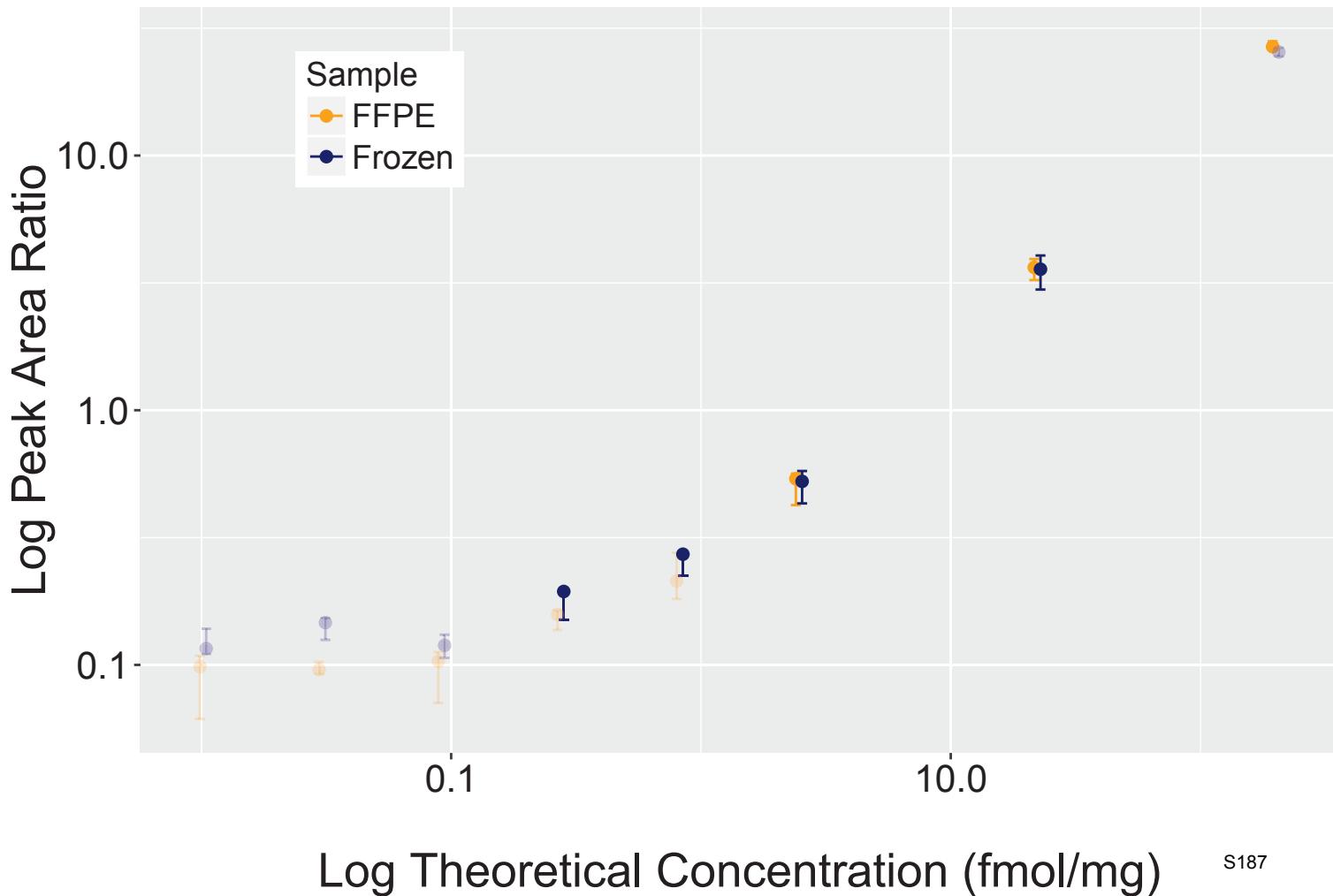
Analyte: SARS.ELVSC[+57]SNC[+57]TDYQAR



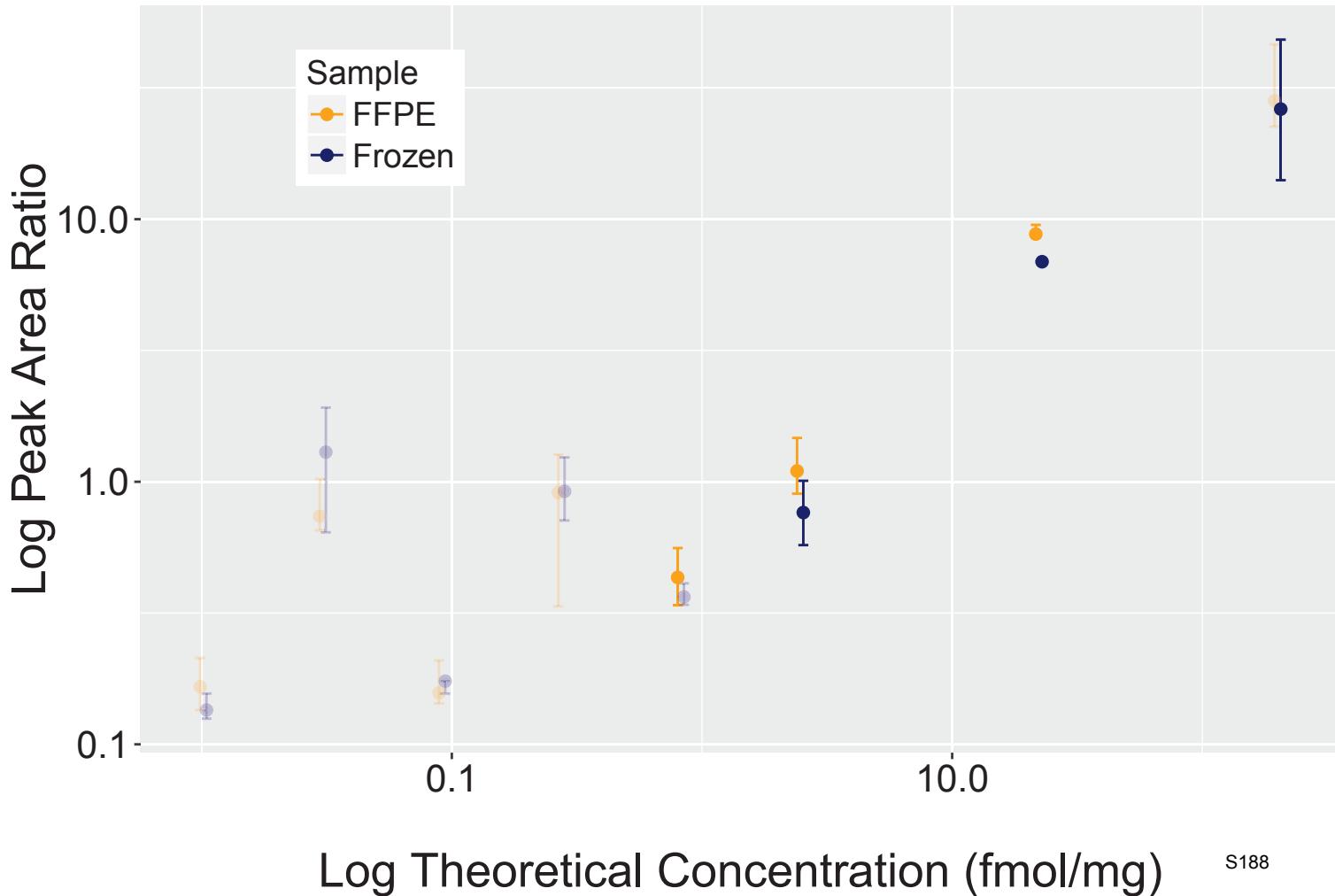
Analyte: ERBB2.ELVSEFSR



Analyte: PFKP.ELVVTQLGYDTR

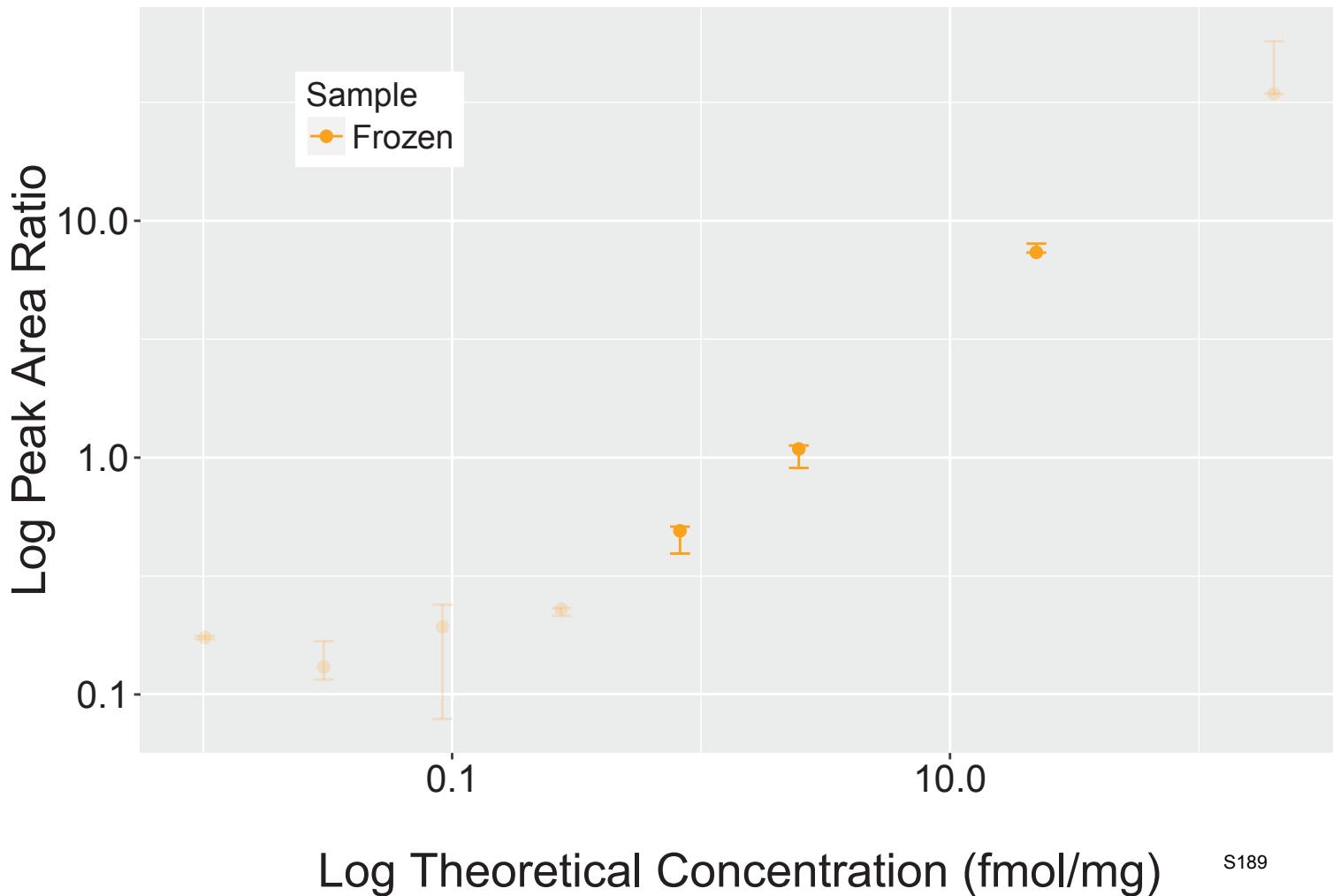


Analyte: CD59.ENELTYYC[+57]C[+57]K

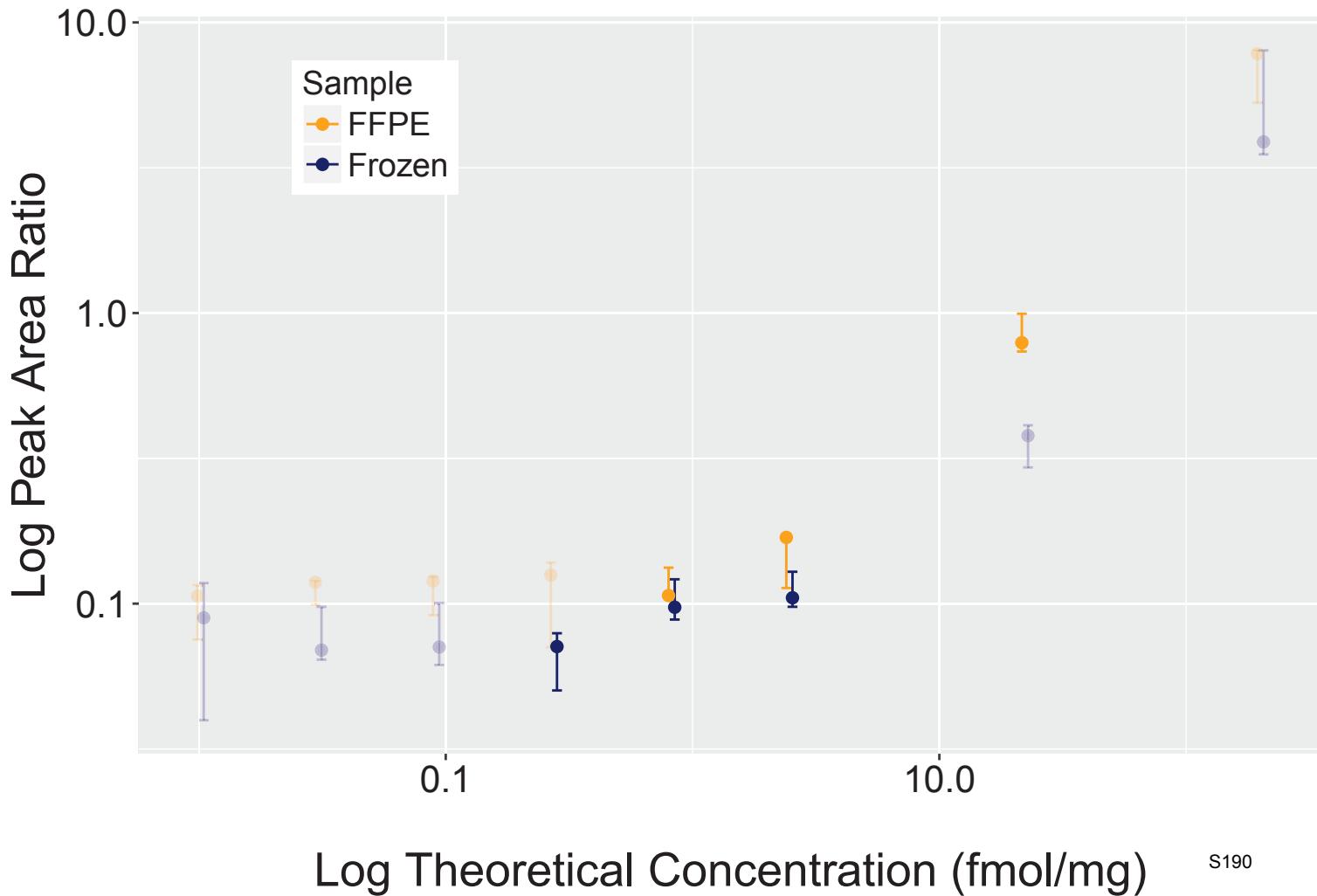


S¹⁸⁸

Analyte: GGCT.ENGLPLEYQEK

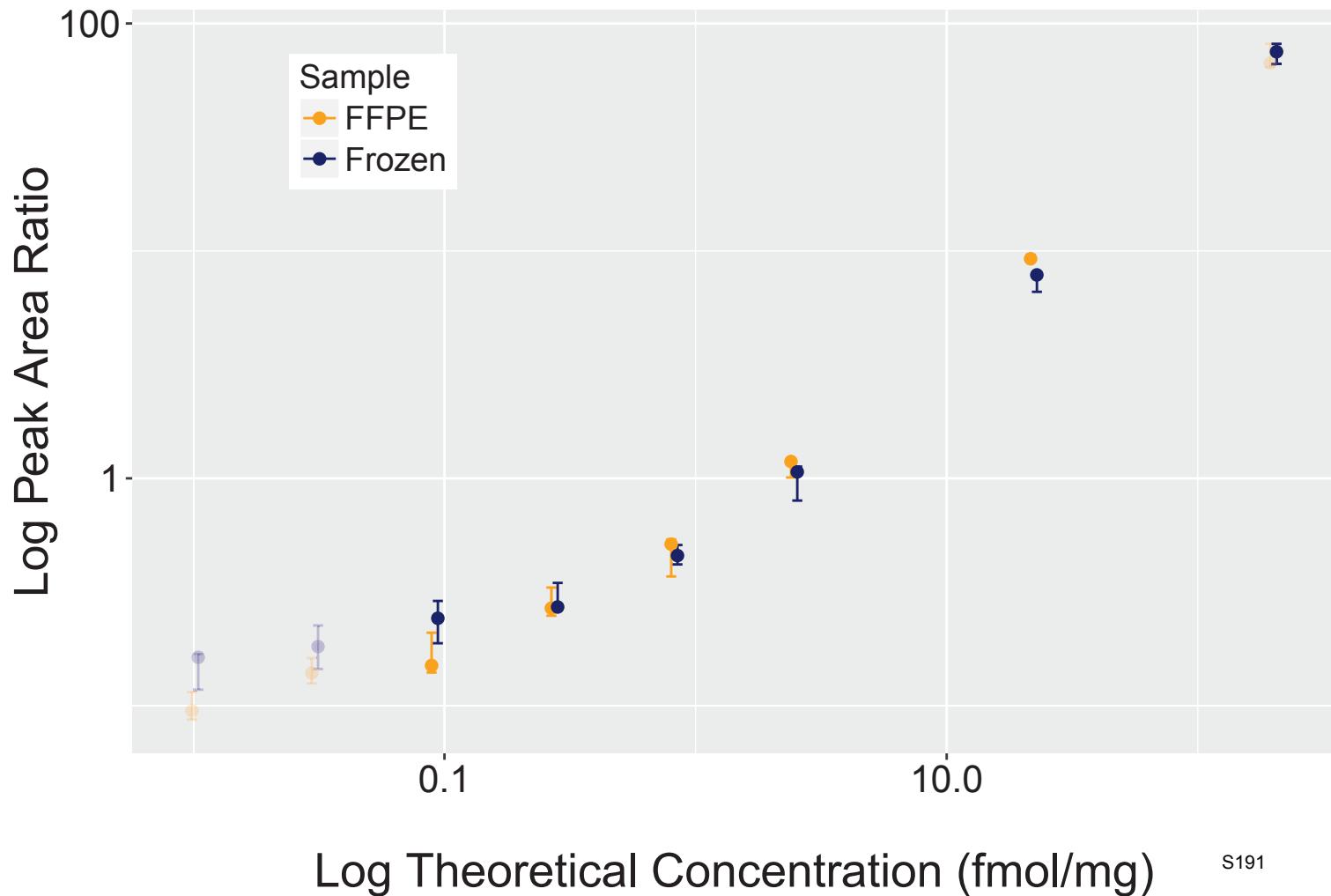


Analyte: SH3BGRL.ENNAVY AFLGLTAPPGSK



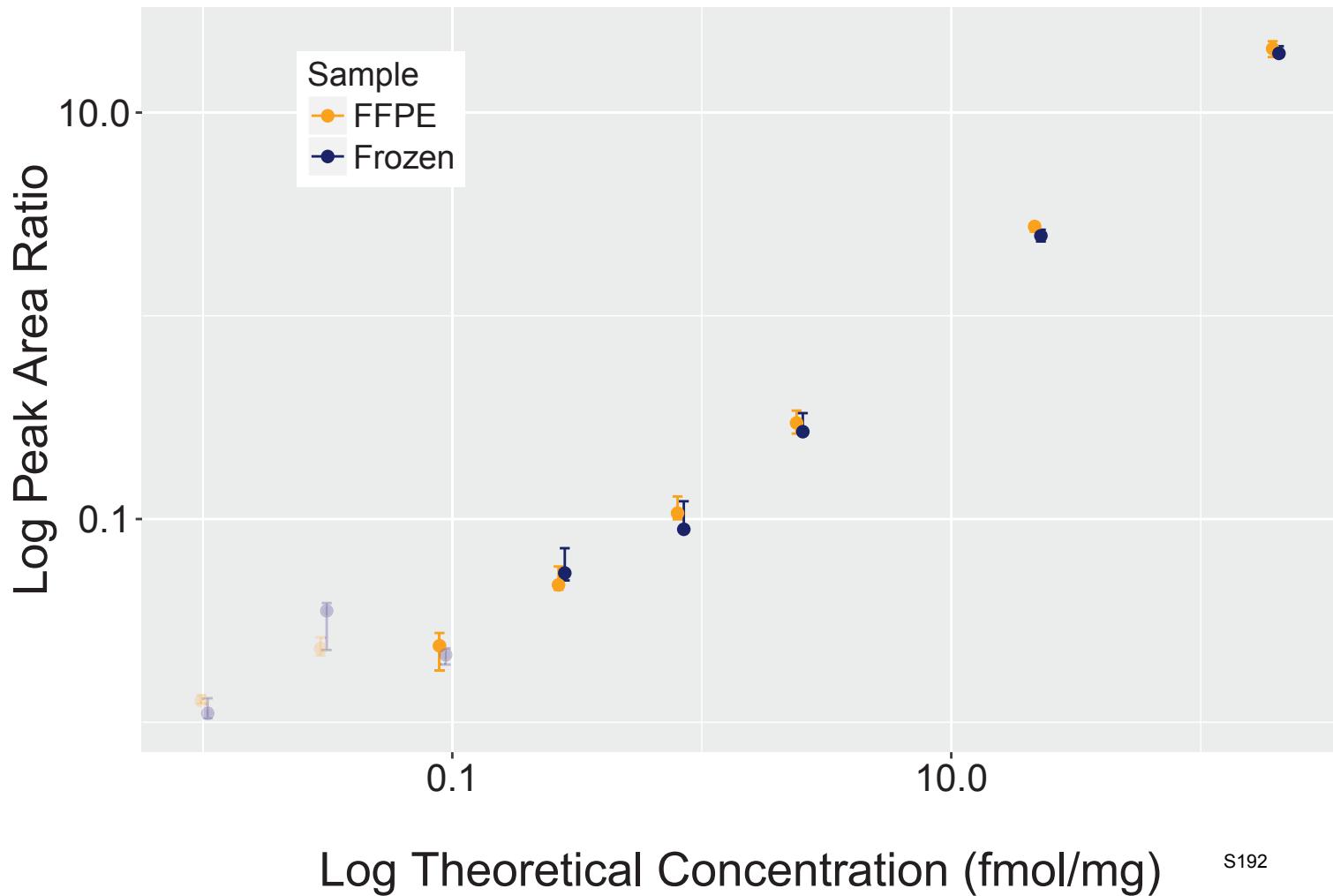
S190

Analyte: ANPEP.ENSLLFDPLSSSSNK



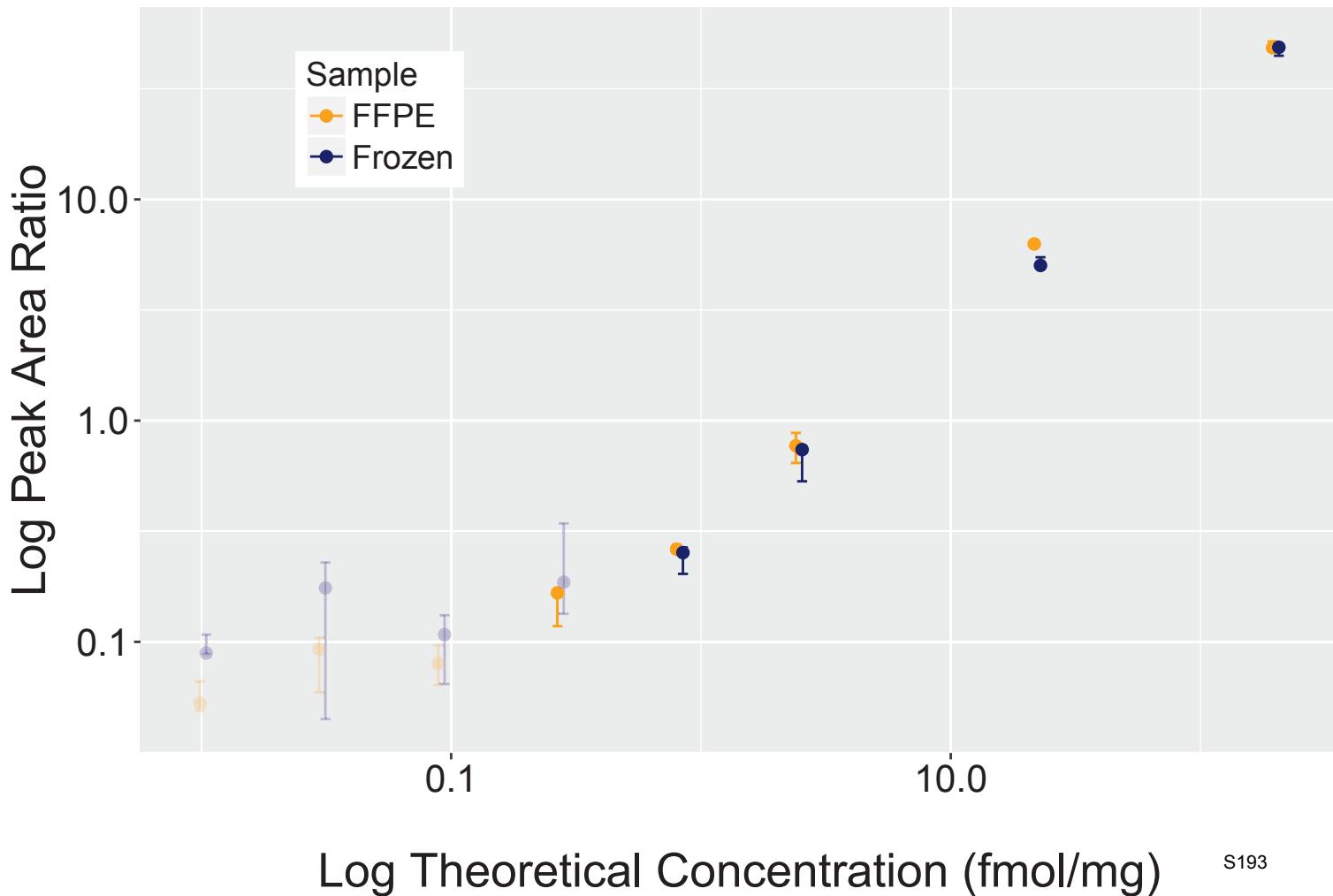
S191

Analyte: LASP1.EPAAPVSIQR

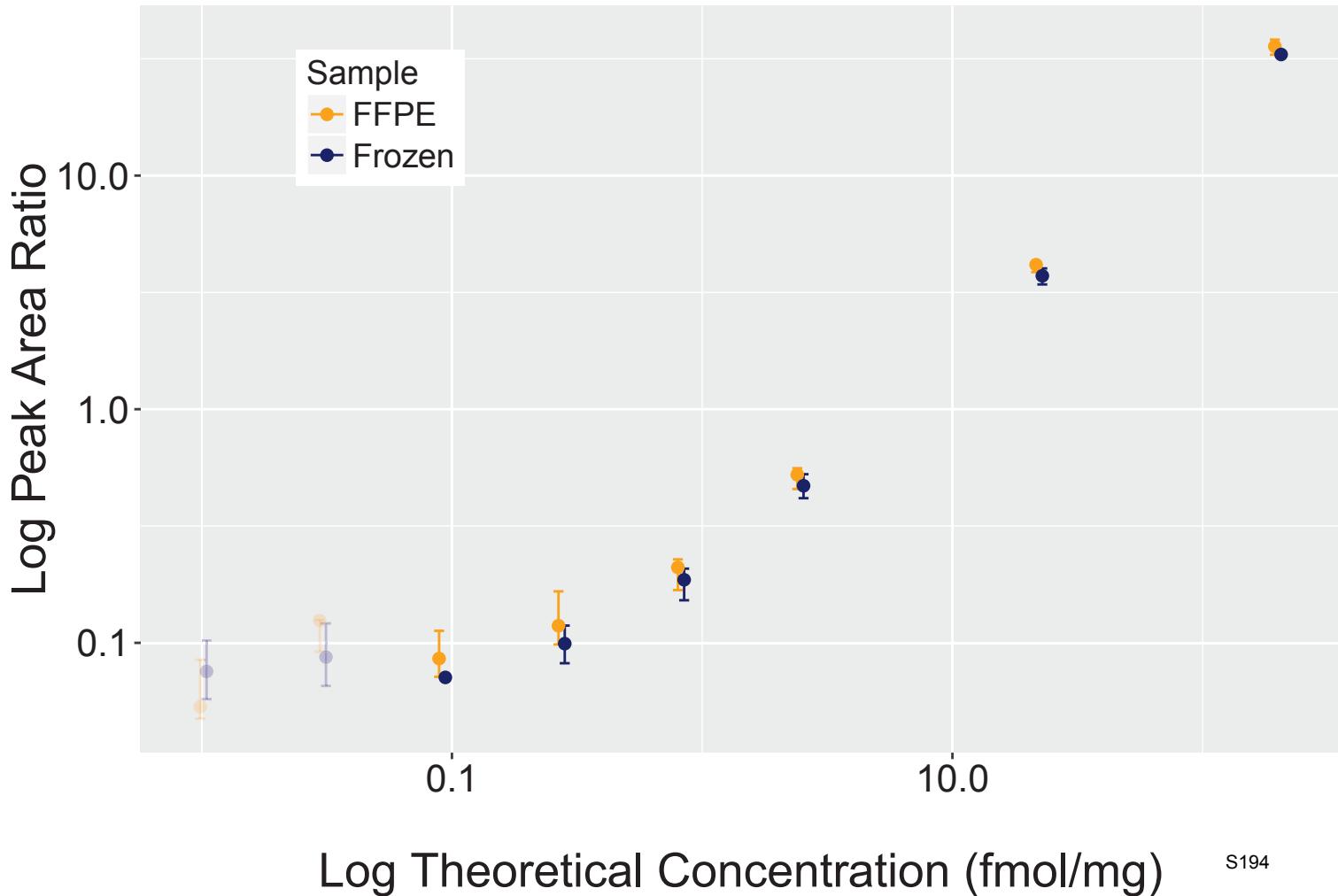


S¹⁹²

Analyte: PSME1.EPALNEANLSNLK

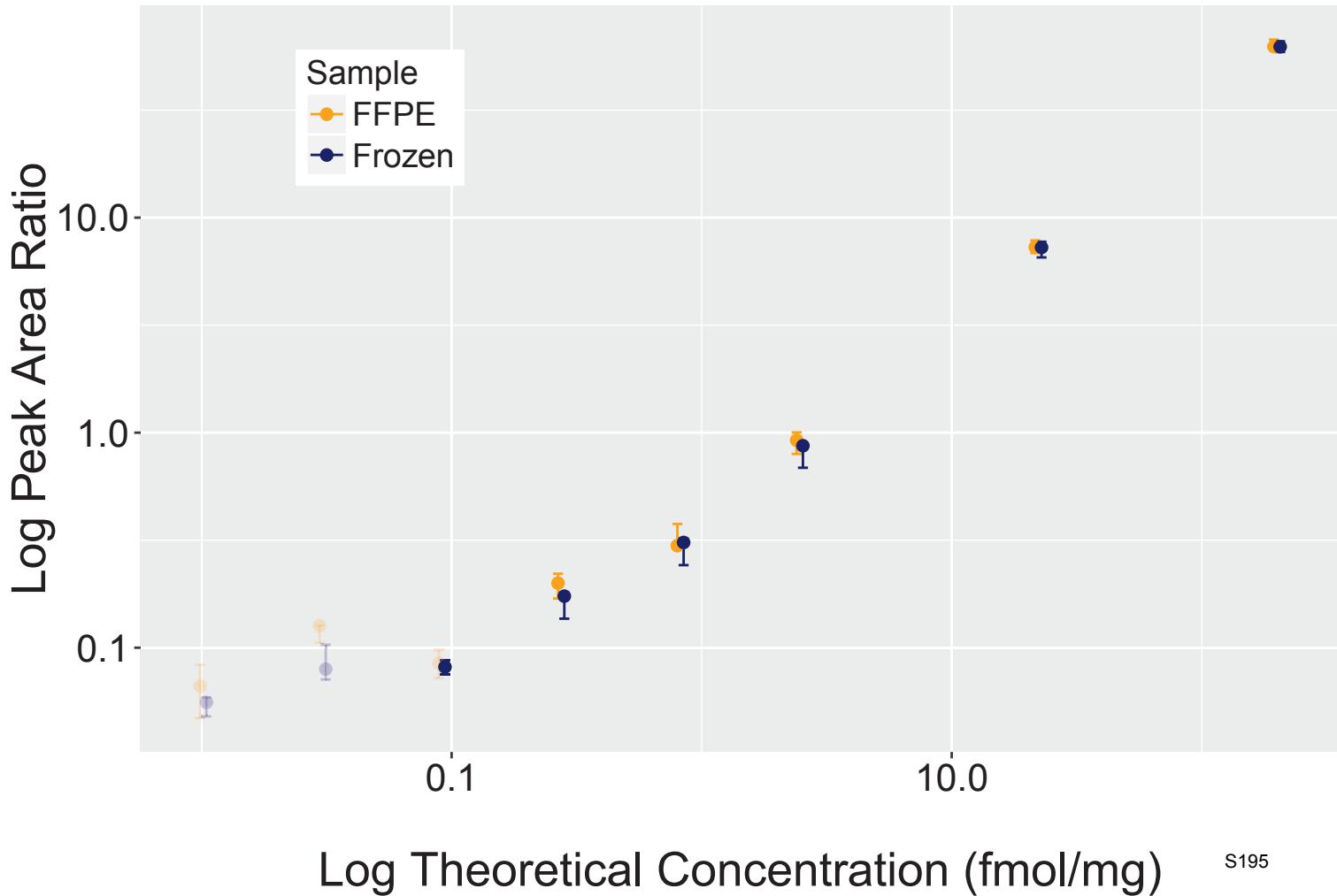


Analyte: USO1.EQDLQLEELR



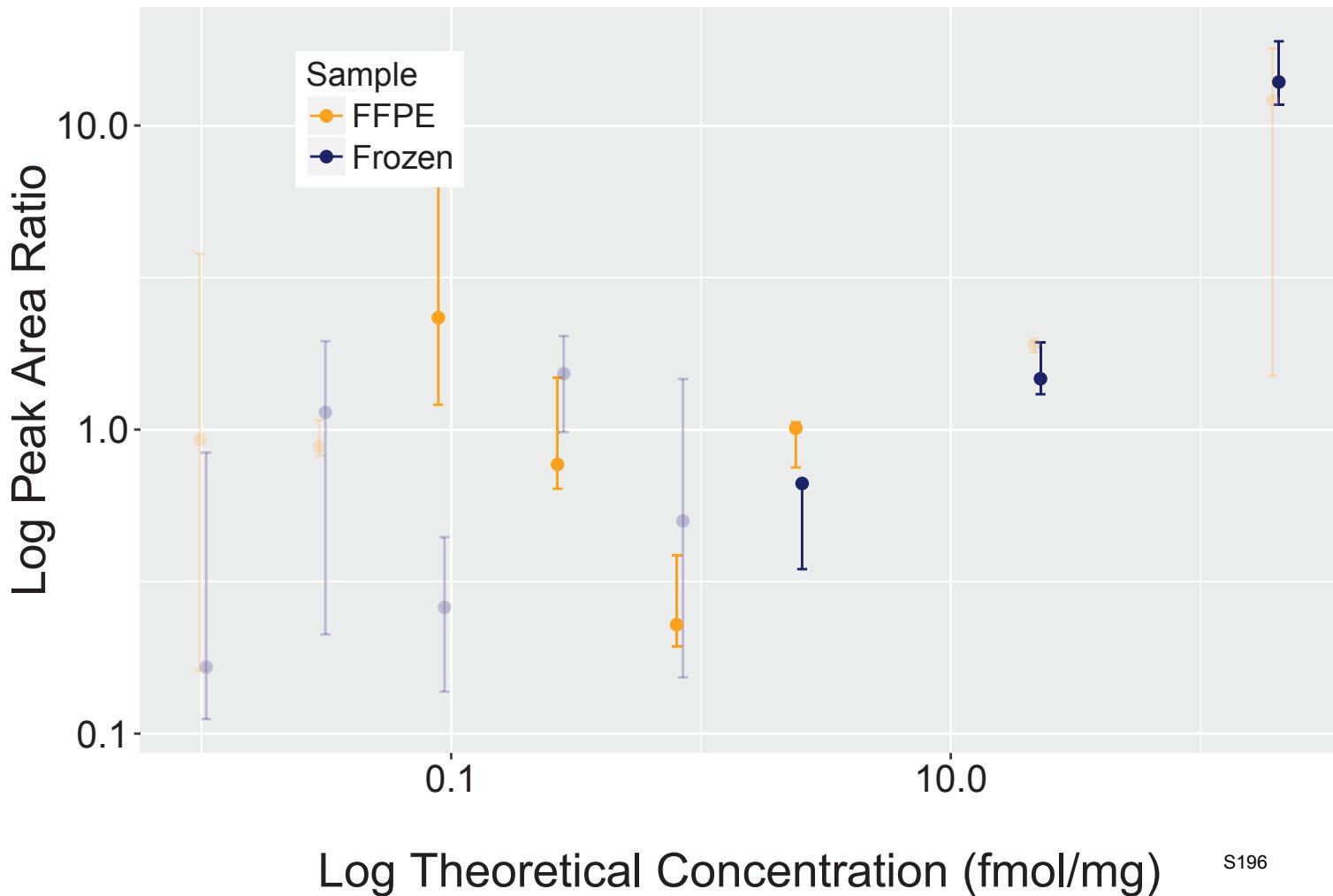
S194

Analyte: FAM83H.EQTVSETLGPGEAVR



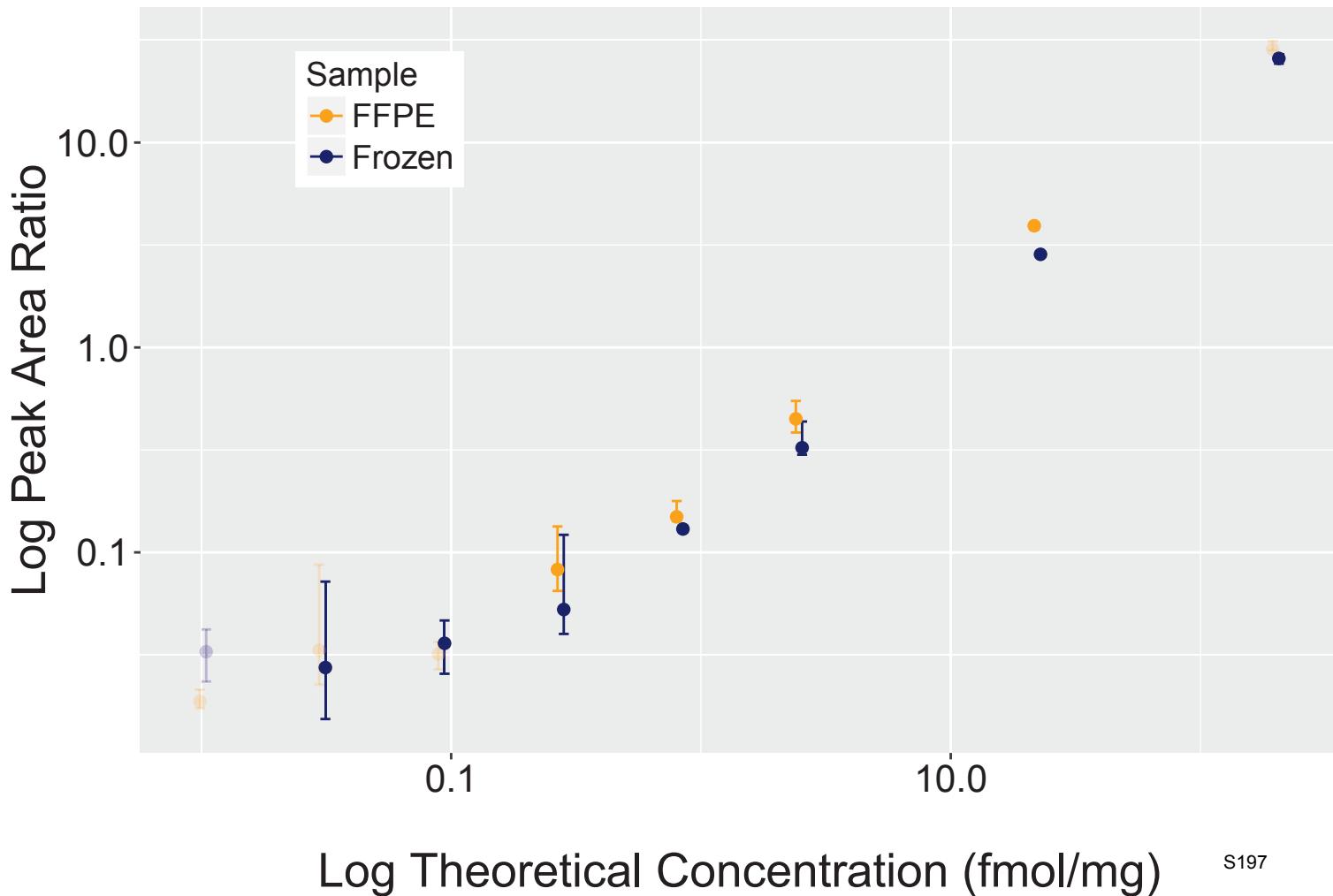
S195

Analyte: EPRS.ERPTPSLNNNC[+57]TTSEDSLVLYNF

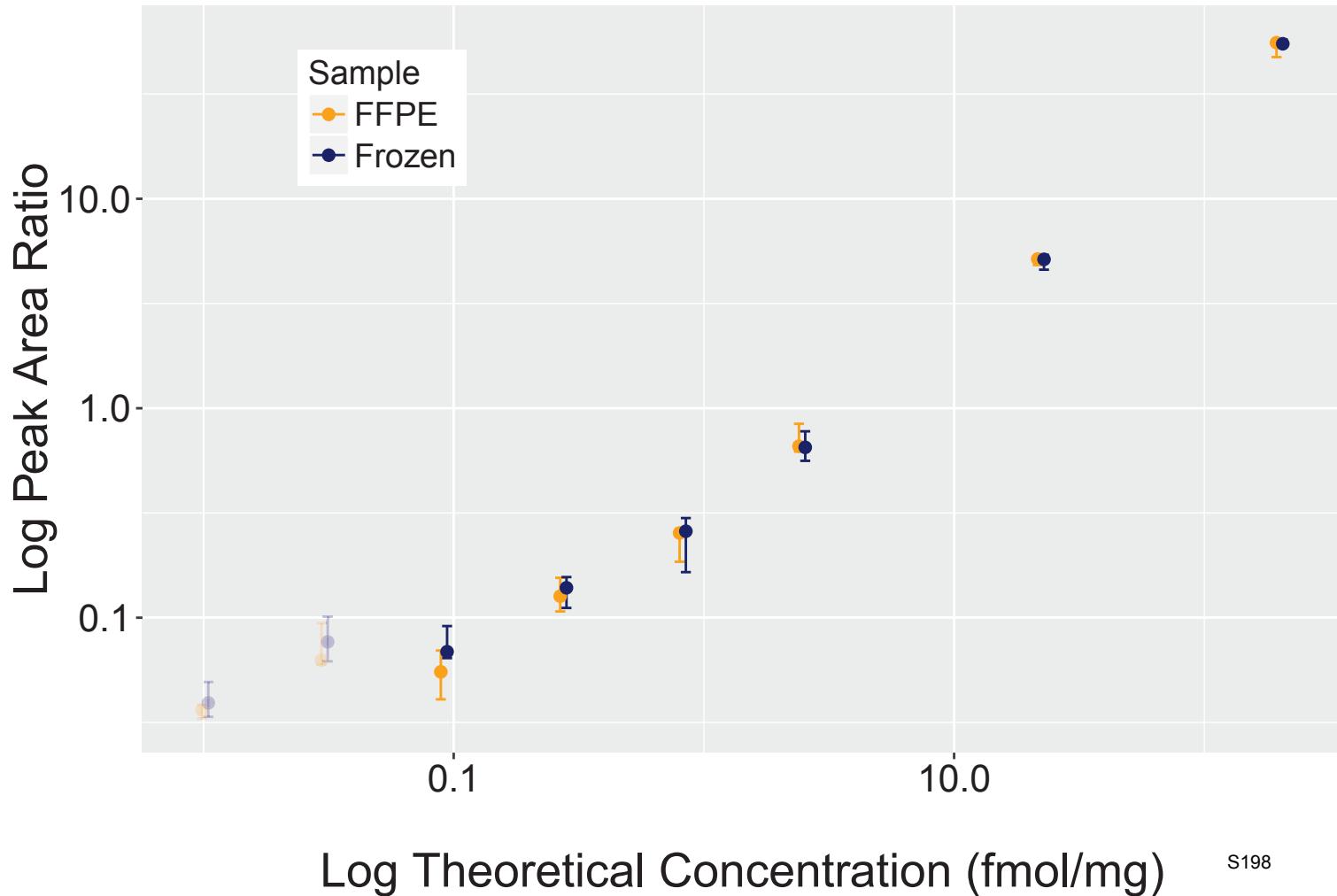


S196

Analyte: BASP1.ESEPVAAAEPVPAEK

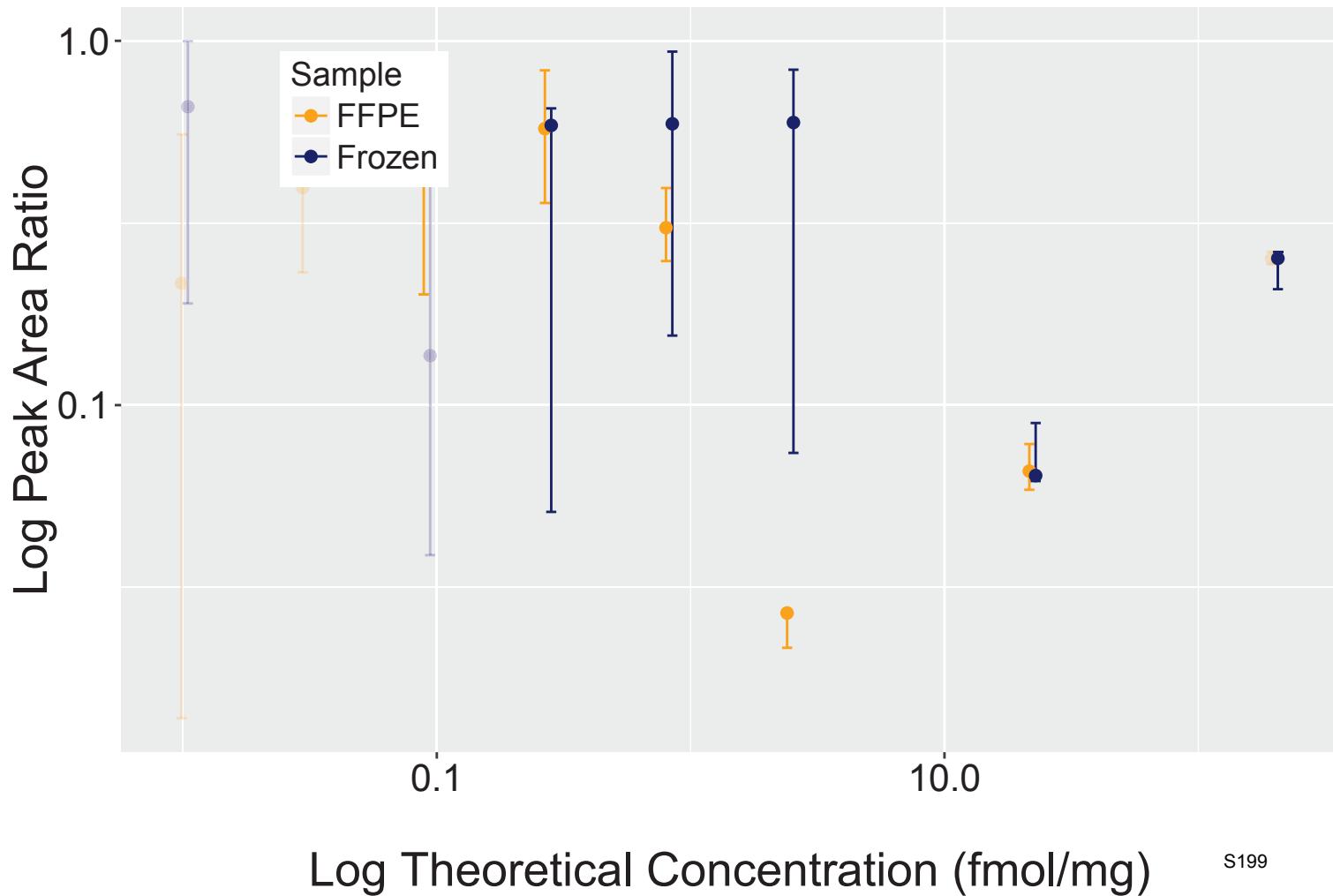


Analyte: GFPT1.ESQDTSFTTLVER



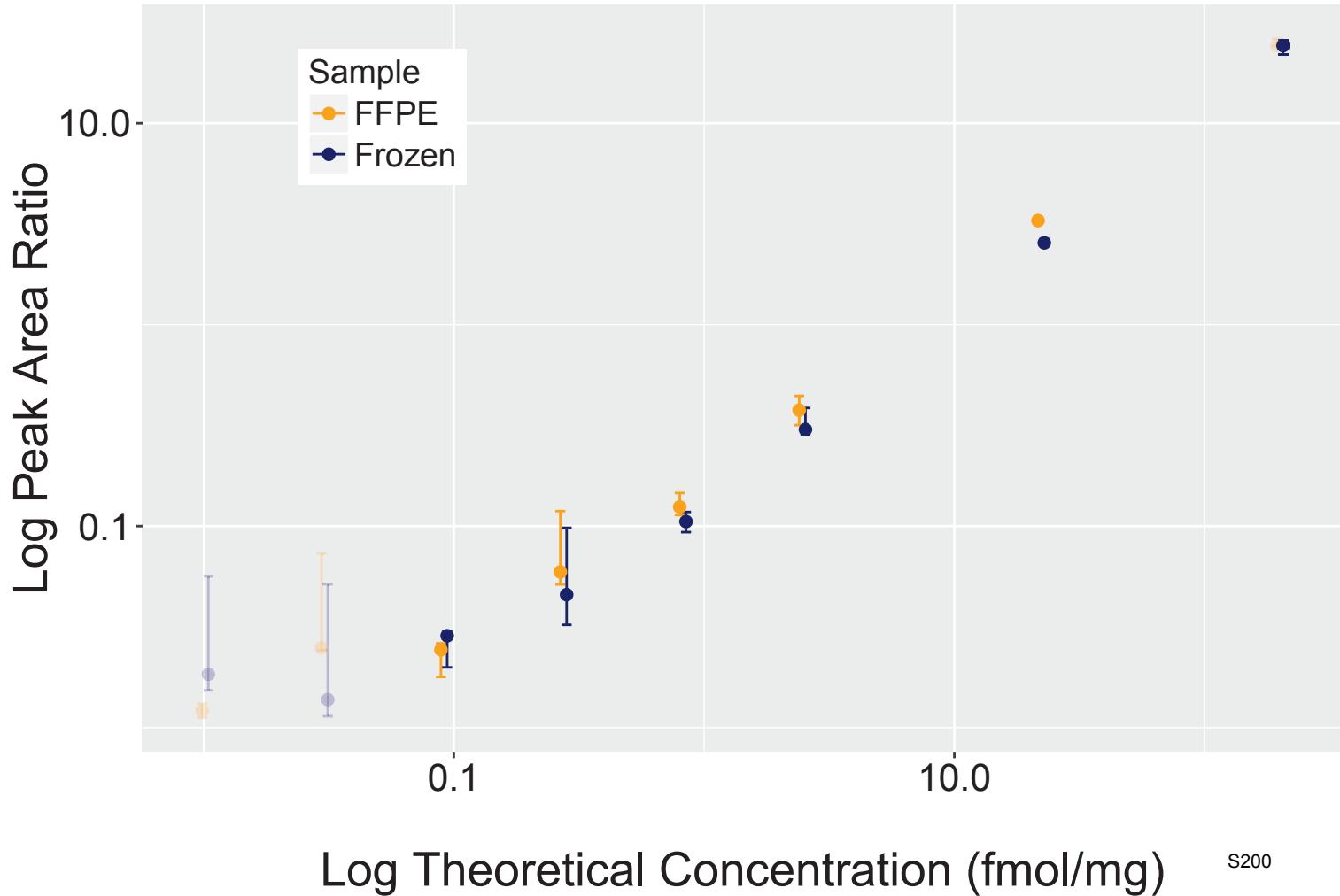
S198

Analyte: PRDX5.ETDLLLDSLVSIFGNR

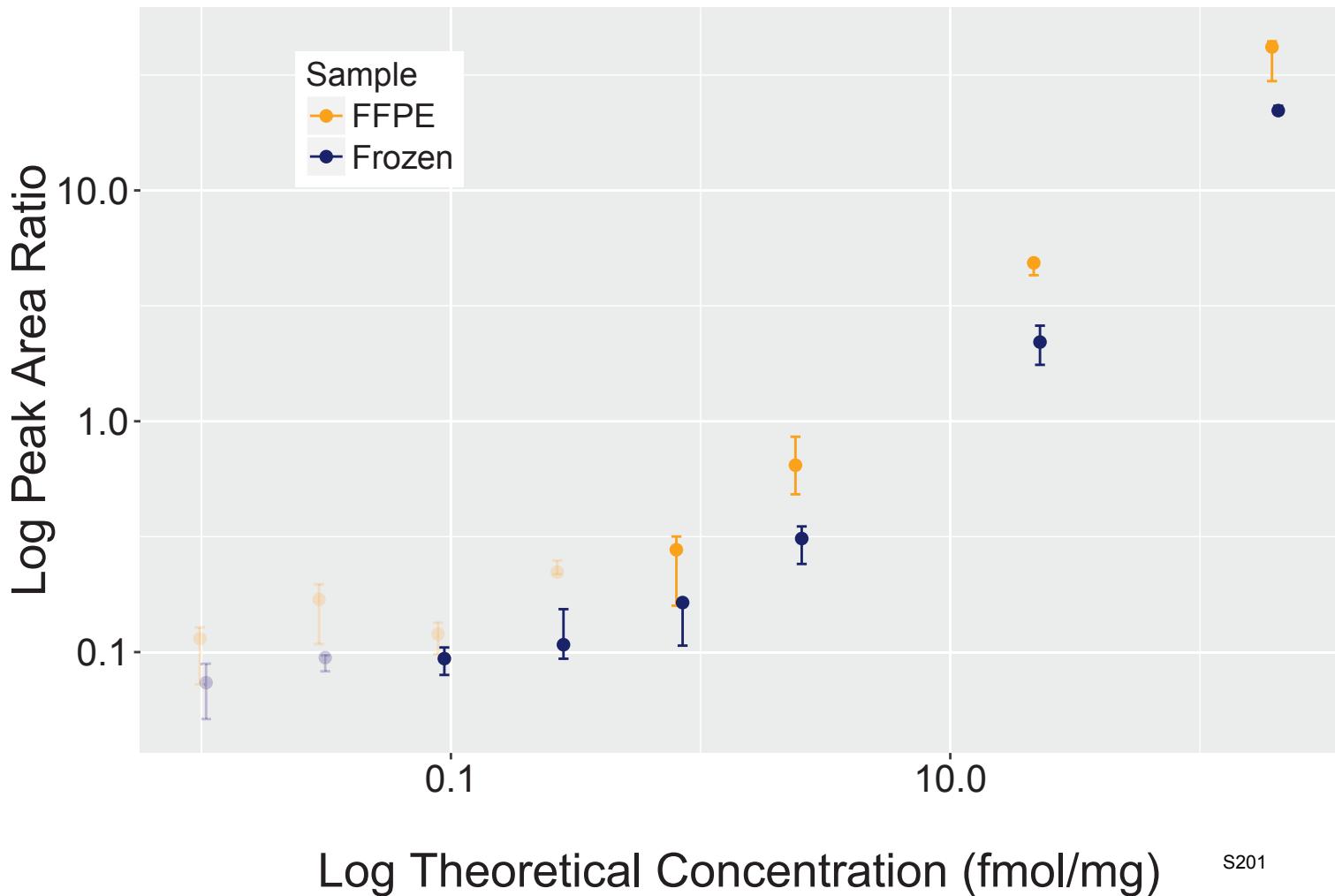


S199

Analyte: BASP1.ETPAATEAPSSTPK

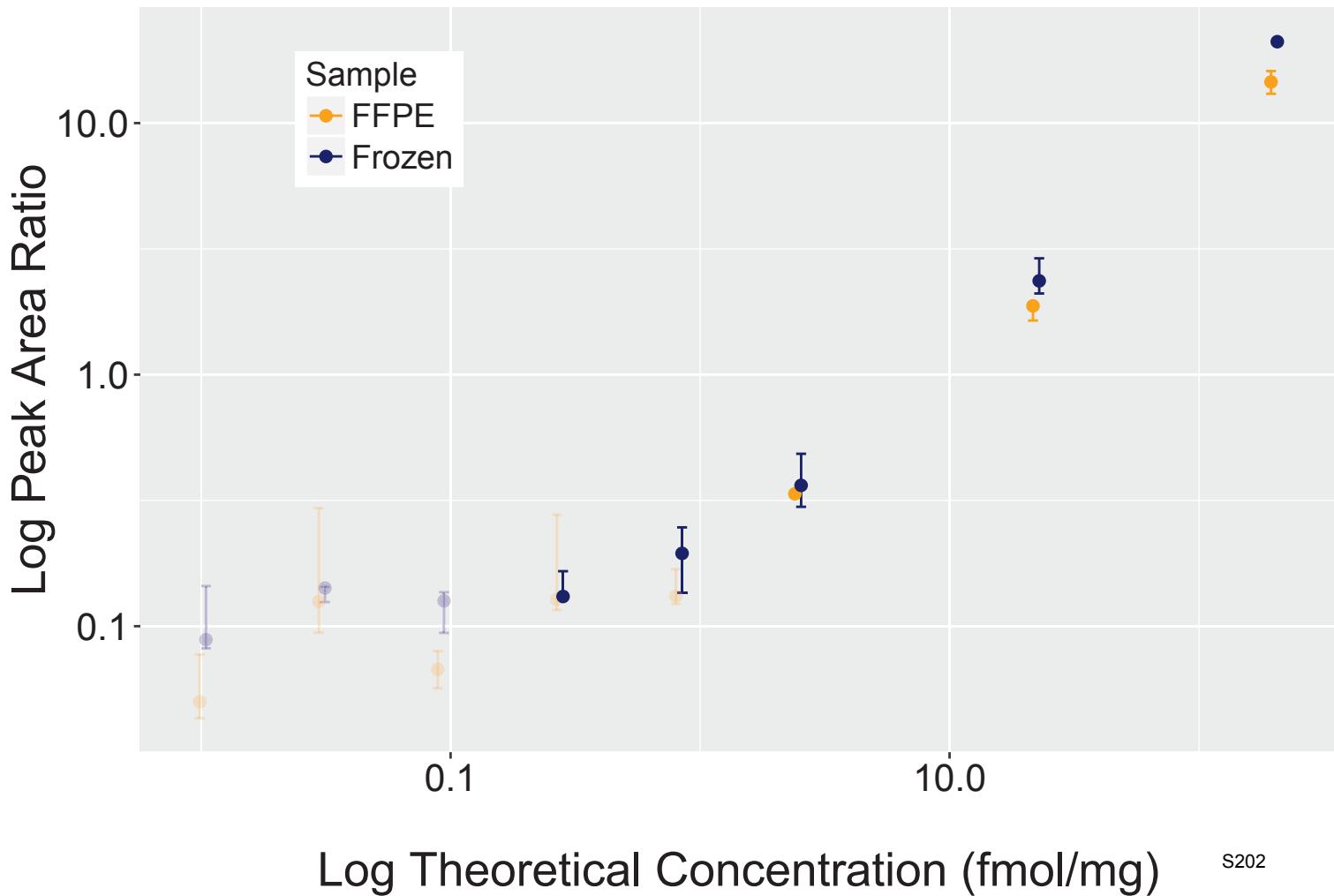


Analyte: ACTN4.ETTD TDTADQVIA SFK



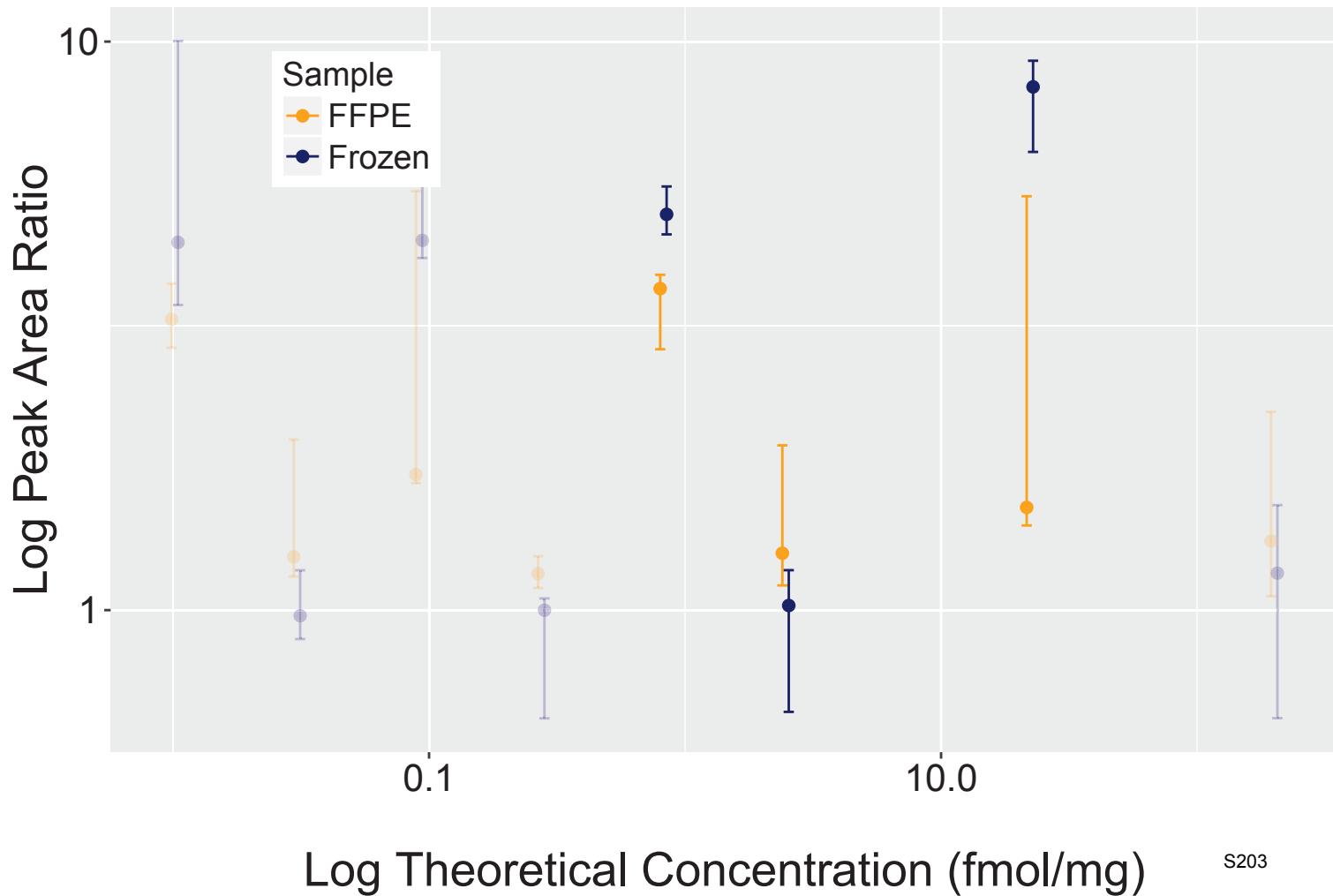
S201

Analyte: C1QBP.EVSFQSTGESEWK



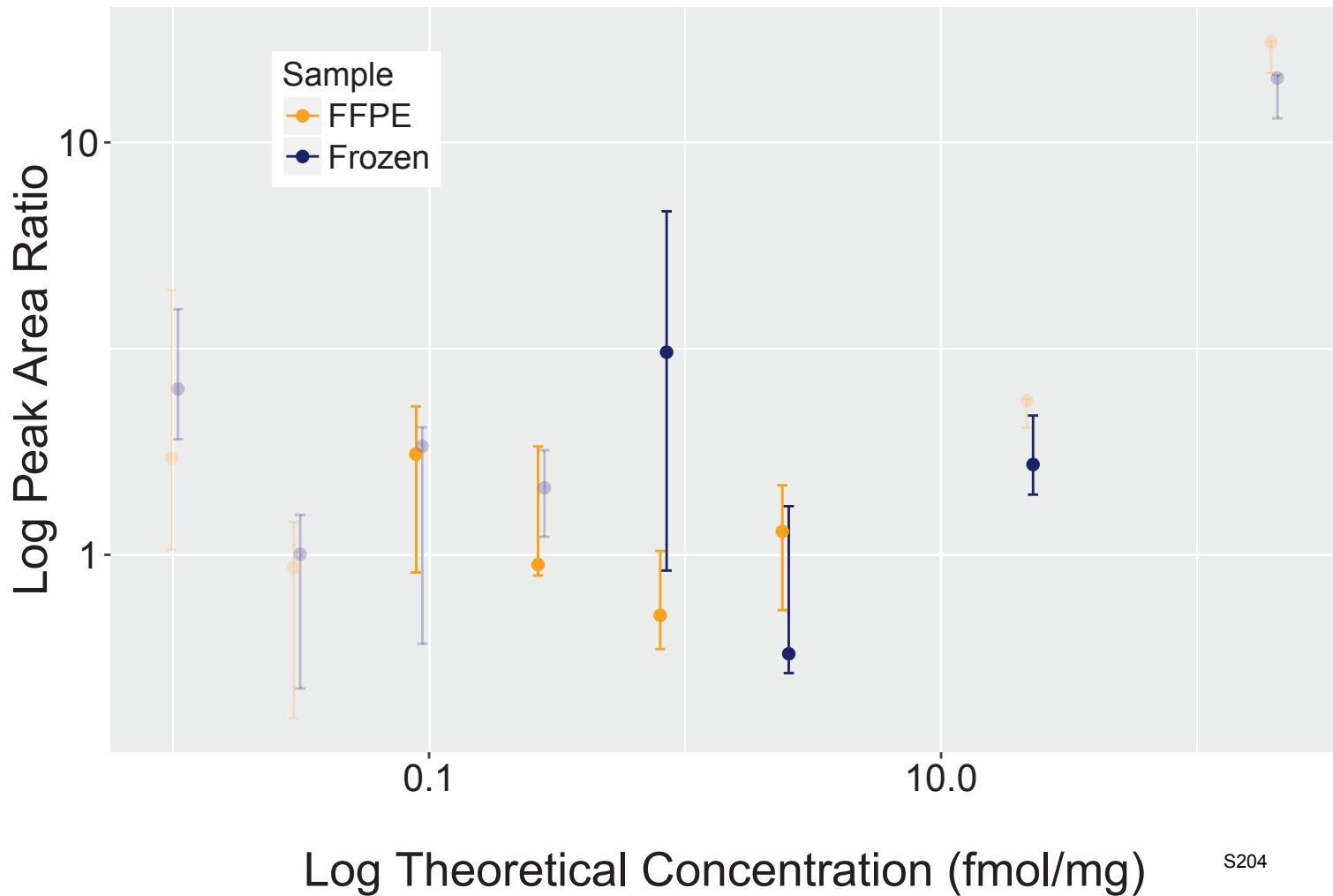
S202

Analyte: MSN.EVWFFGLQYQDTK



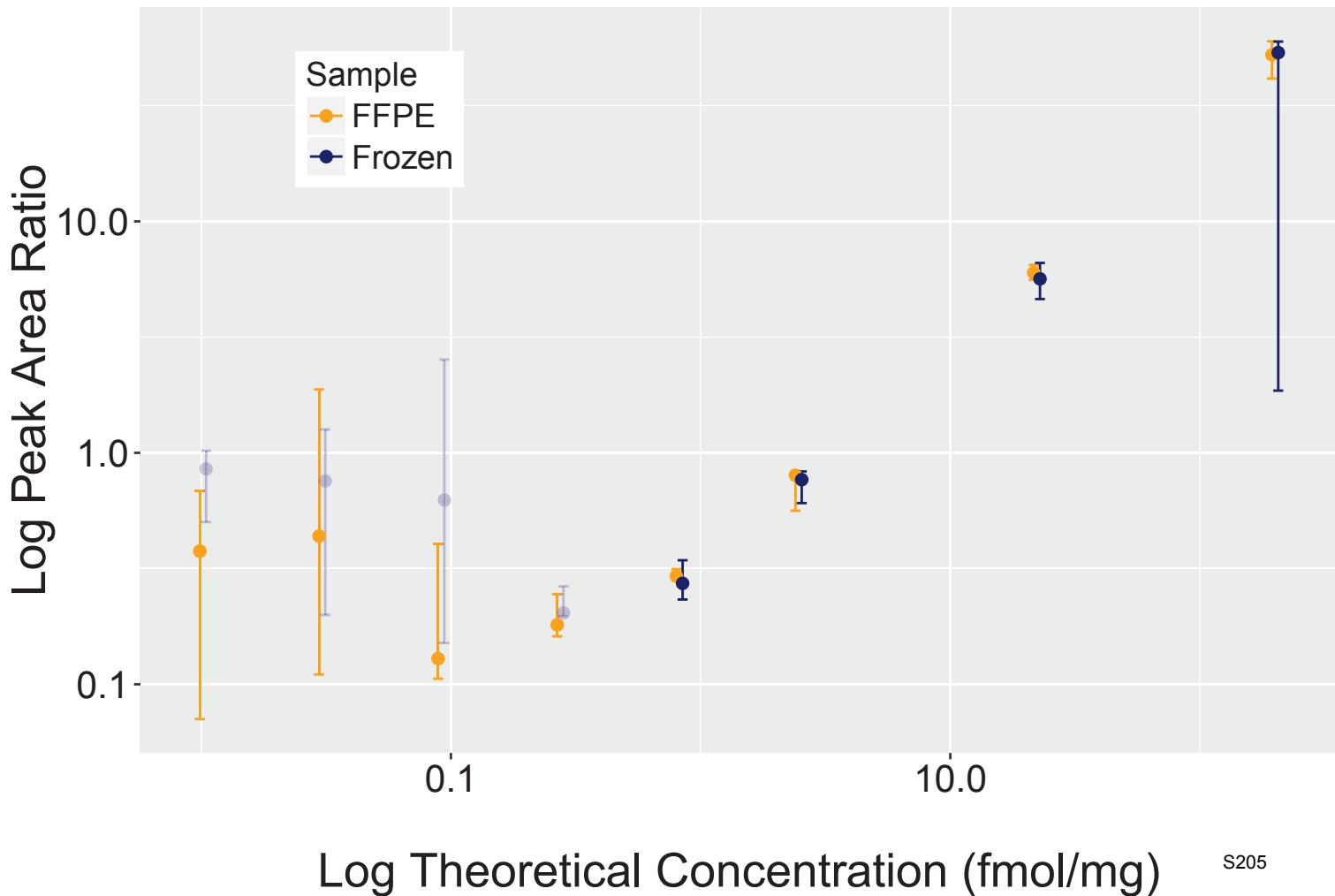
S203

Analyte: PSPC1.FAQPGTFFEFYASR

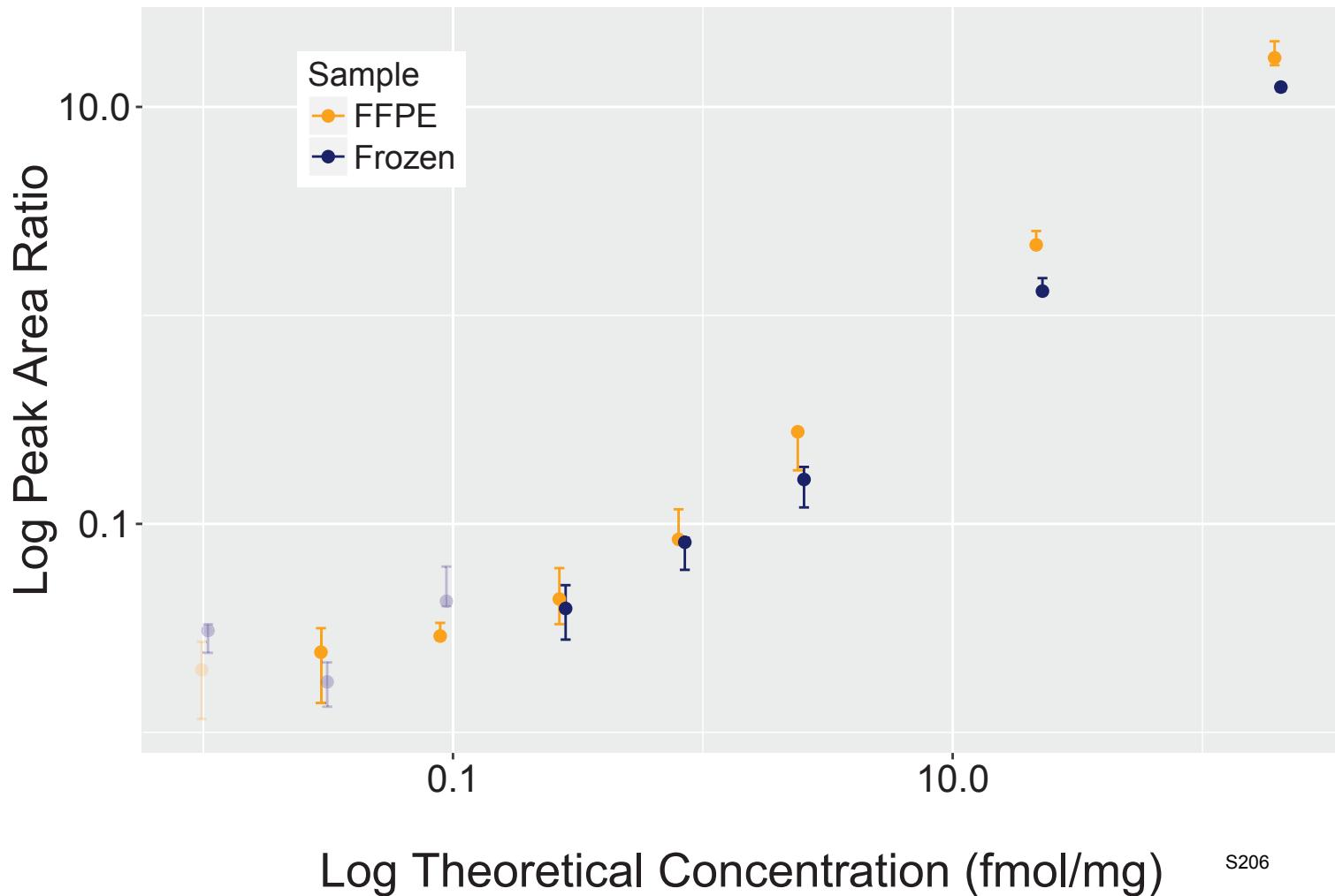


S204

Analyte: NDUFS1.FASEIAGVDDLGGTGR

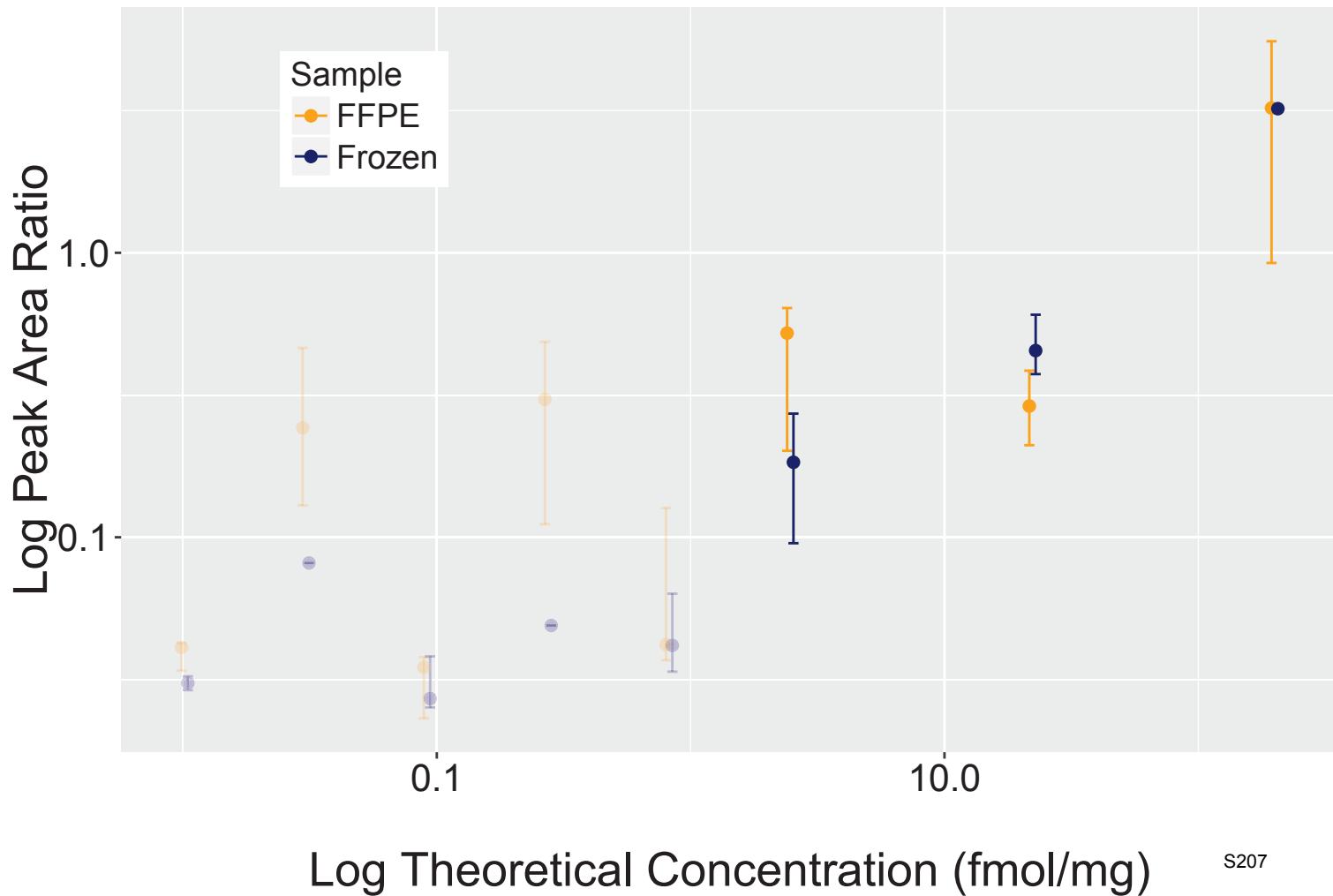


Analyte: FASN.FDASFFGVHPK



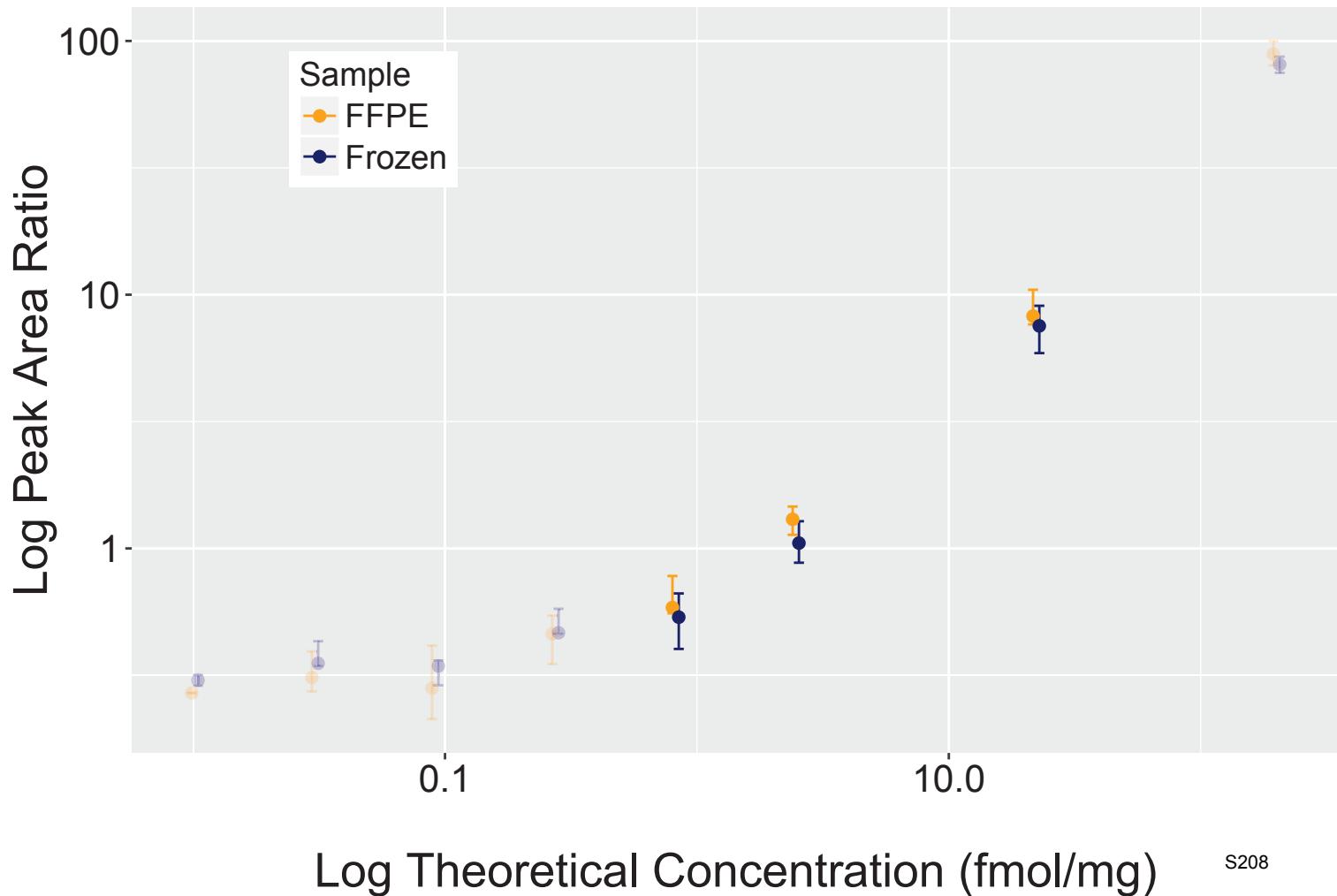
S206

Analyte: CD59.FEHC[+57]NFNDVTTR



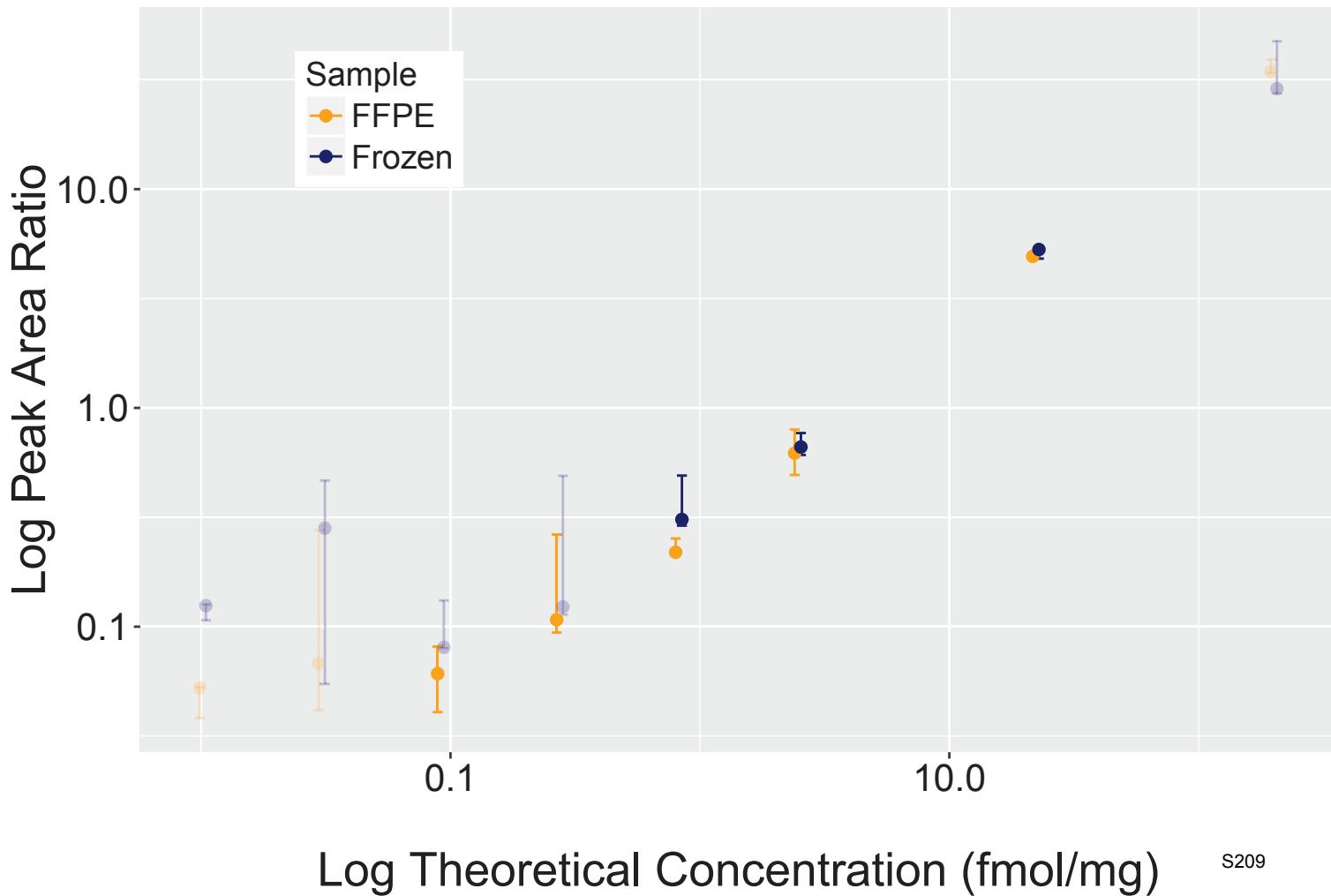
S207

Analyte: ASS1.FELSC[+57]YSLAPQIK



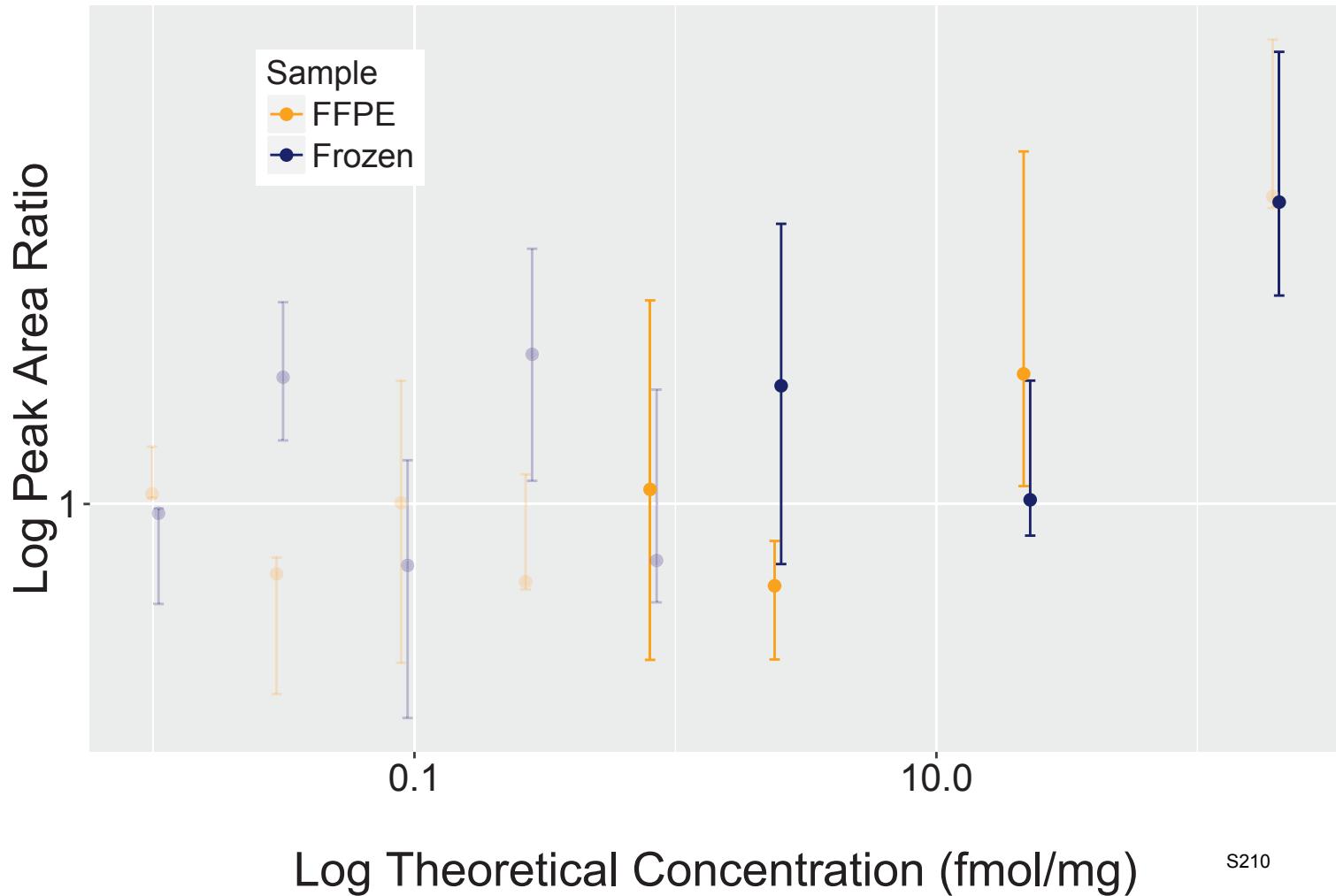
S²⁰⁸

Analyte: BSG.FFVSSSQGR



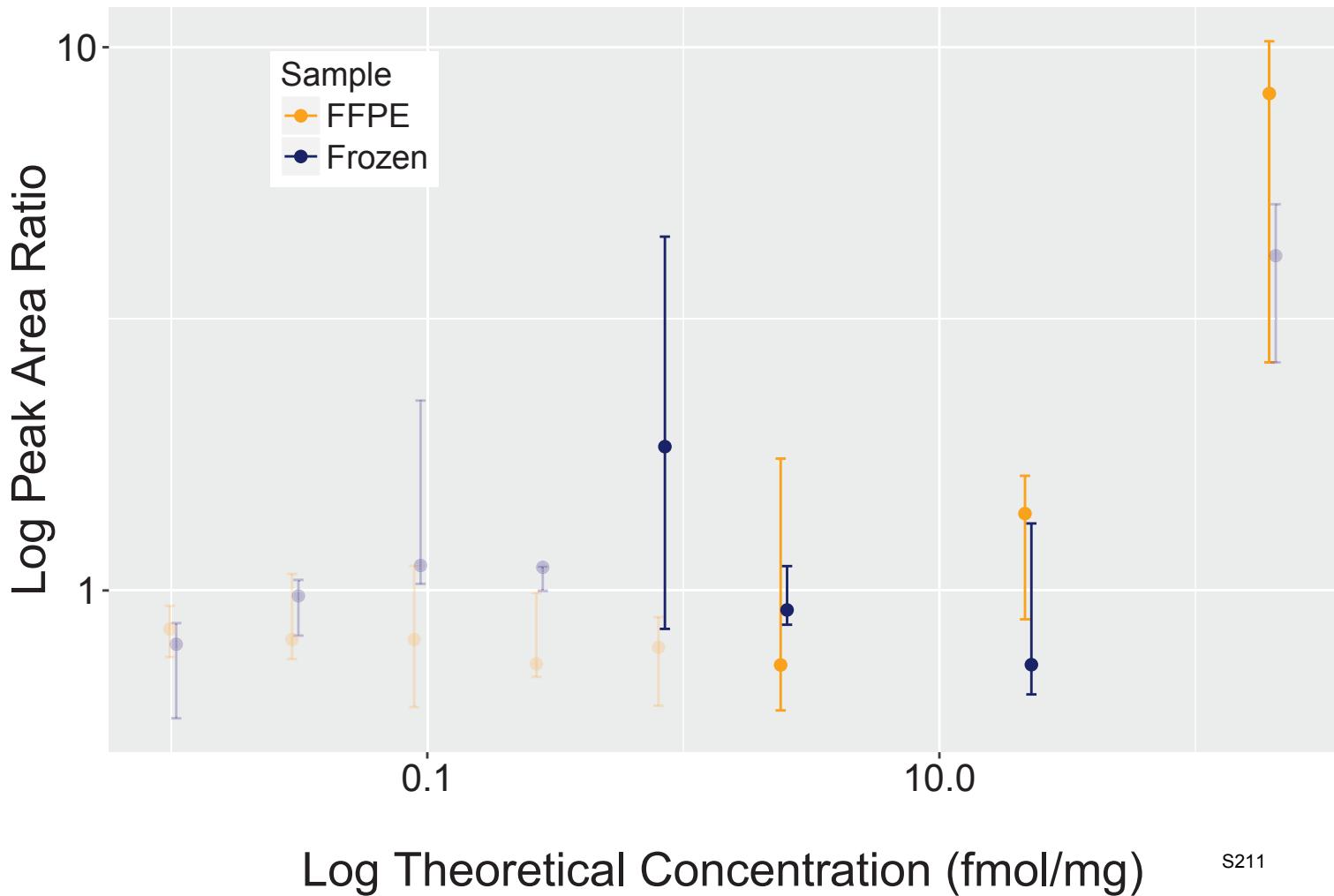
S209

Analyte: TXNRD1.FGEENIEVYHSYFWPLEWTIPSR

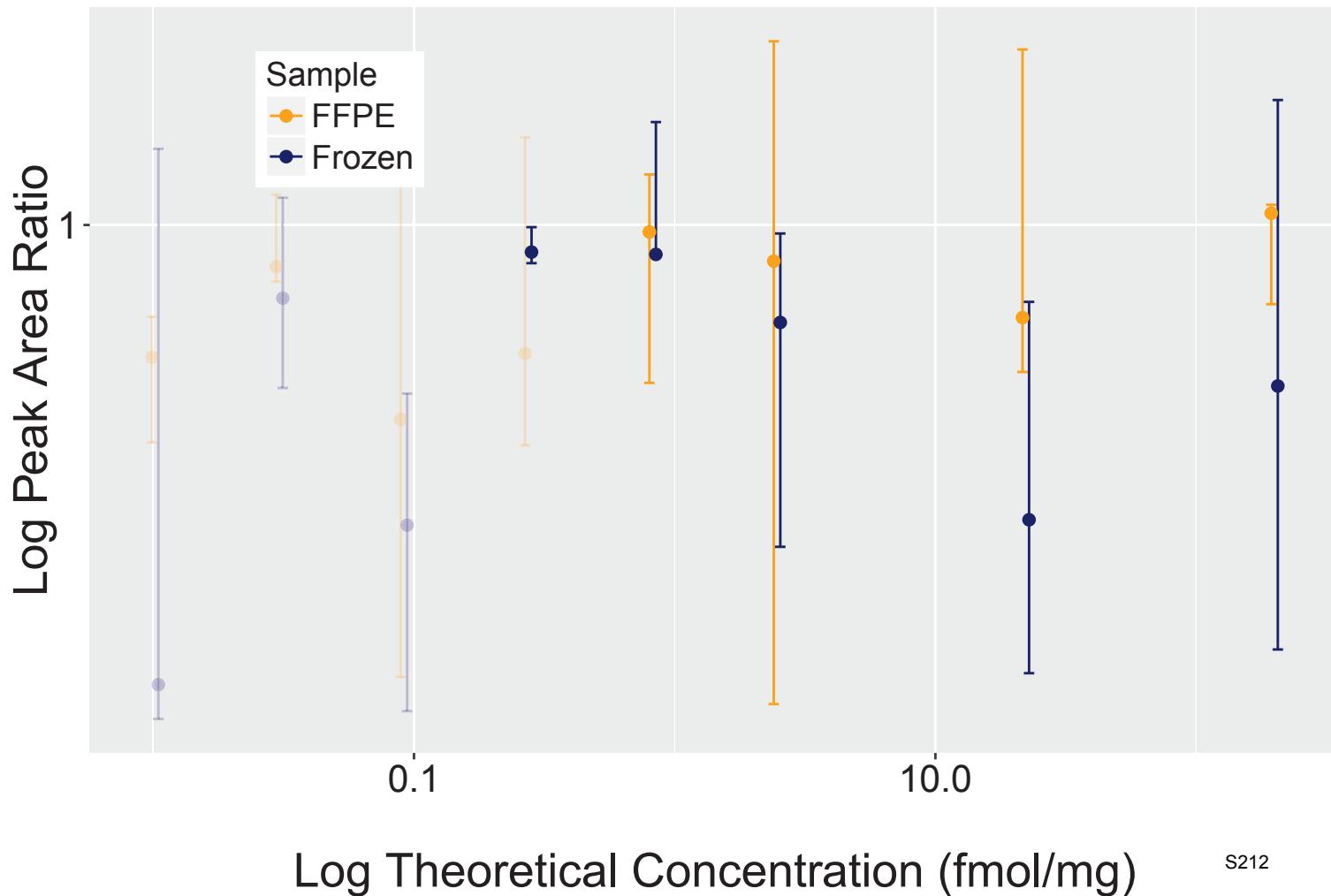


S210

Analyte: FKBP5.FGIEPNAELIYEVTLK

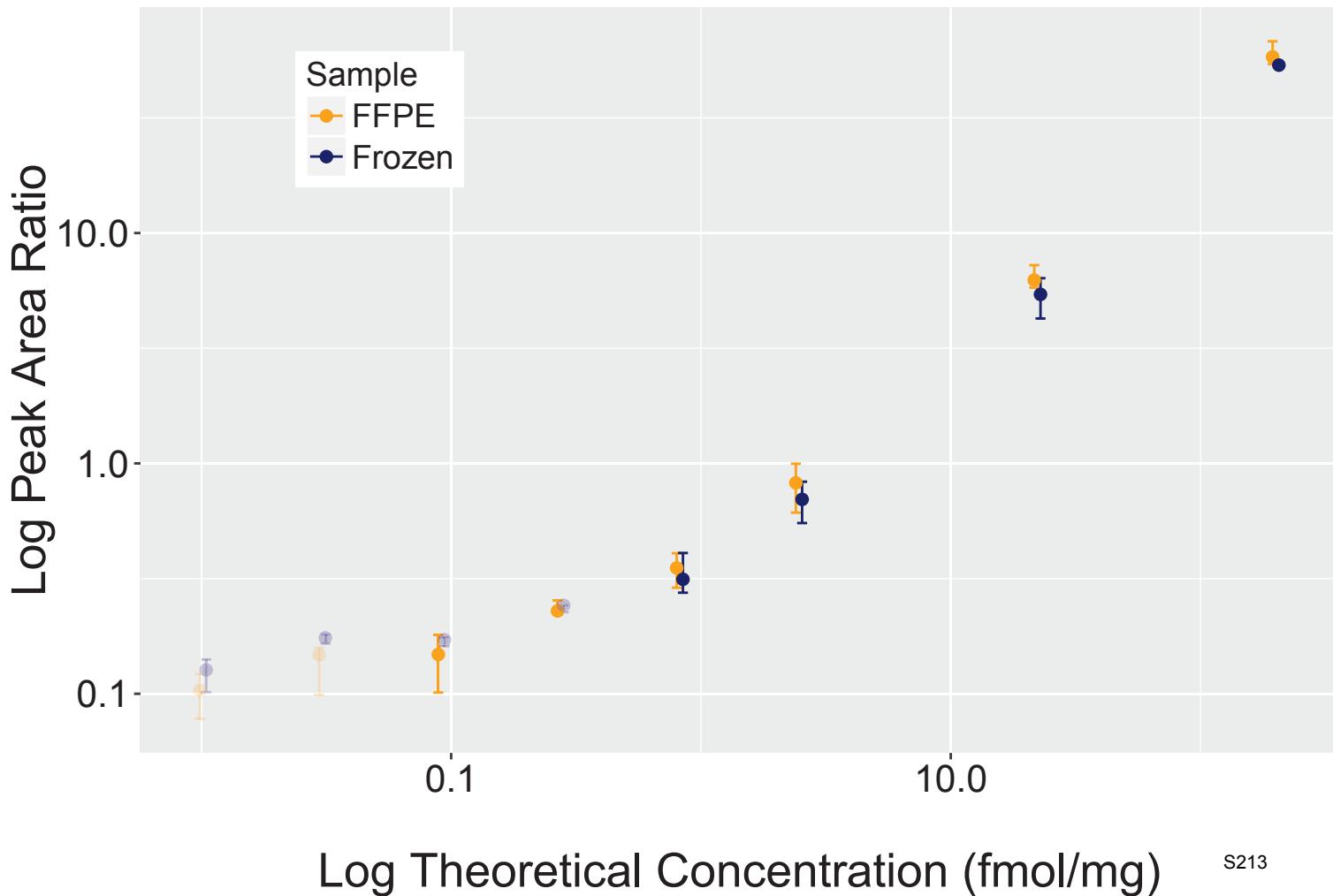


Analyte: DYNC1H1.FGNPLLQDVQSYDPVLPVNR

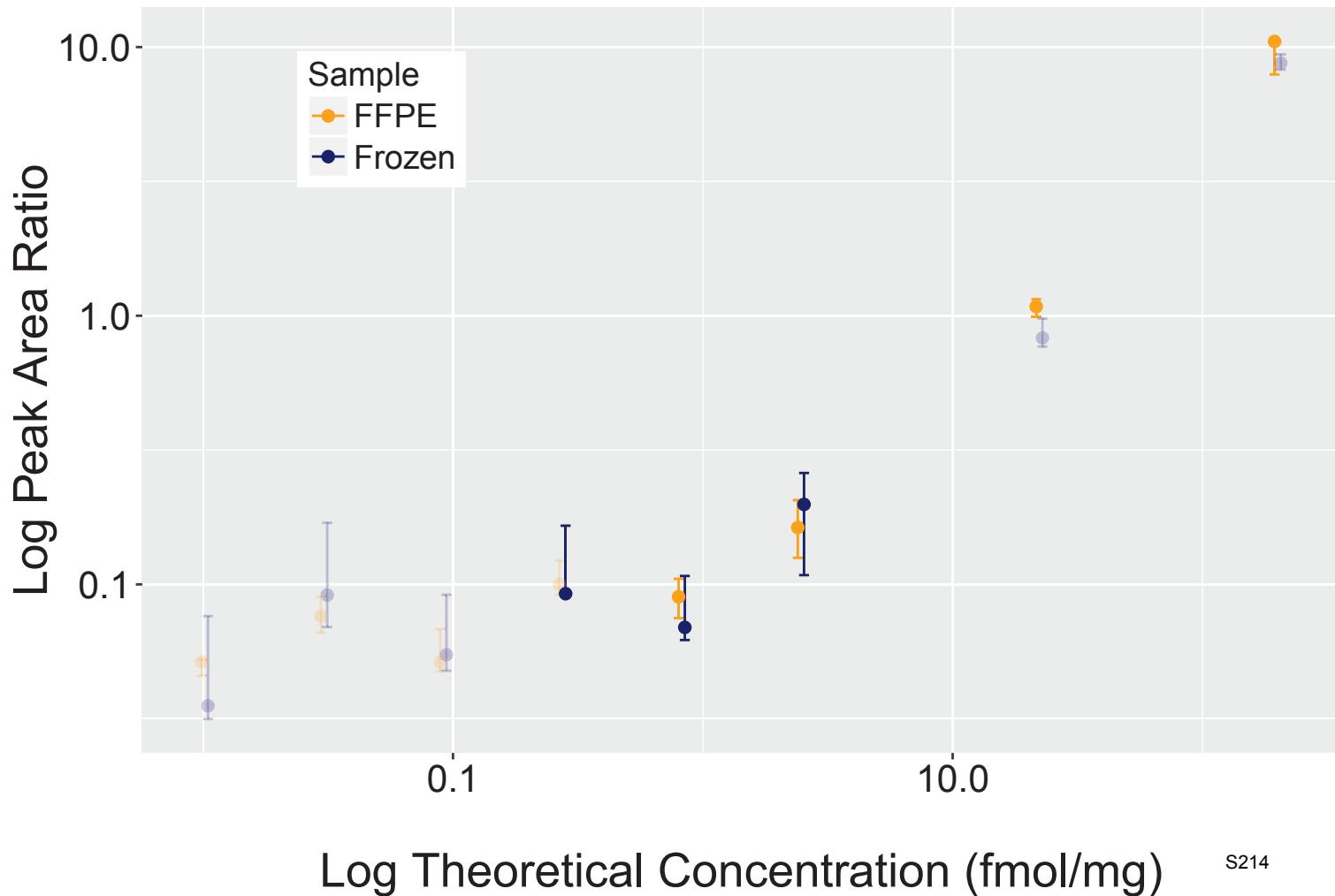


S₂₁₂

Analyte: ADSS.FIEDELQIPVK

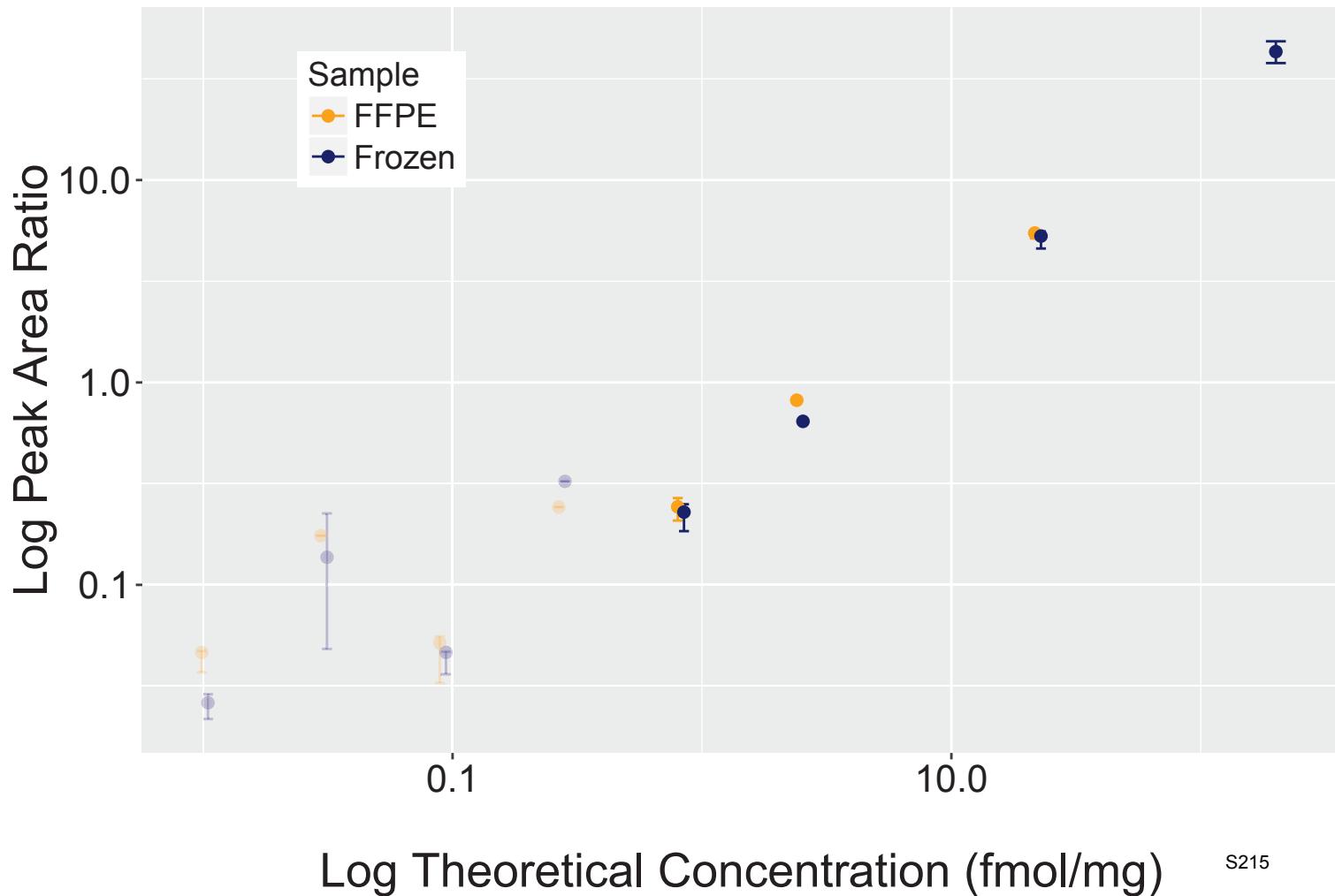


Analyte: IARS2.FLINLEGGDIR



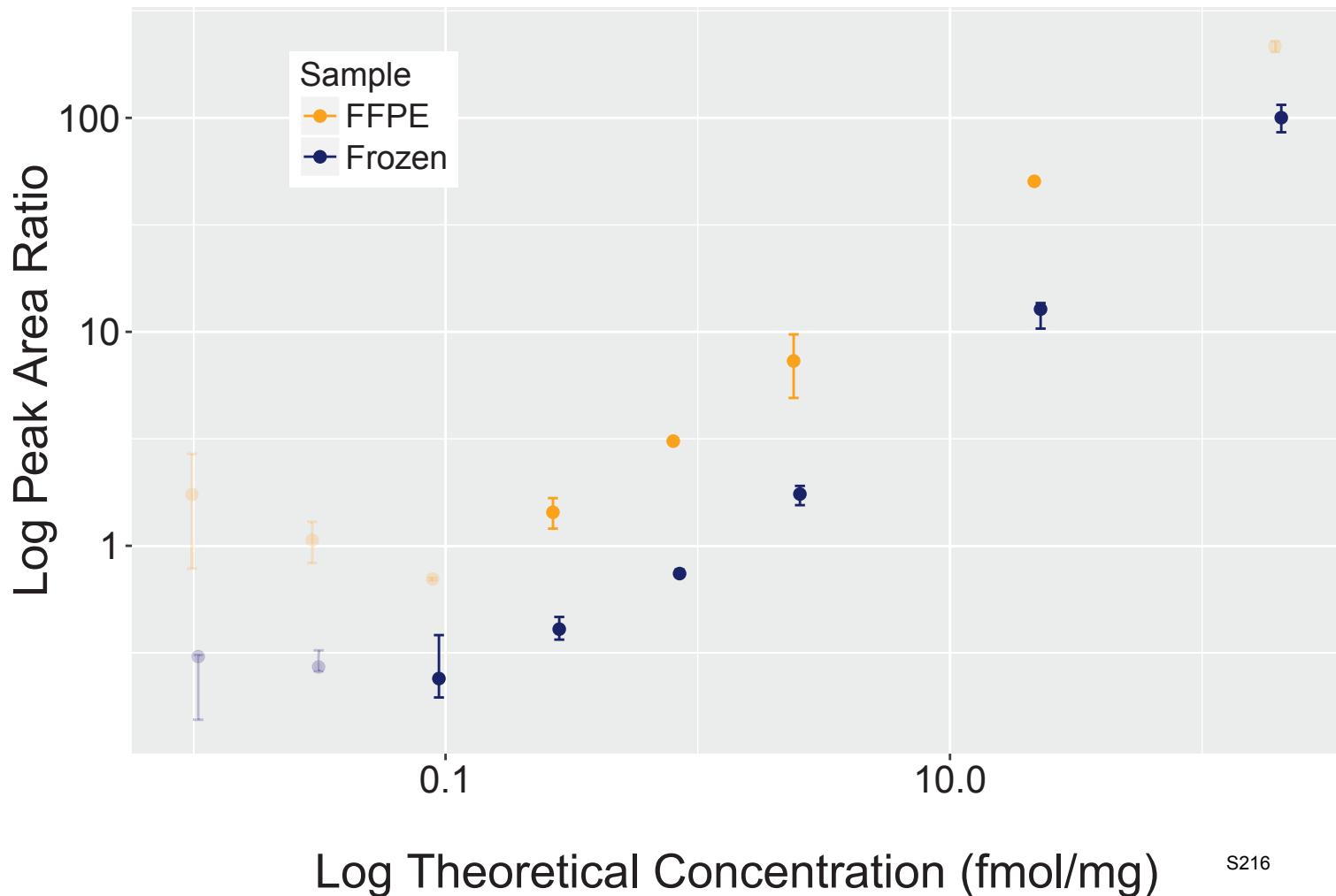
S214

Analyte: MCCC2.FLYIWPNAR



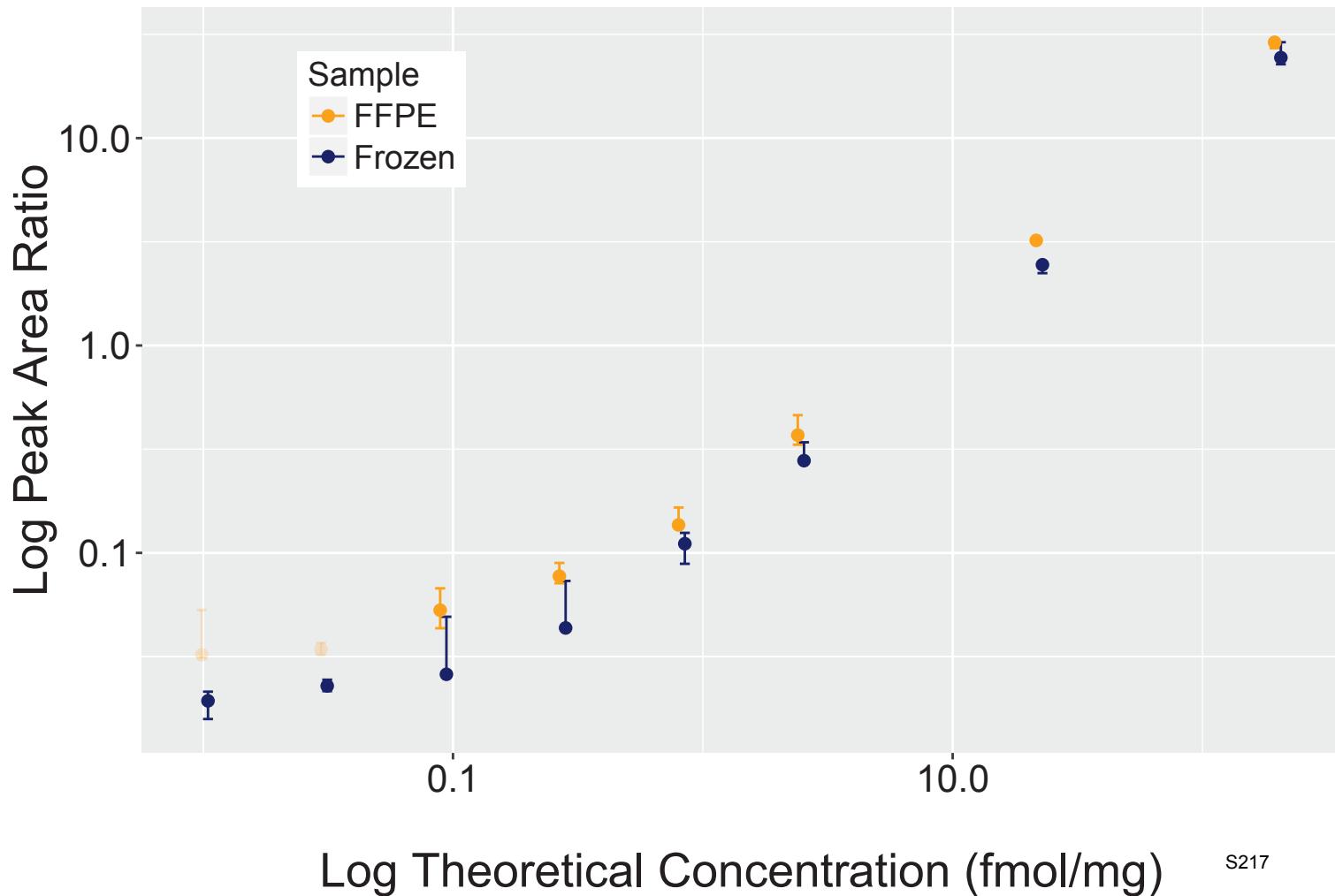
S215

Analyte: PGM1.FNISNGGPAPEAITDK

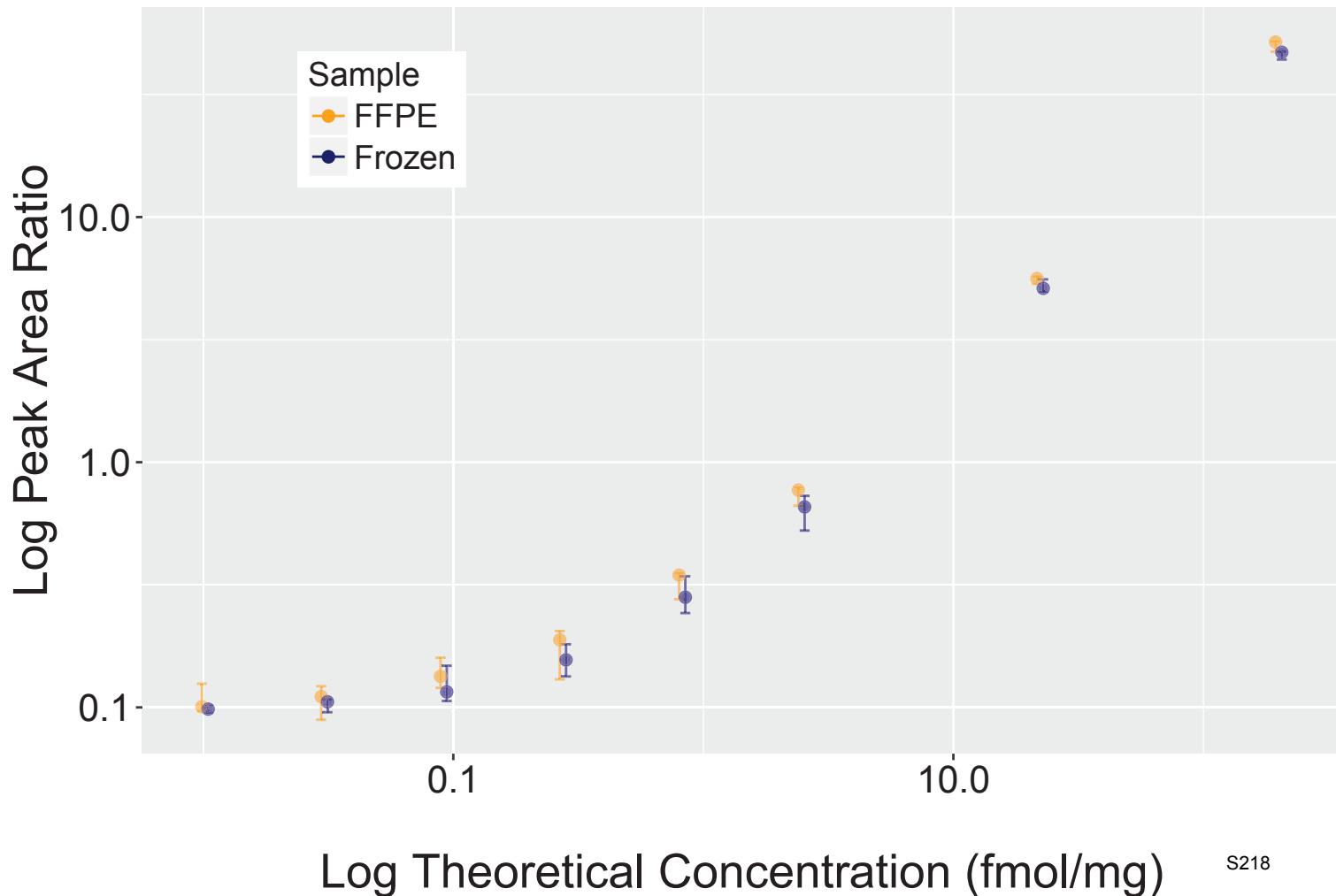


S²¹⁶

Analyte: CAT.FNTANDDNVTQVR

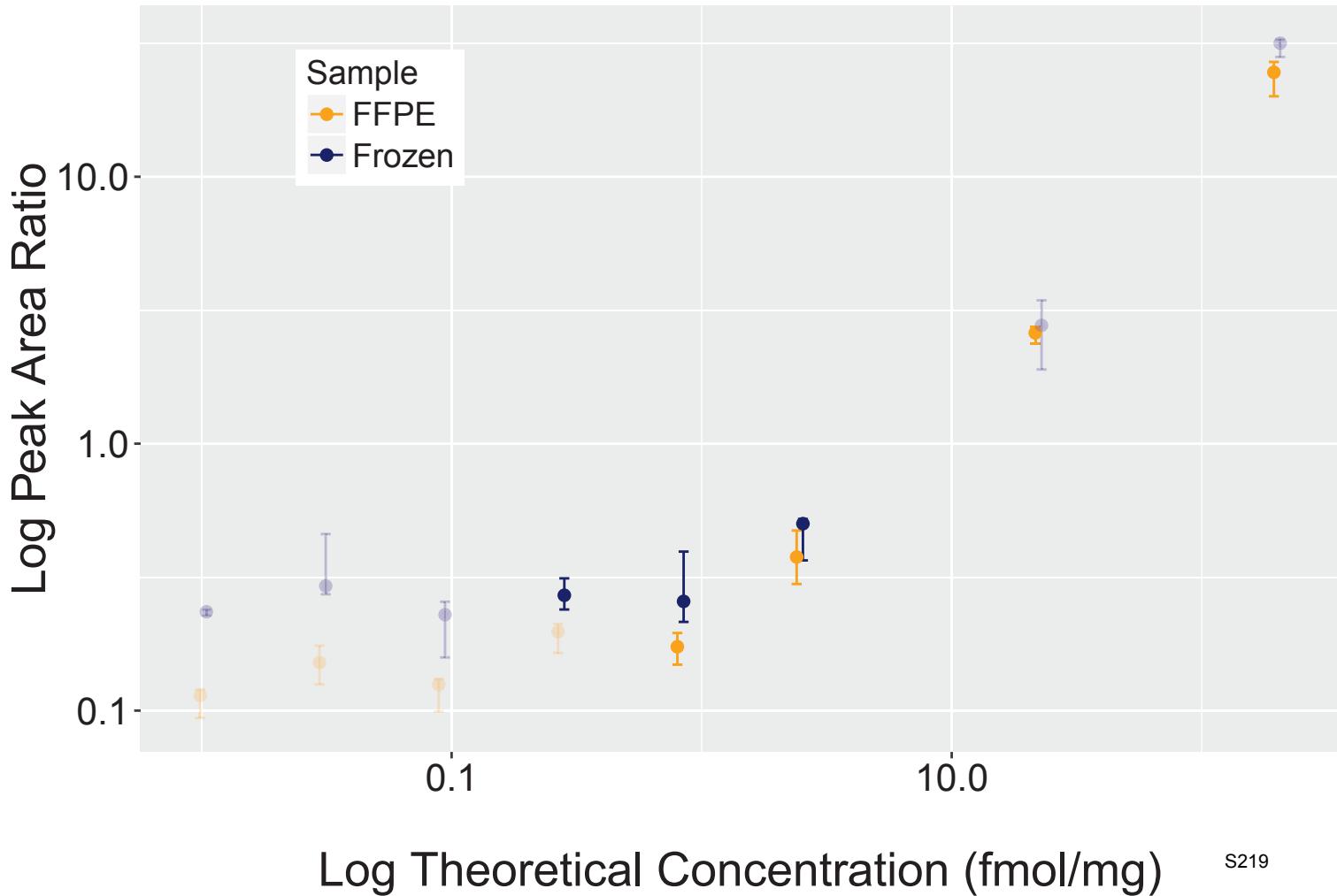


Analyte: LANCL2.FPAFELDSSK



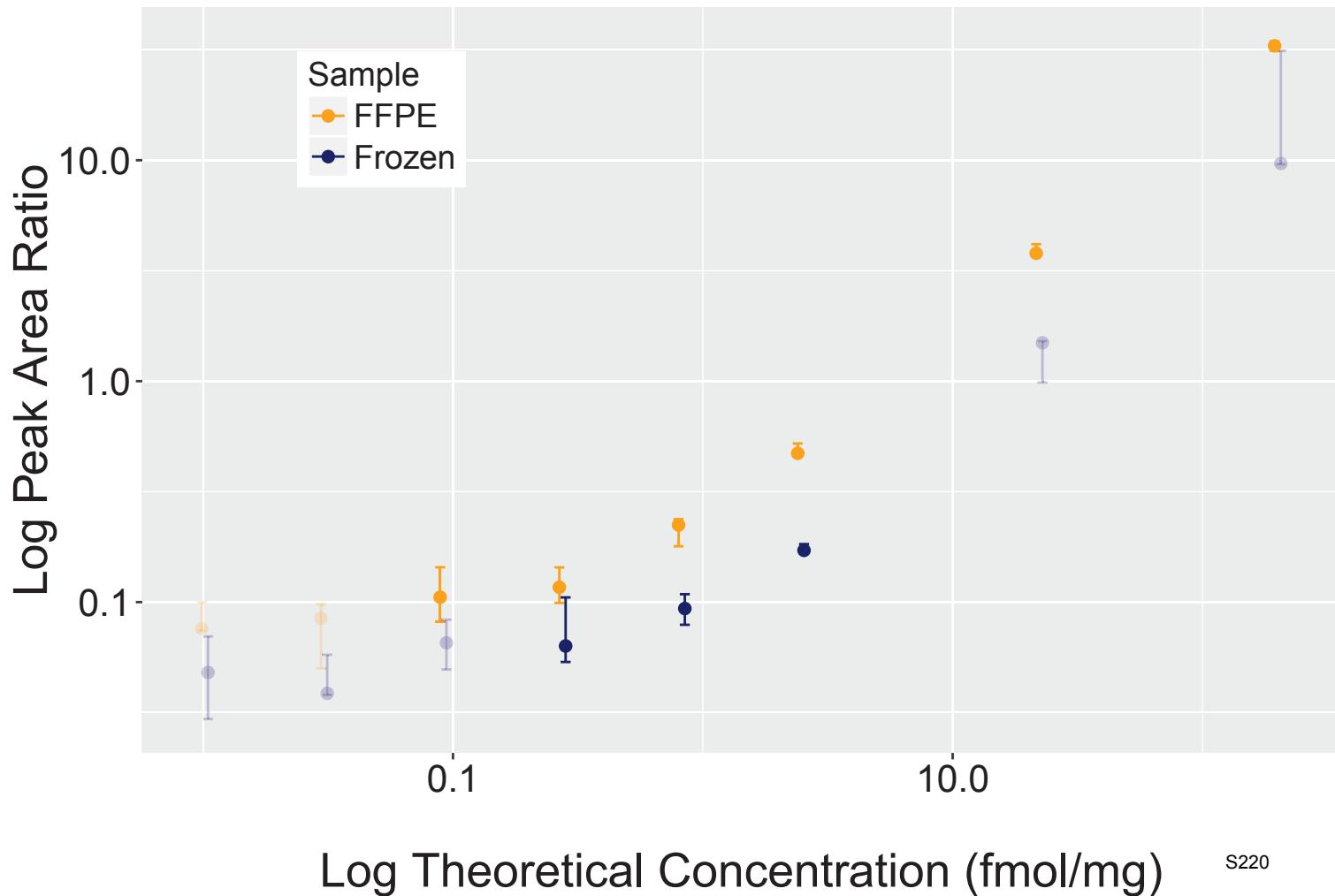
S²¹⁸

Analyte: FAM129B.FQELIFEDFAR



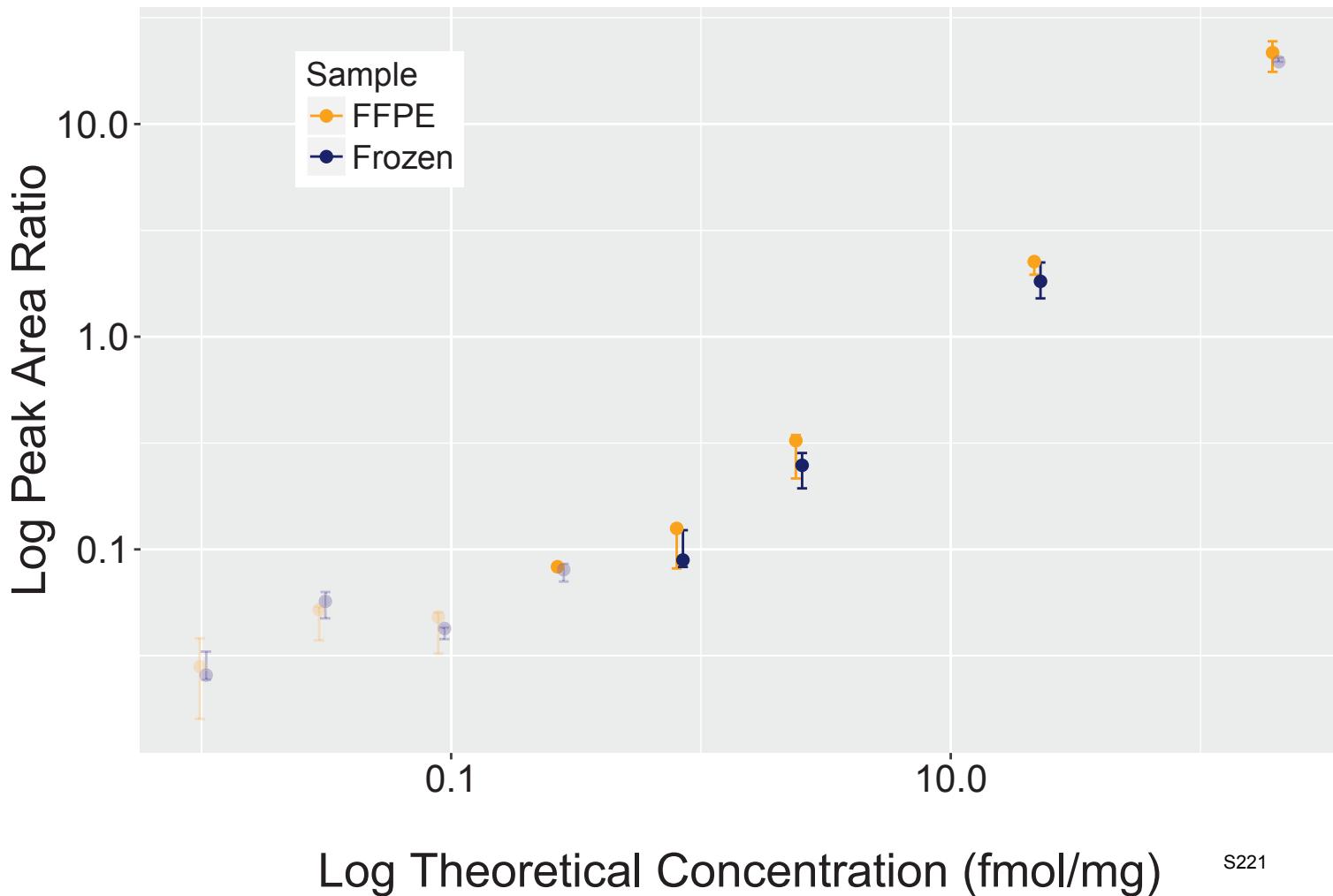
S219

Analyte: PCNA.FSASGELGNGNIK

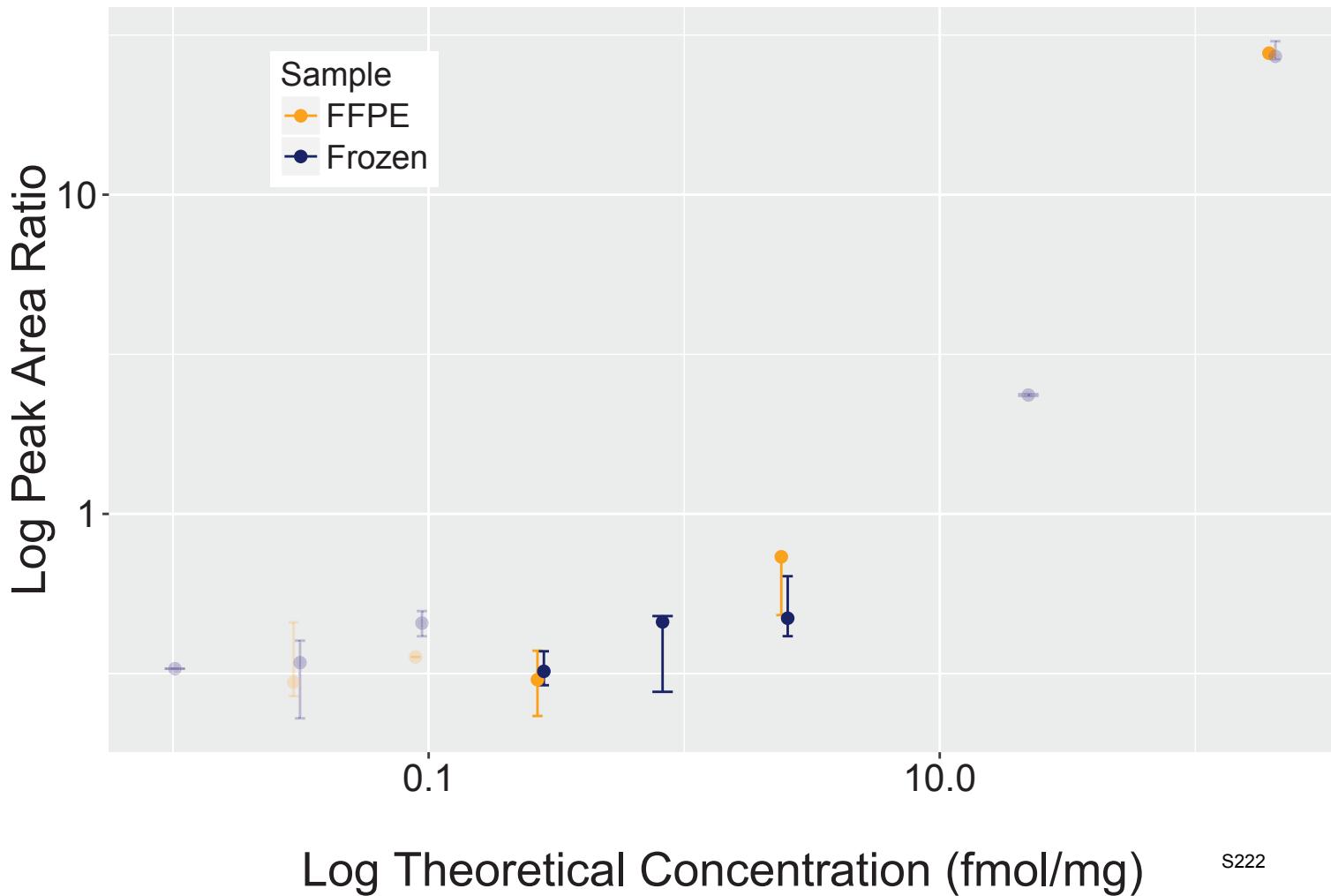


S220

Analyte: LCP1.FSLVGIGGQDLNEGR

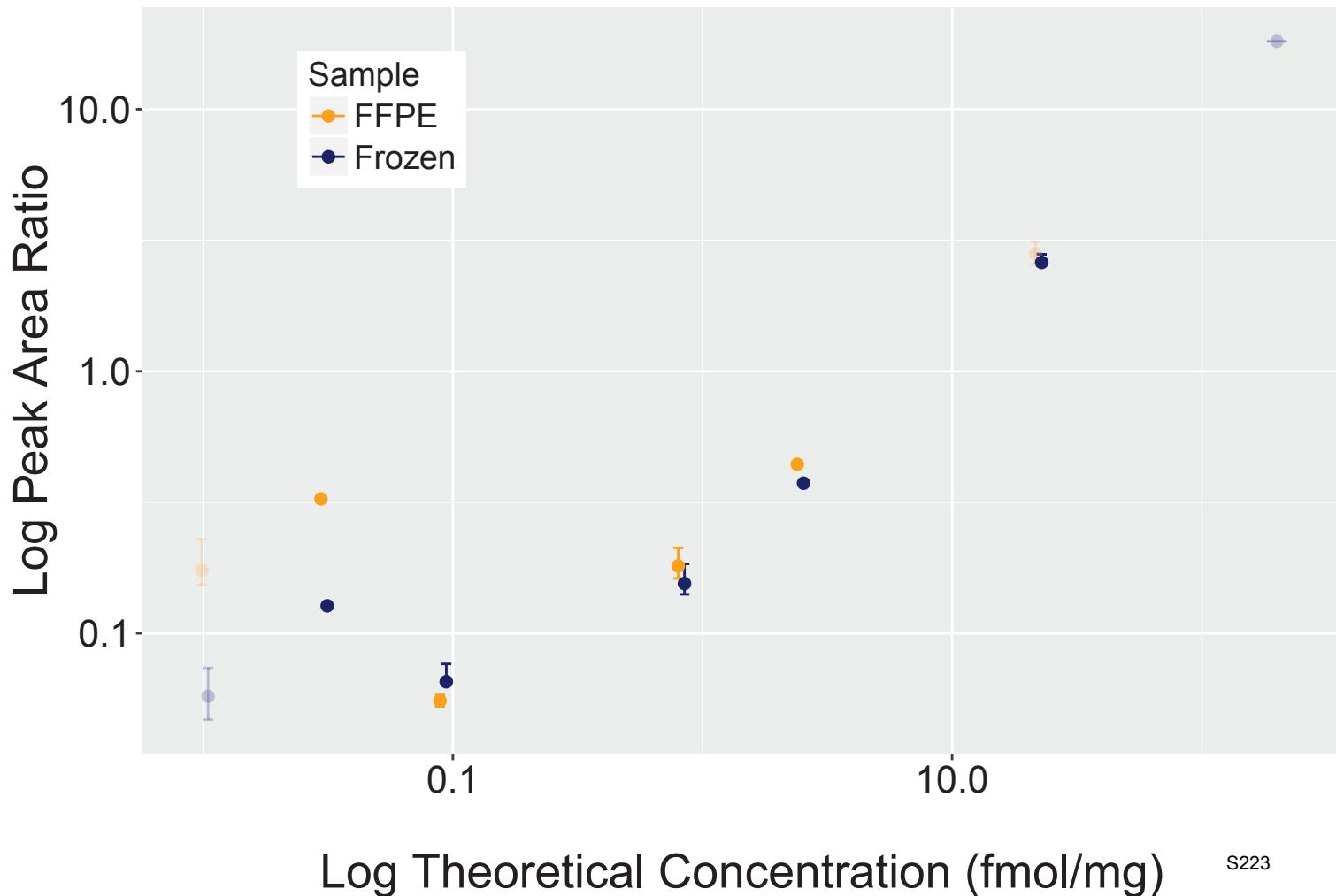


Analyte: GLS.FSPDLWGVSVC[+57]TVDGQR



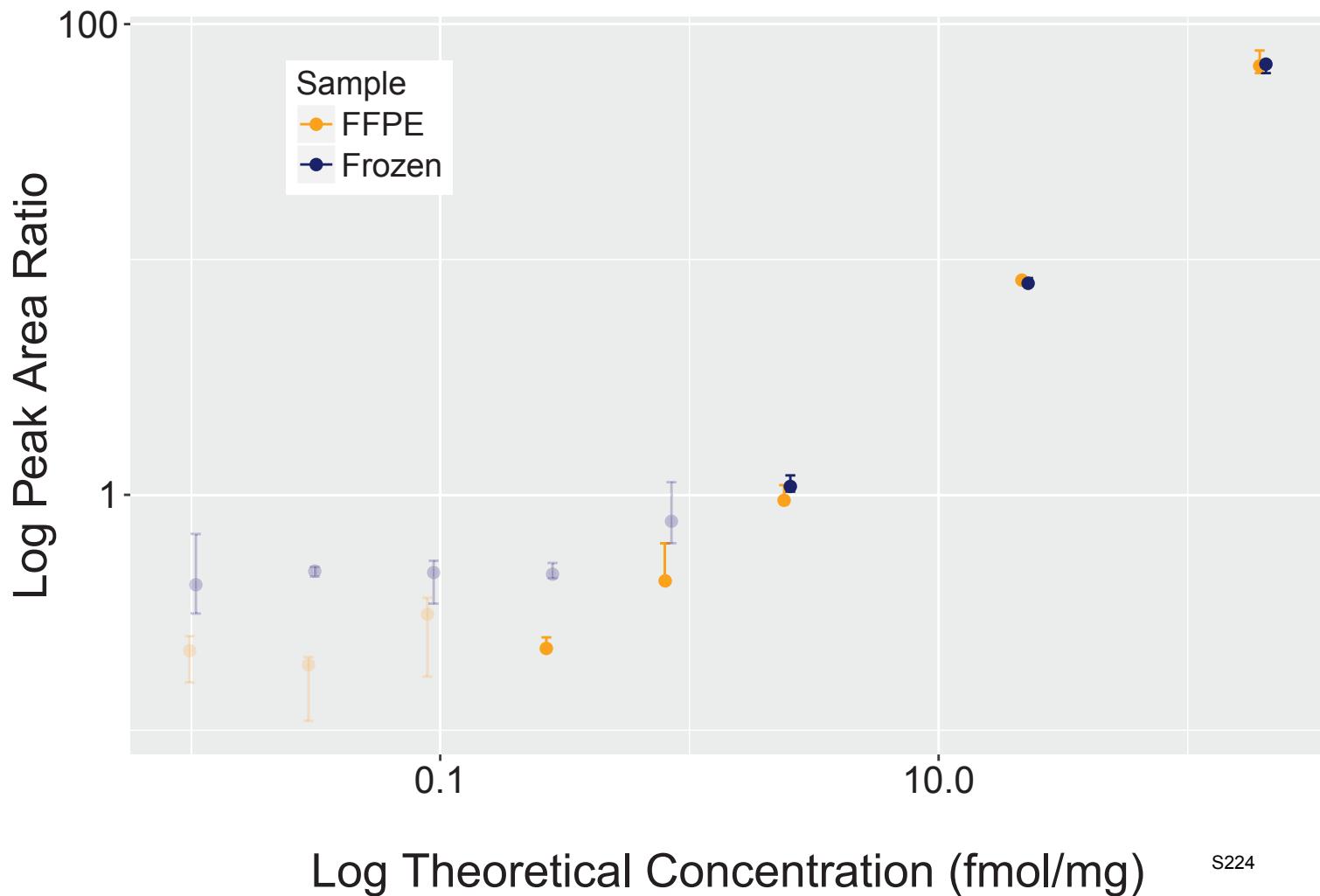
S222

Analyte: EPHX1.FSTWTNTEFR

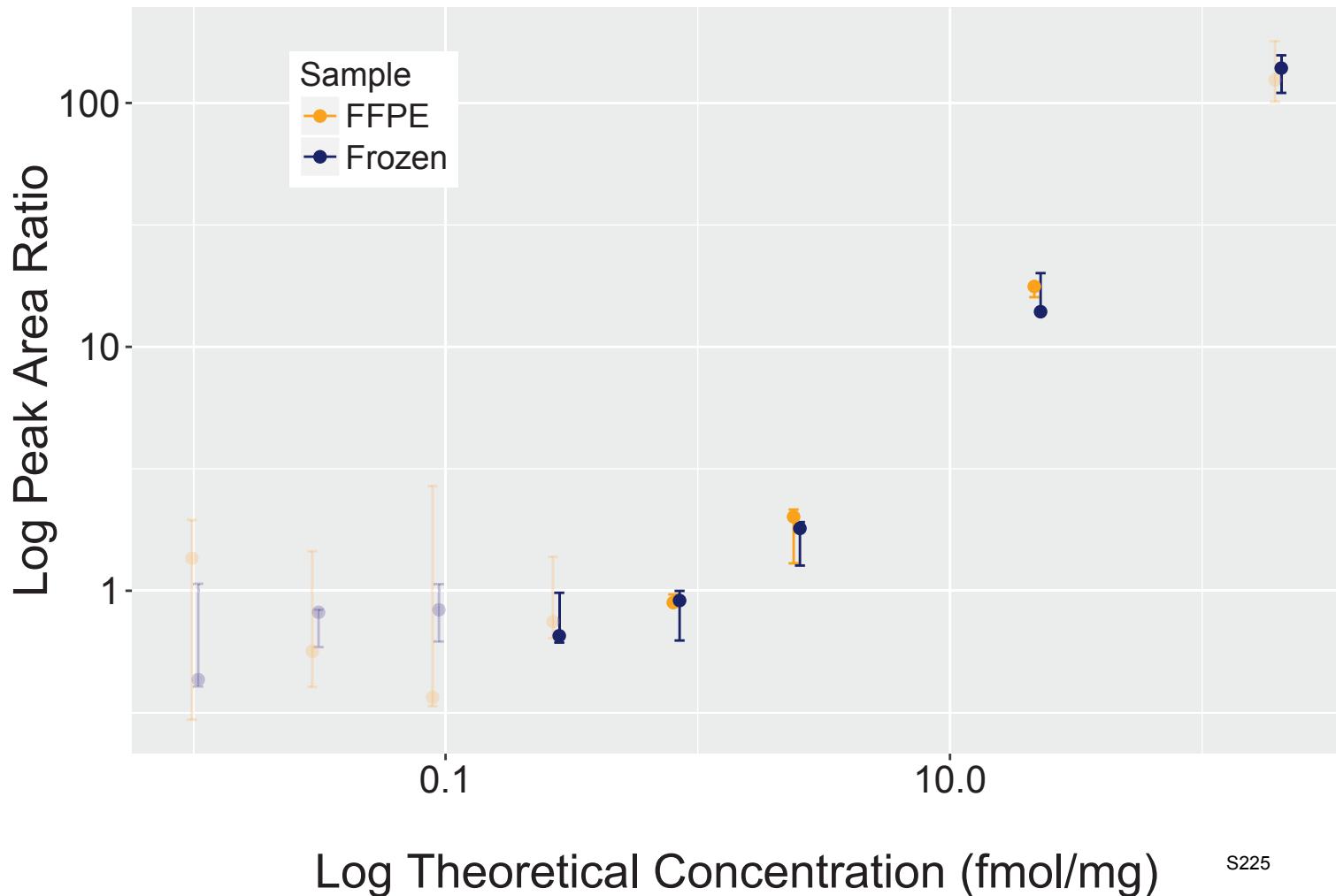


S223

Analyte: ITGA6.FSYLPIQK

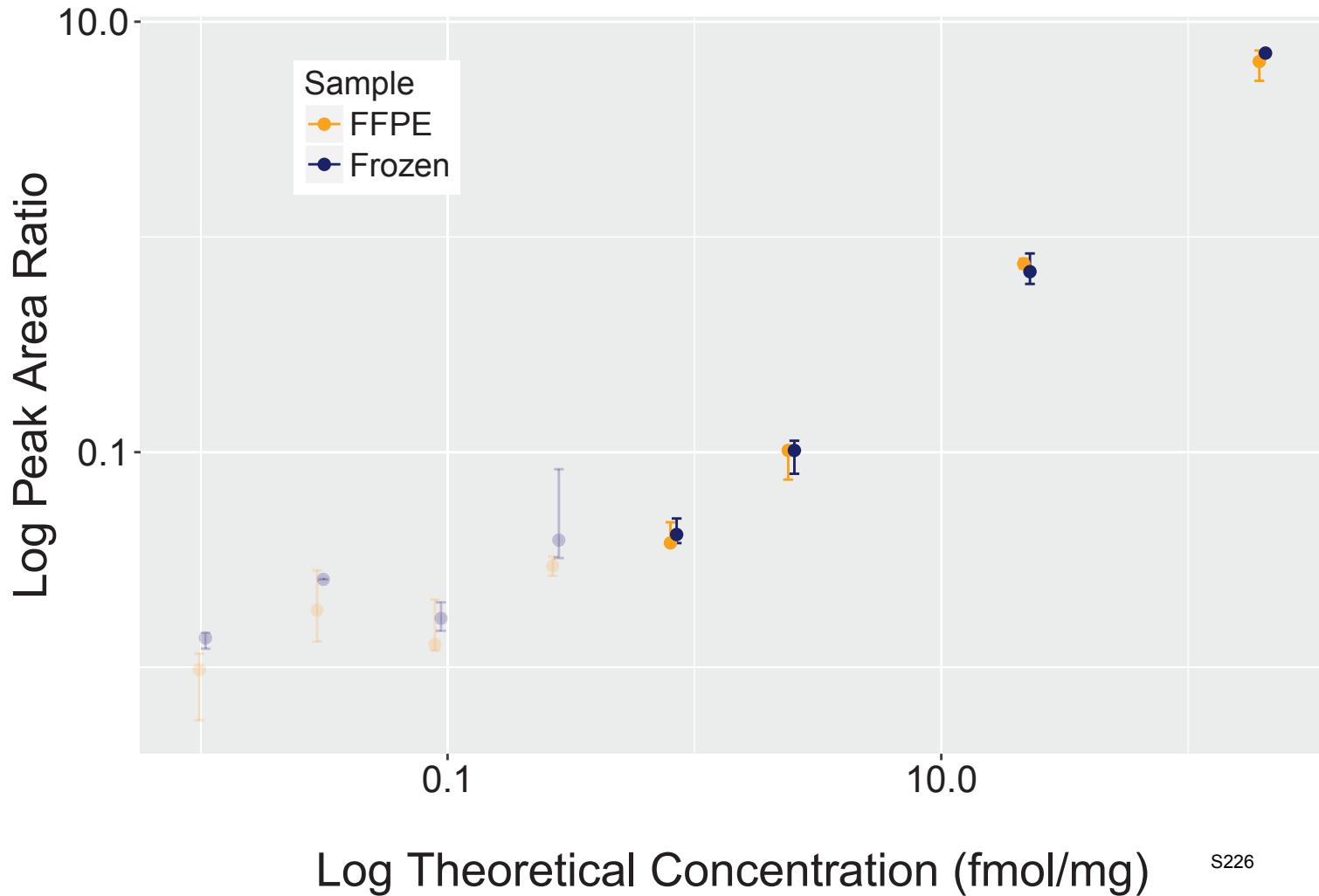


Analyte: GRB7.FTDLLQLVEFHQLNR



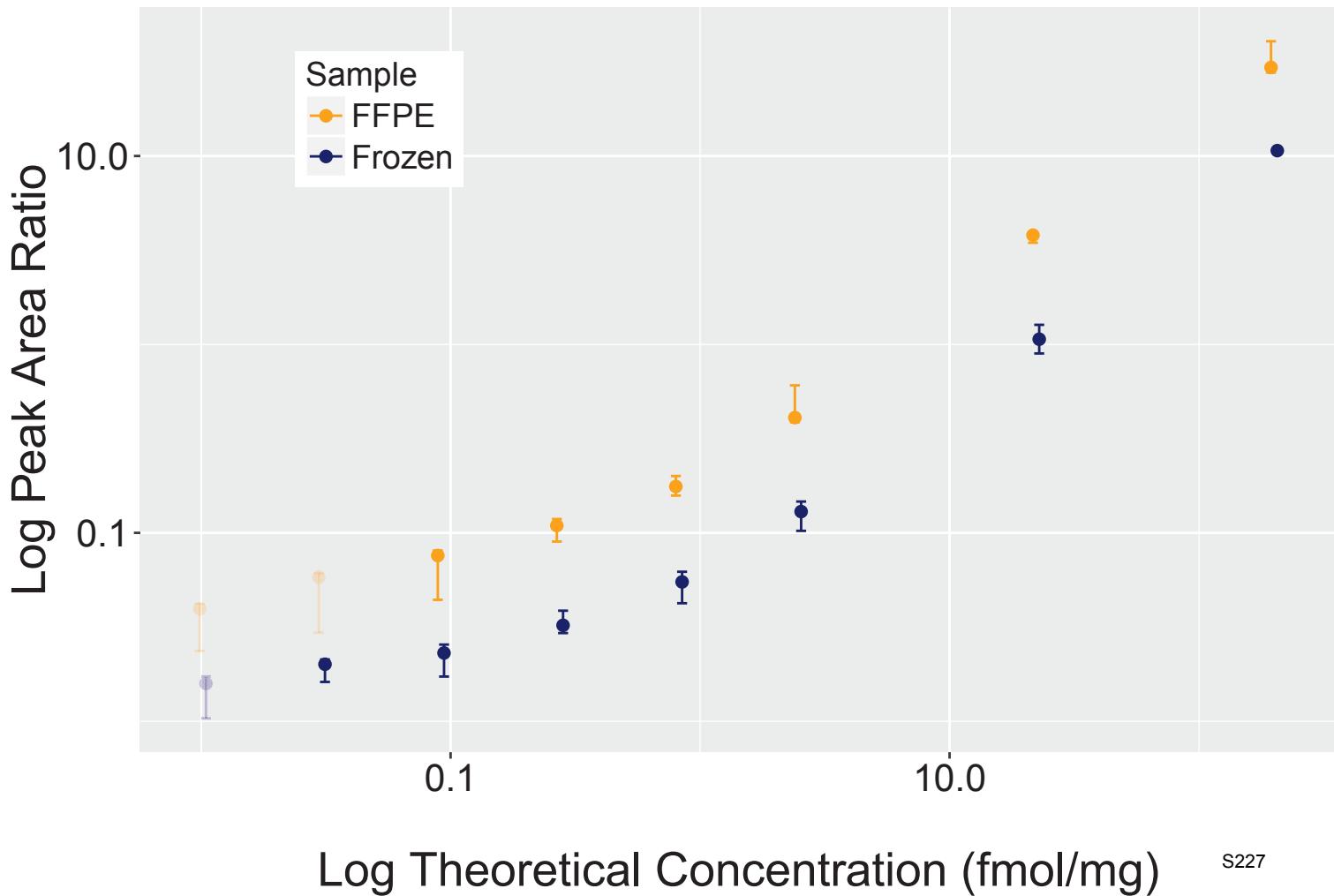
S225

Analyte: ATP5B.FTQAGSEVSALLGR



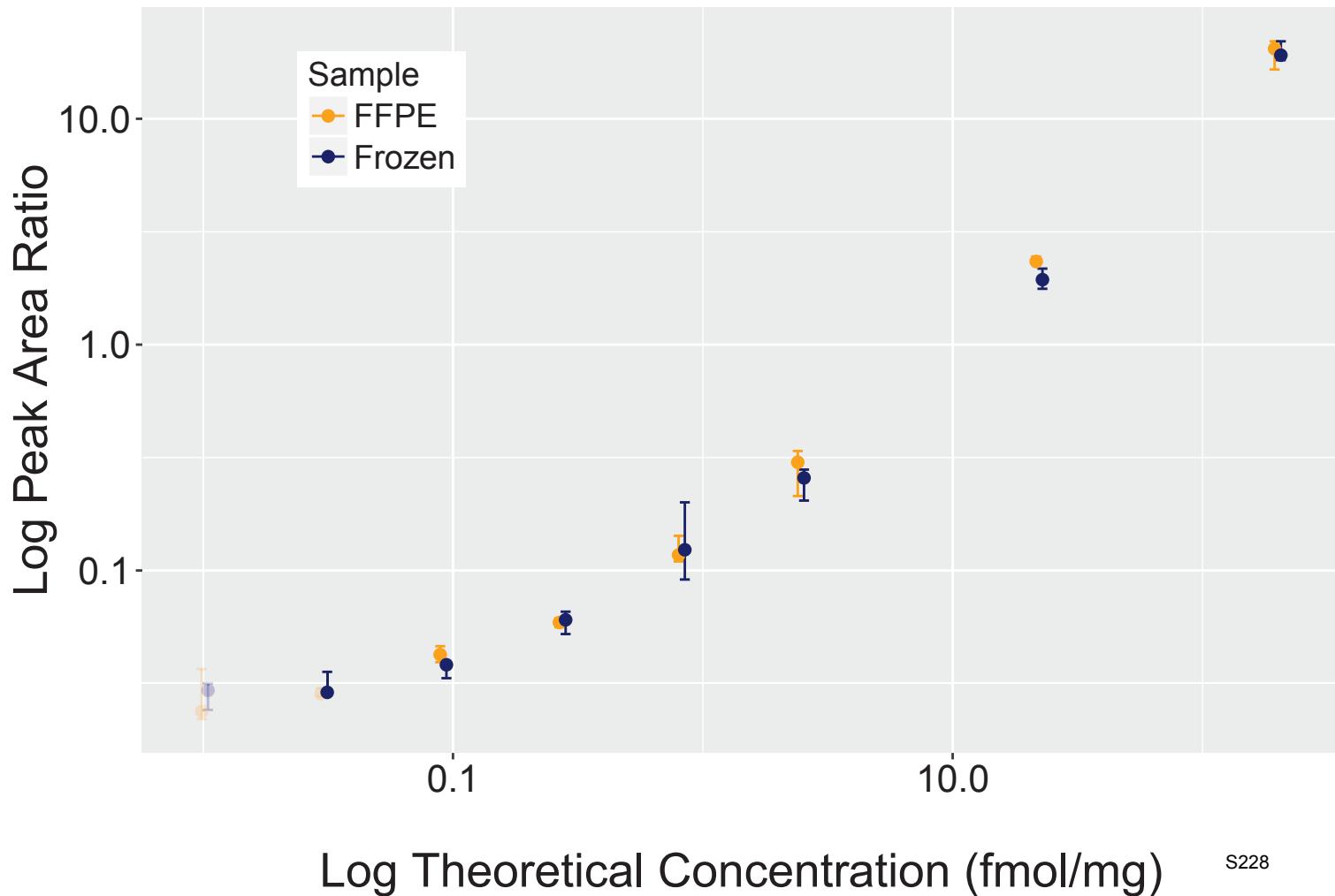
S²²⁶

Analyte: MDH1.FVEGLPINDFSR



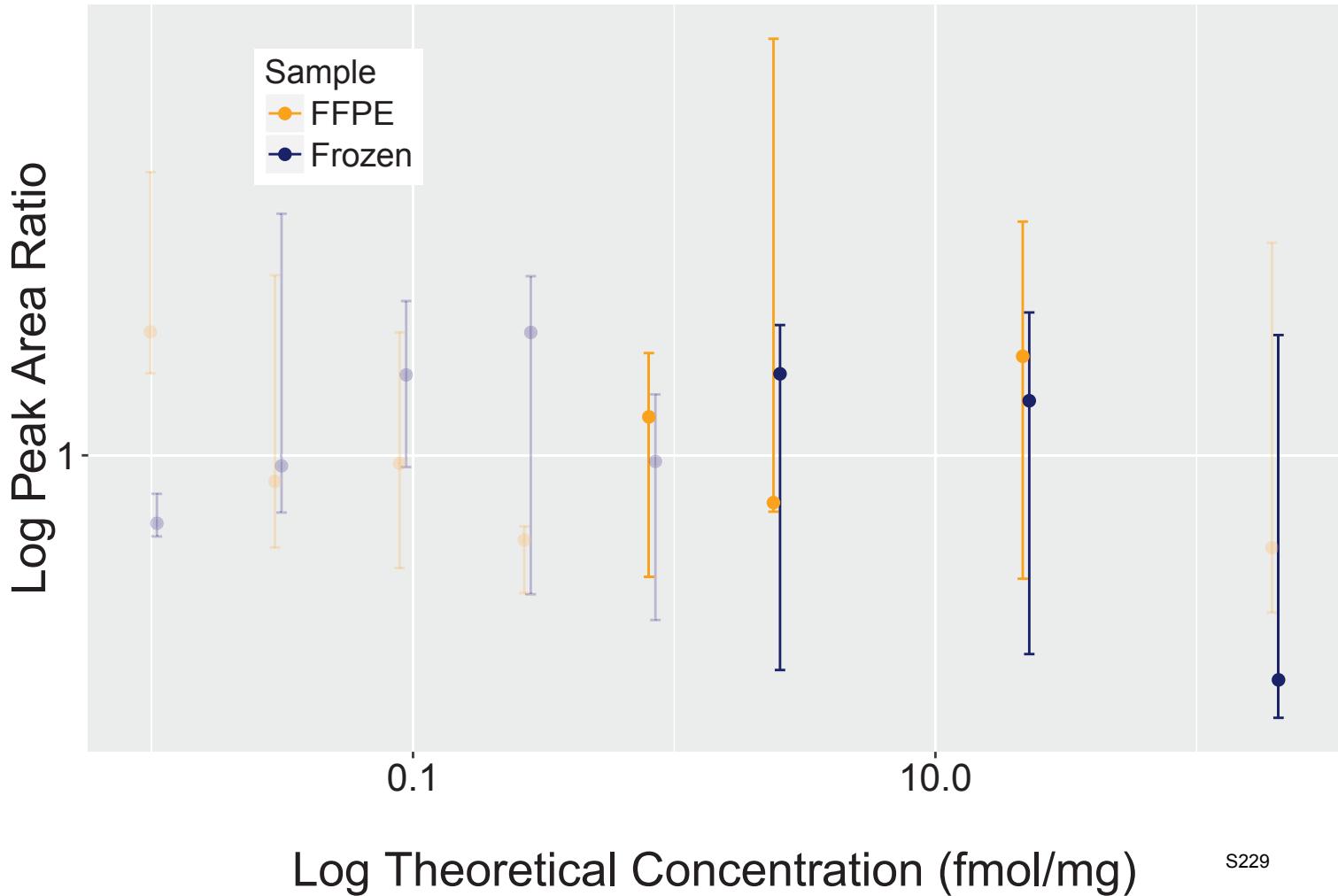
S227

Analyte: GOT2.FVTVQTISGTGALR



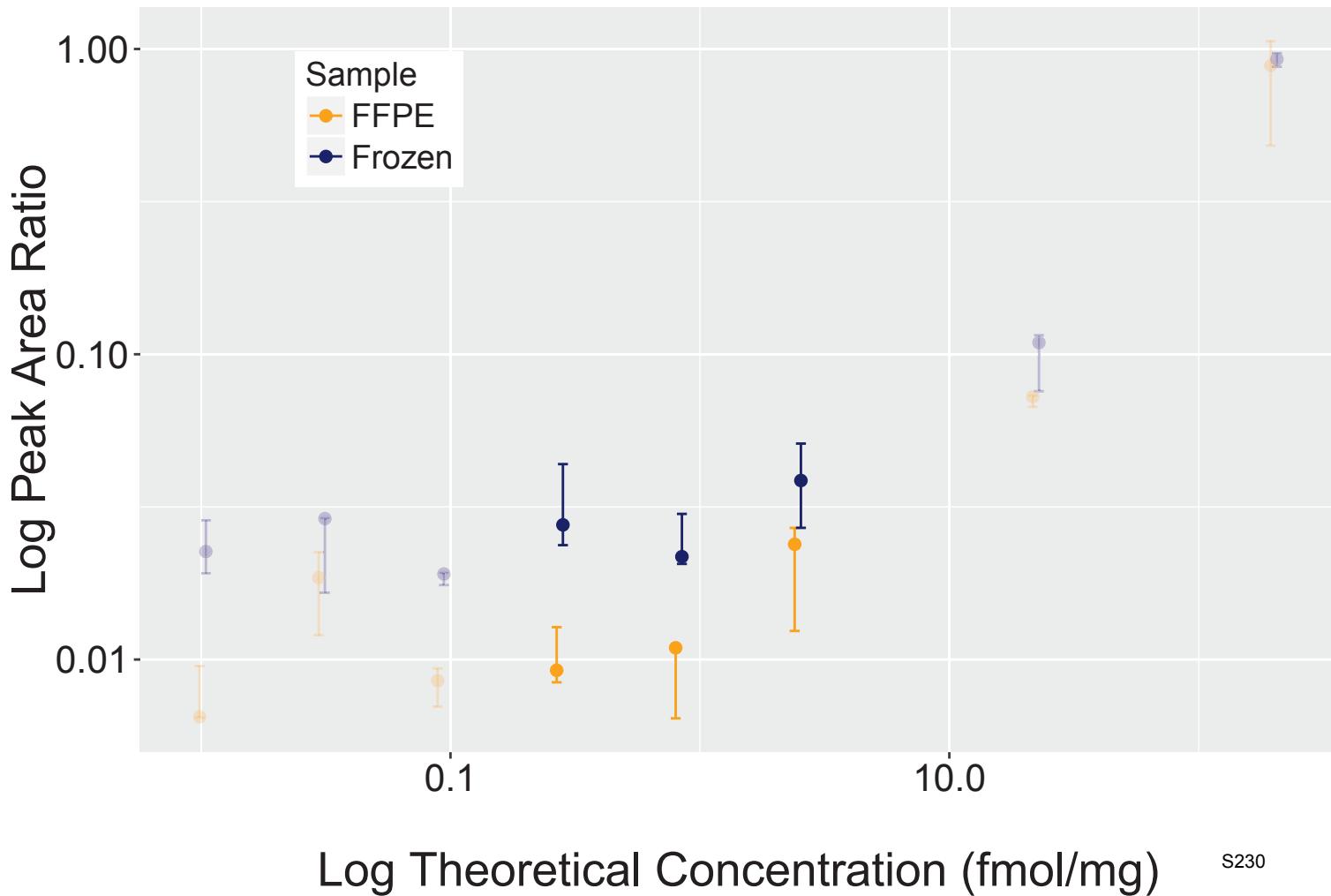
S228

Analyte: ERBB2.FVVIQNEDLGPASPLDSTFYR

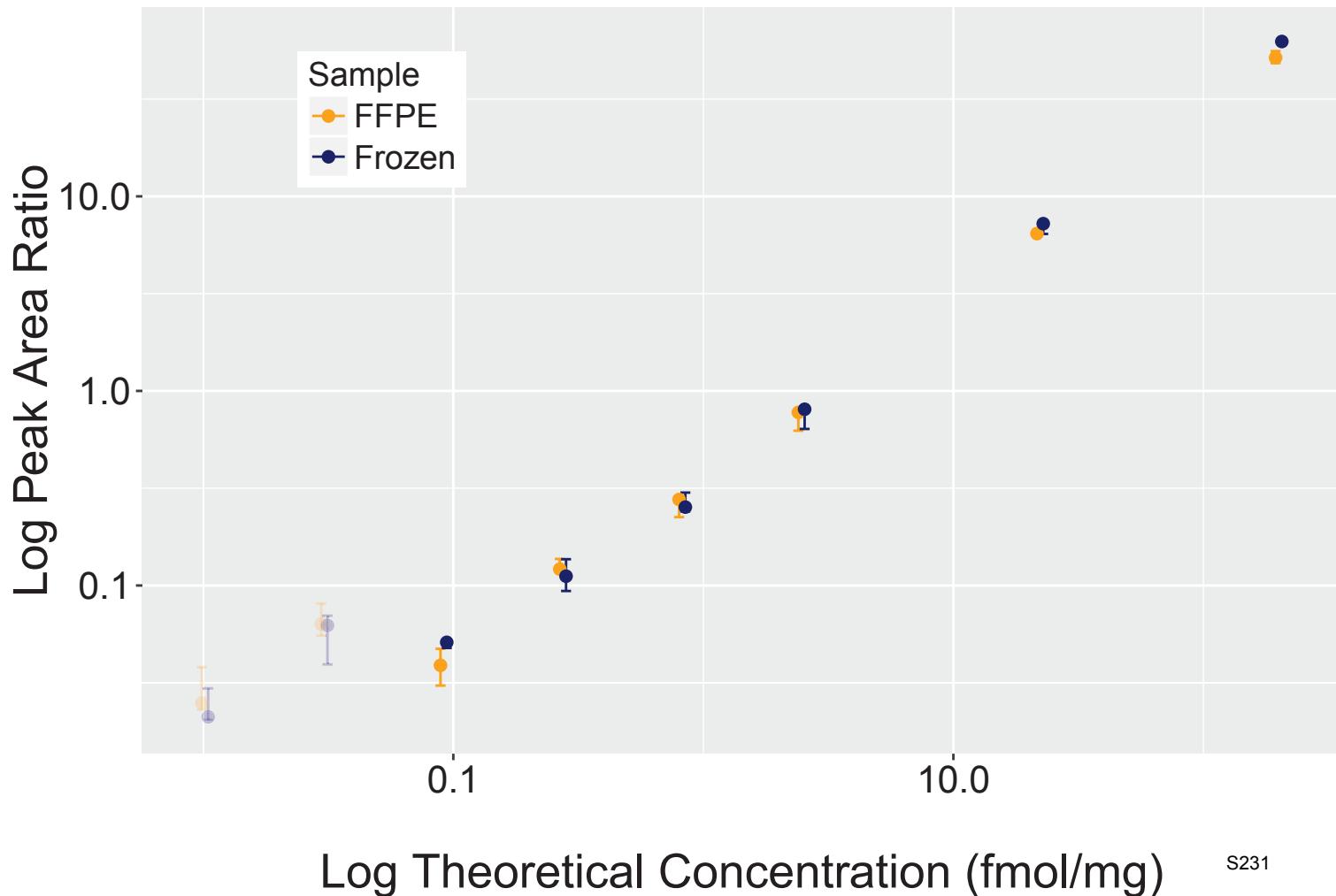


S229

Analyte: CALR.FYALSASFEPFSNK

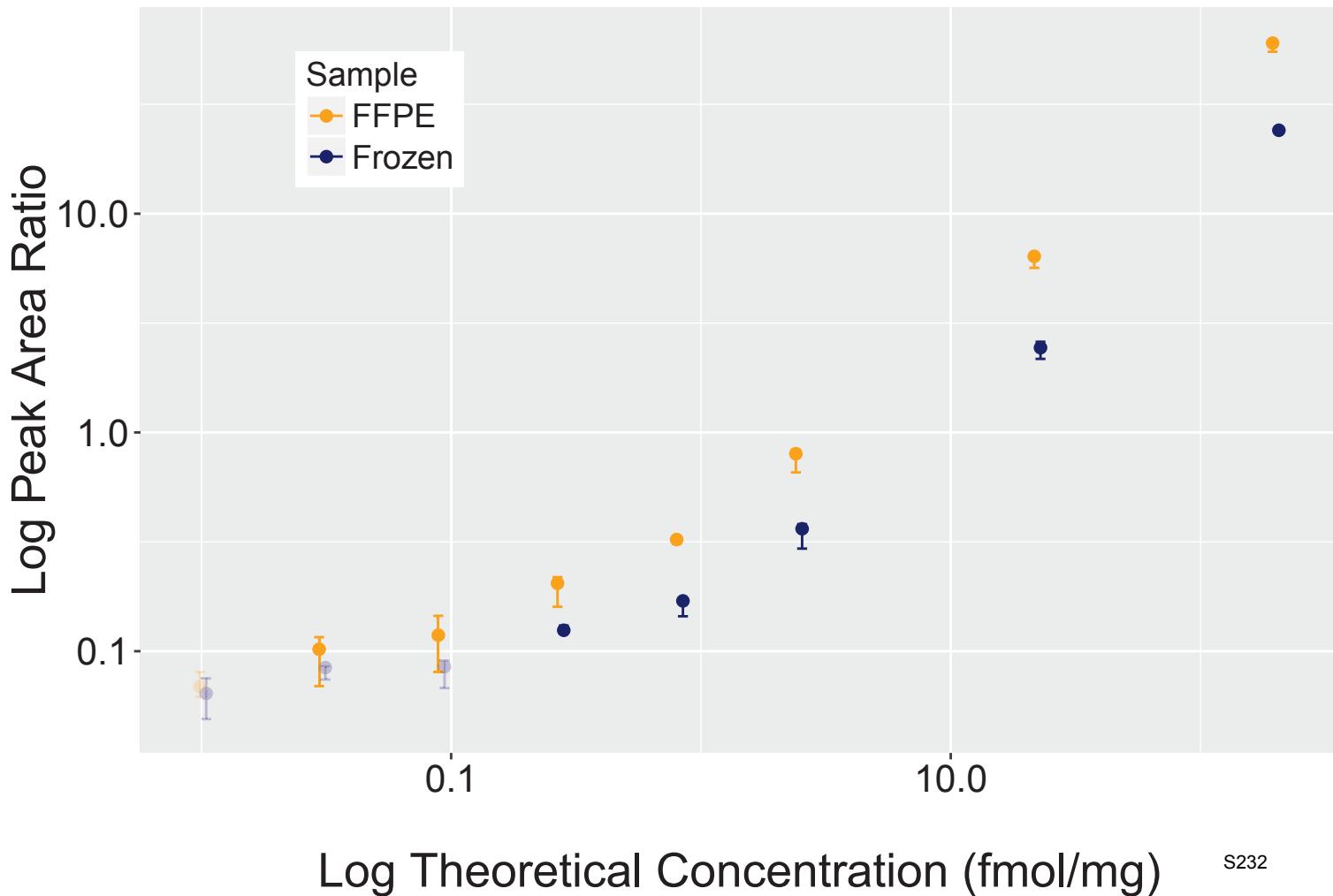


Analyte: CSDA.GAEAANVTGPDGVPGVEGSR



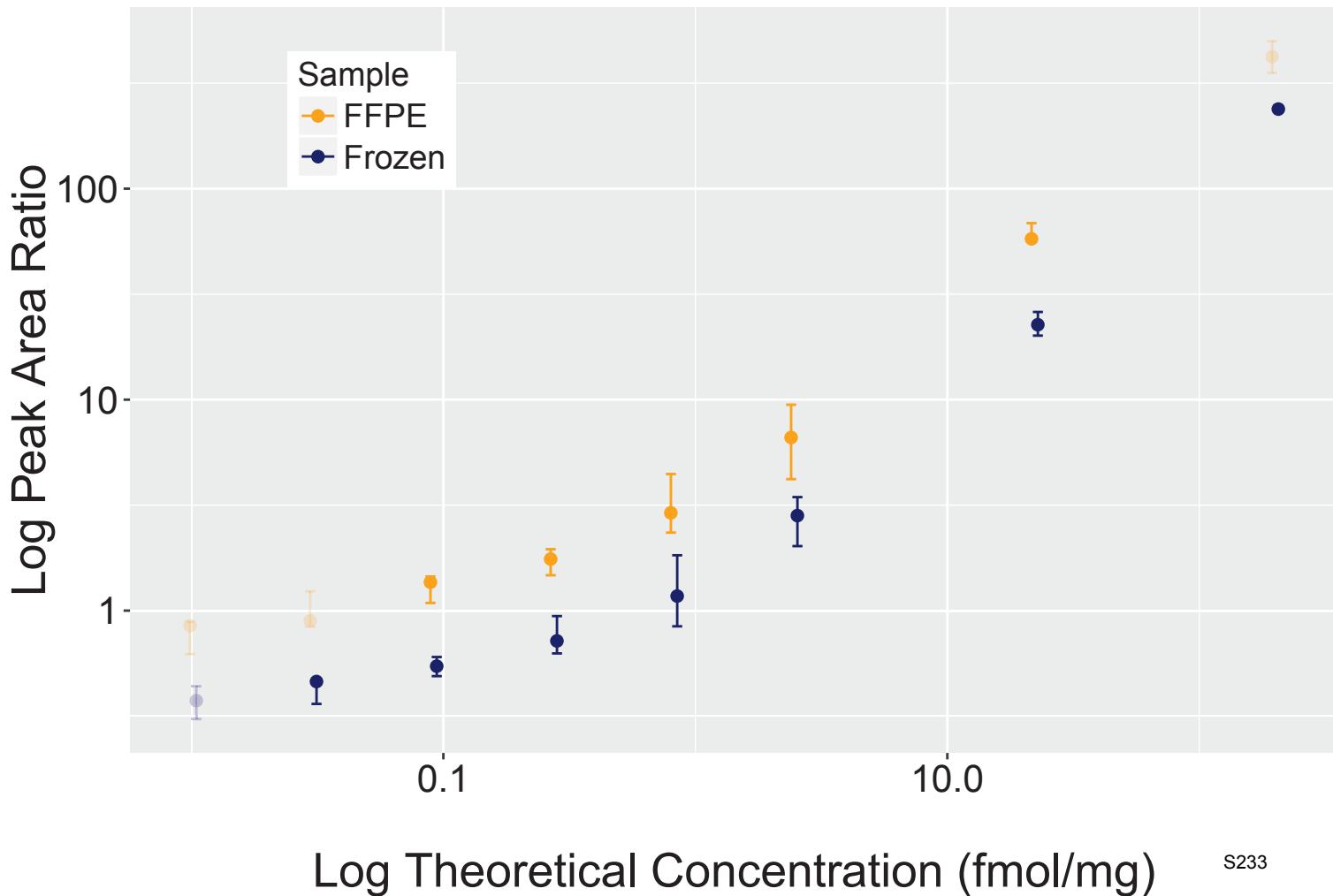
S²³¹

Analyte: ERP29.GALPLDTVTFYK



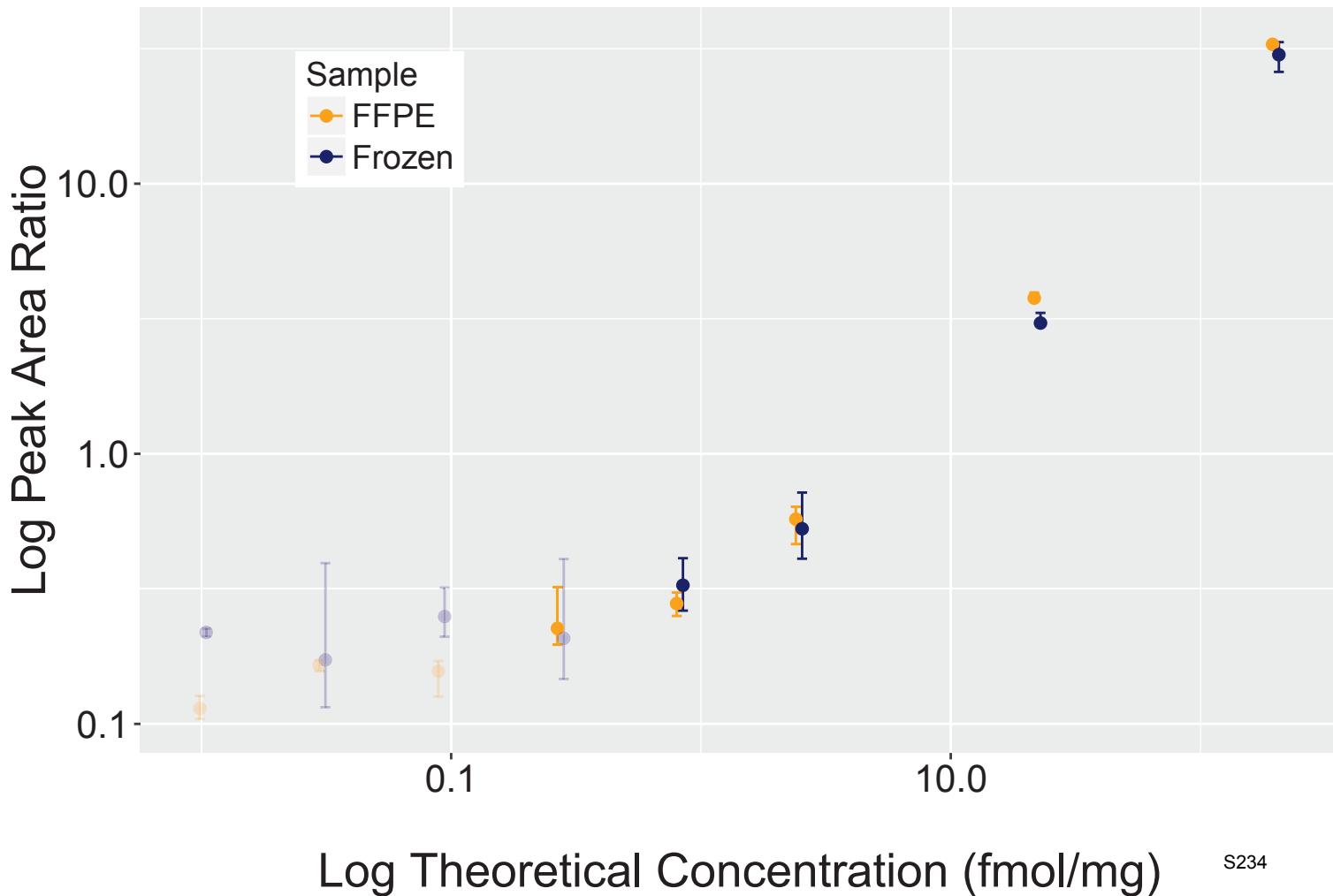
S²³²

Analyte: HSD17B4.GALVVVNDLGGDFK



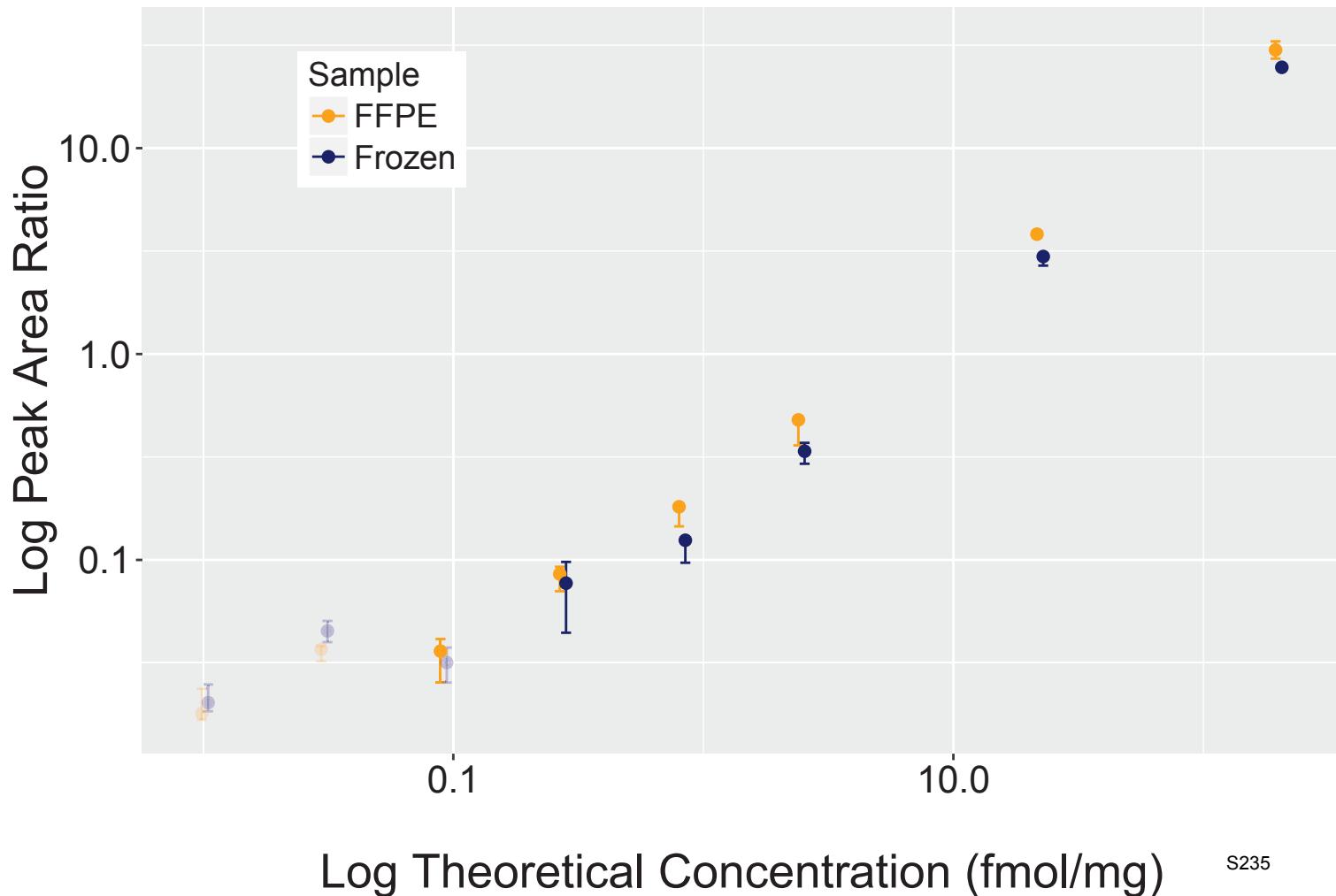
S²³³

Analyte: ALDH7A1.GAPPTSLISVAVTK



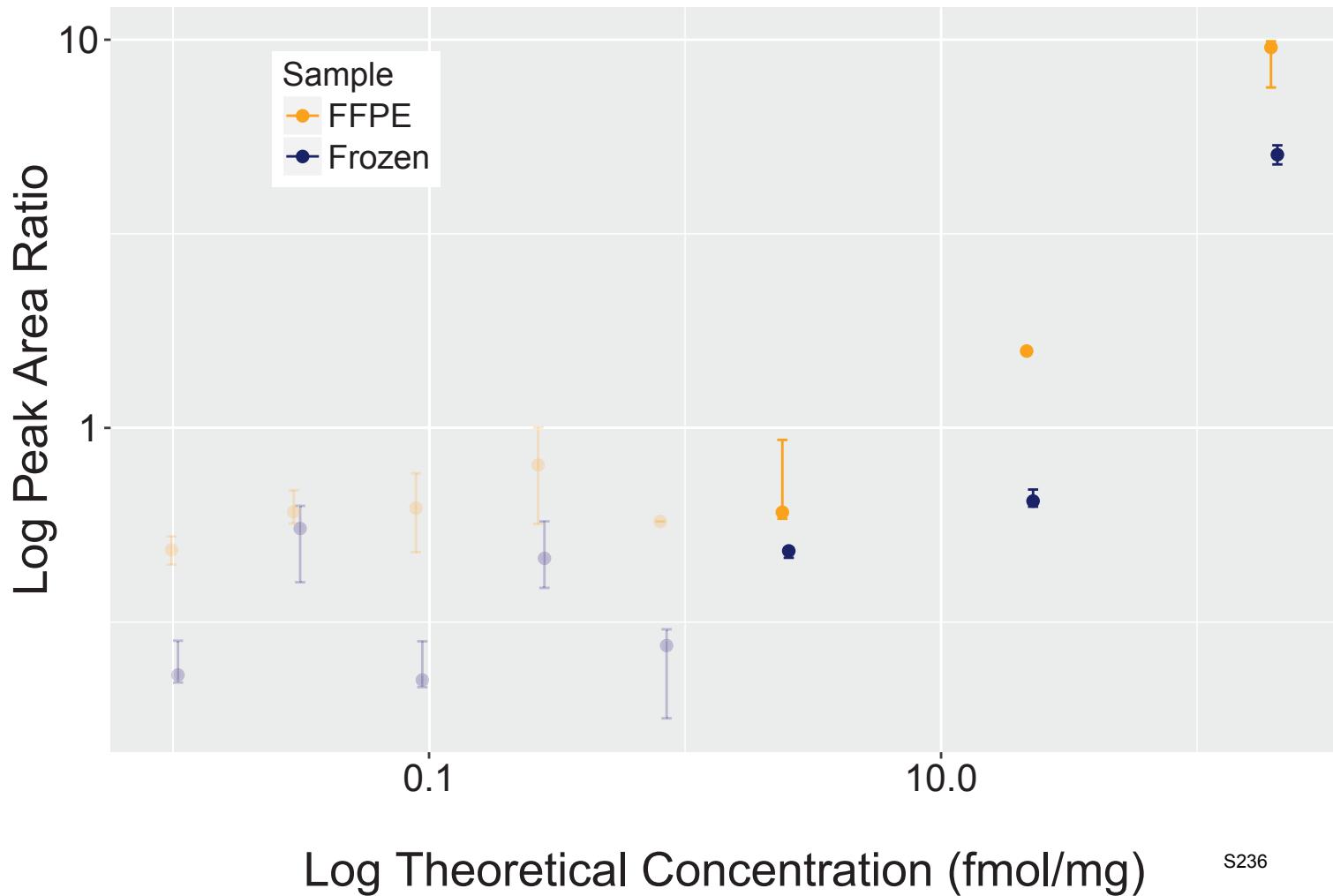
S²³⁴

Analyte: CCT2.GATQQILDEAER



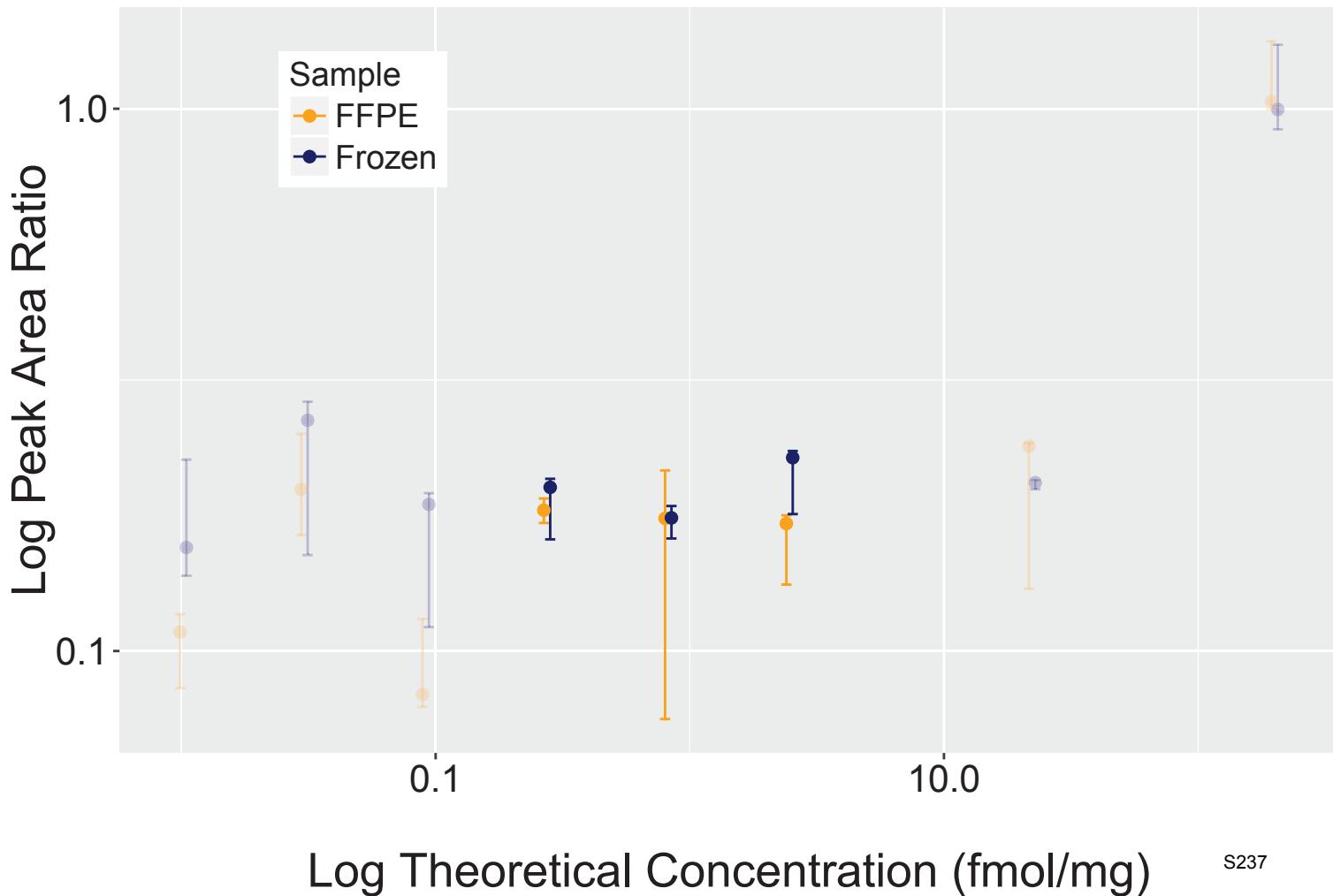
S²³⁵

Analyte: TARS.GAYIYNALIEFIR



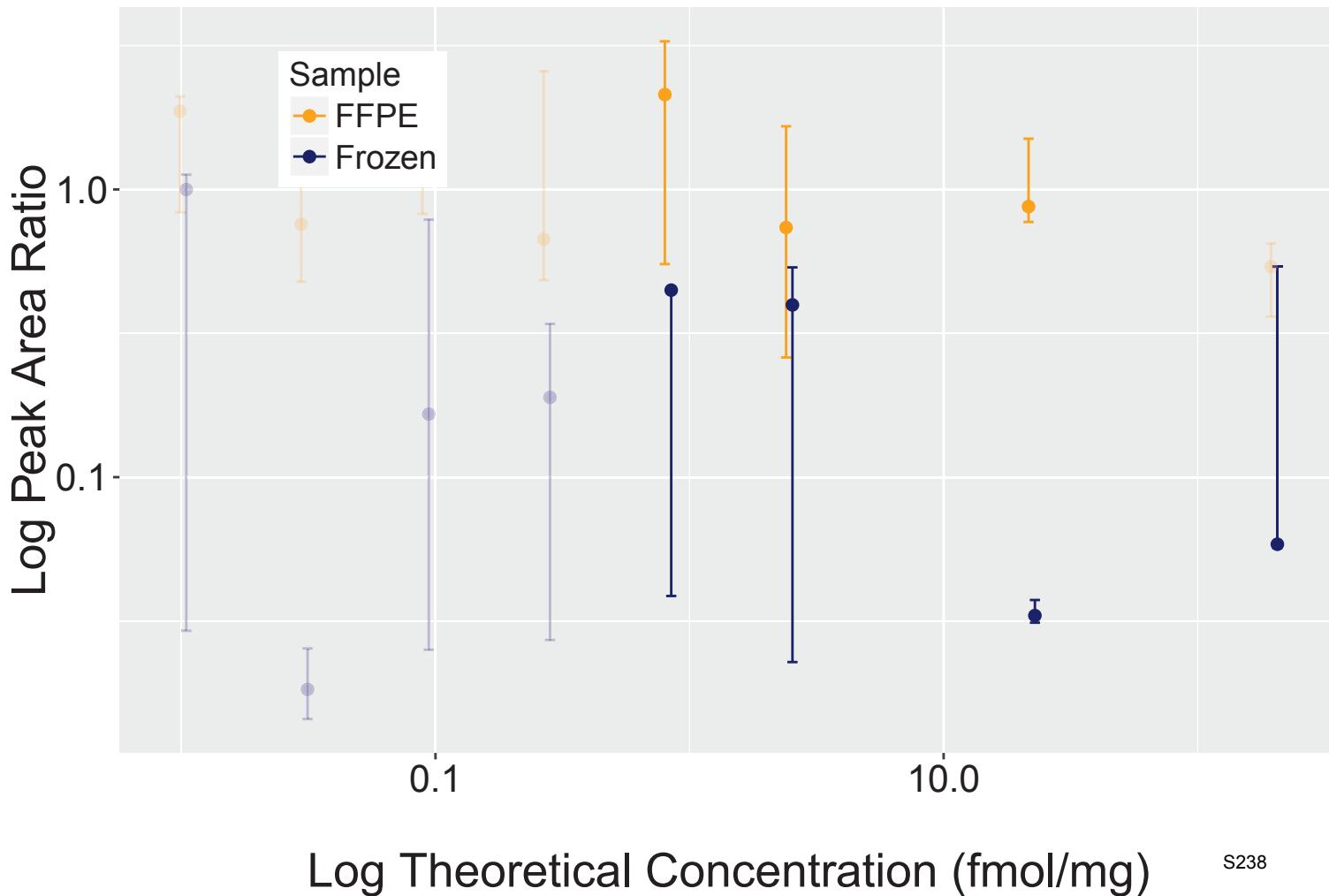
S²³⁶

Analyte: HK1.GDFIALDLGGSSFR



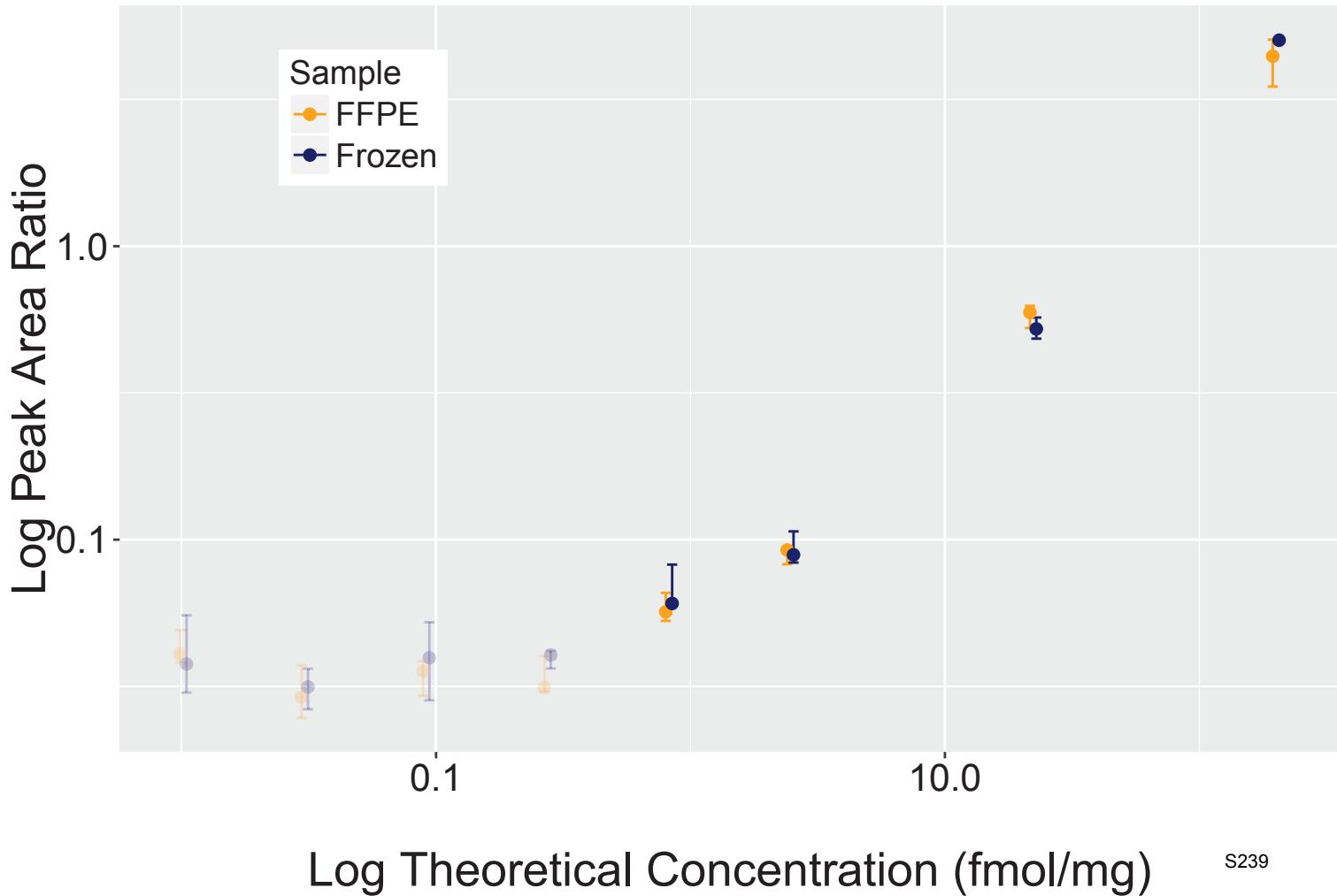
S²³⁷

Analyte: ANXA2.GDLENAFLNLVQC[+57]IQNKPLYFADI



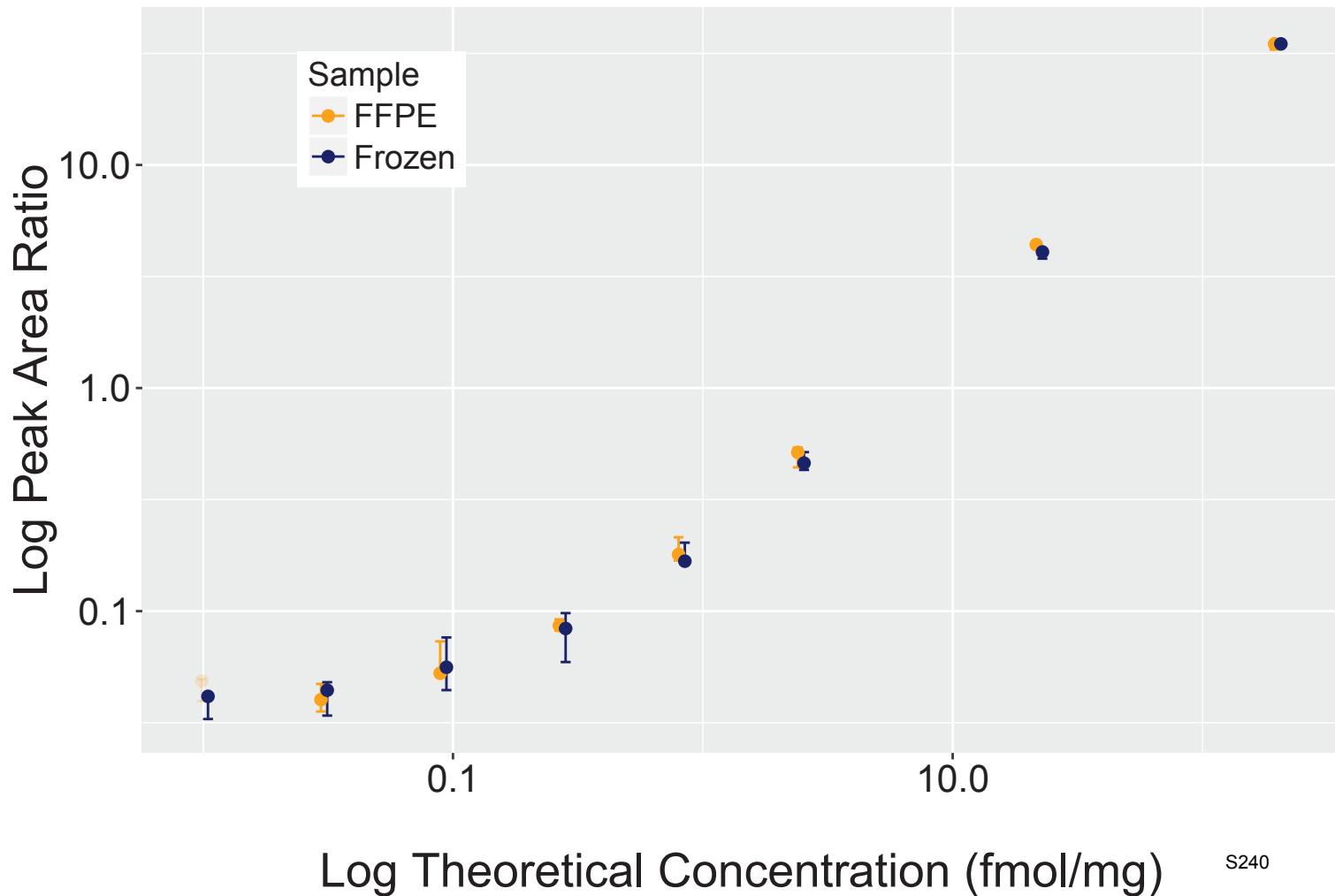
S²³⁸

Analyte: SH3BGRL.GDYDAFFEAR



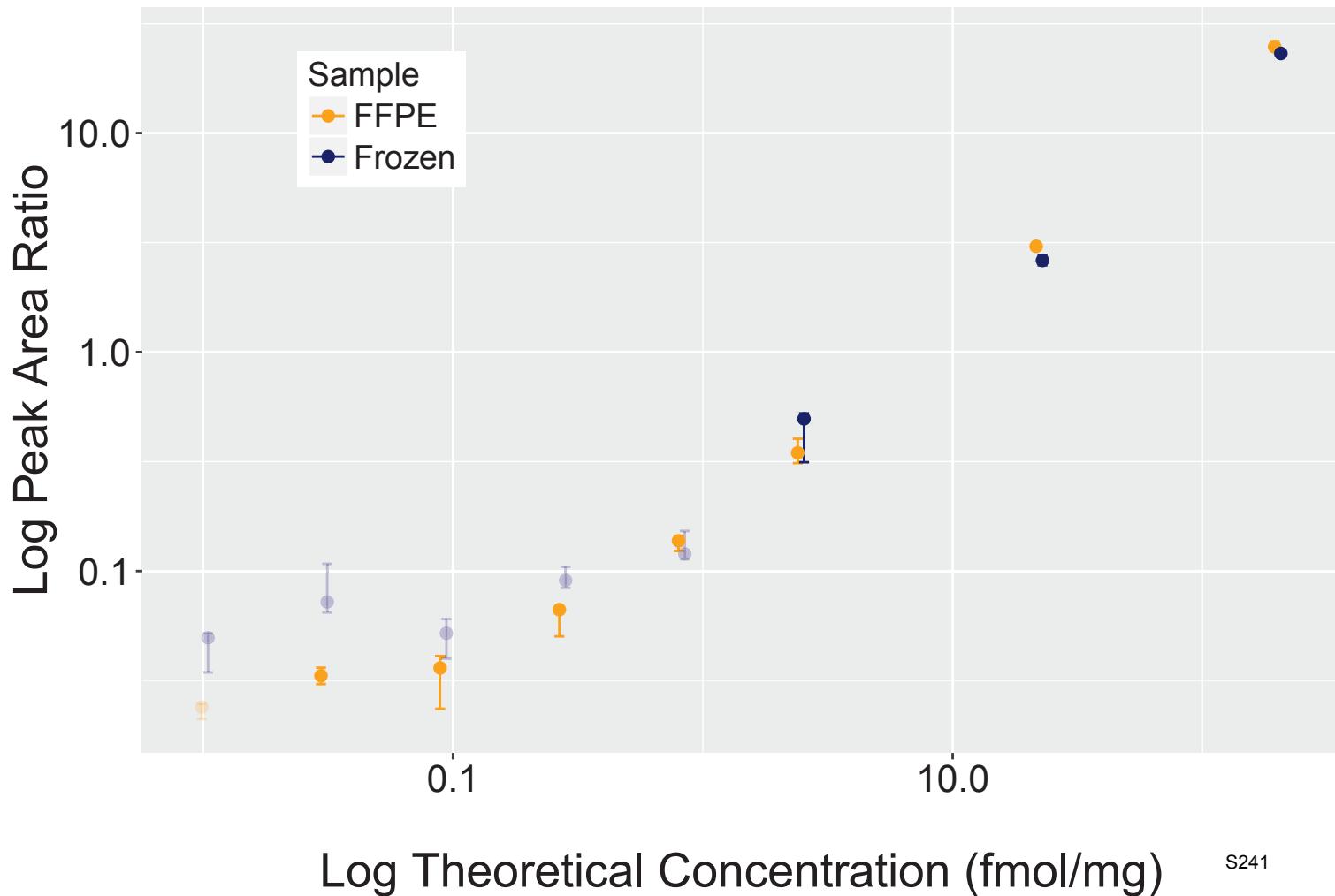
S²³⁹

Analyte: SSR1.GEDFPANNIVK

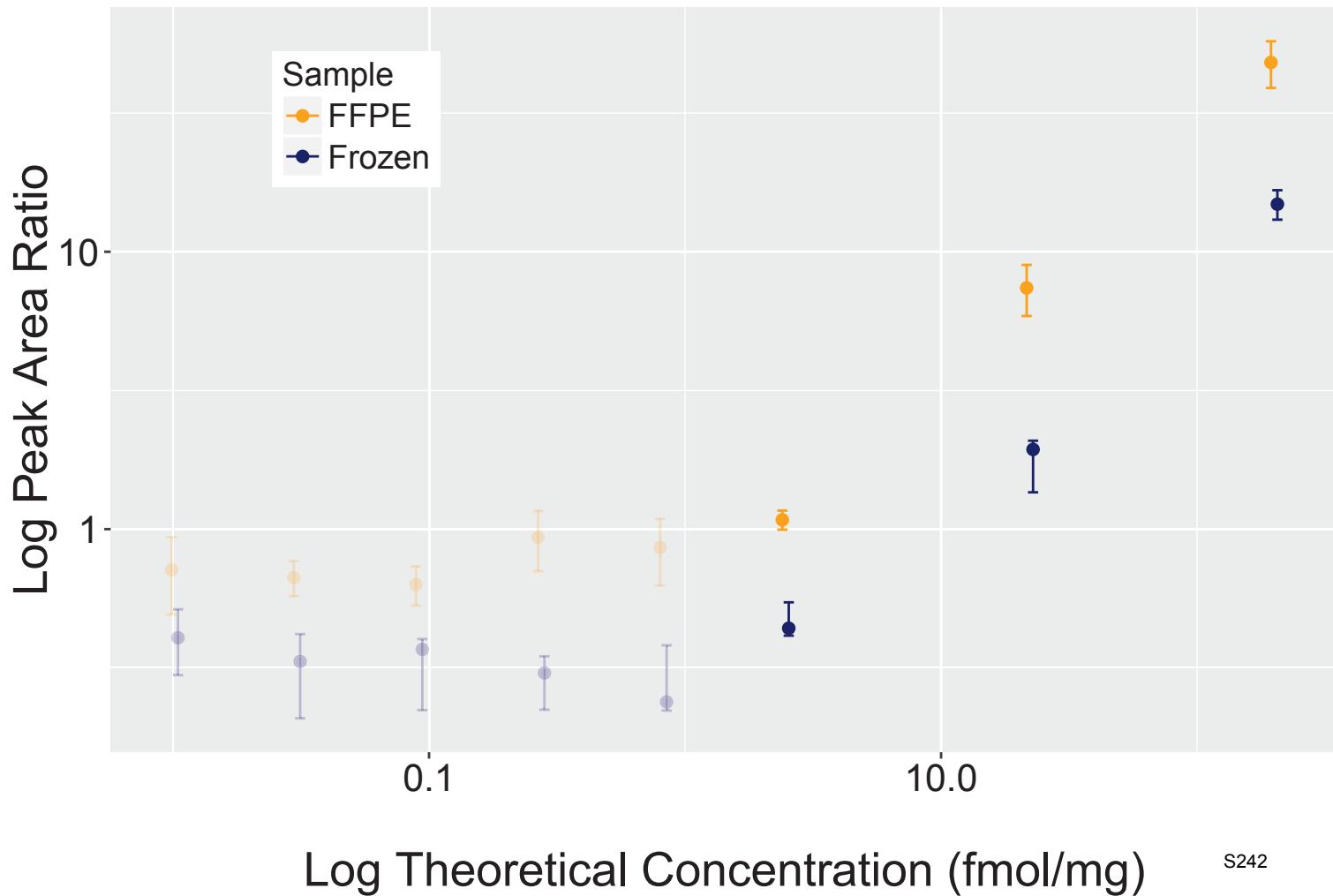


S²⁴⁰

Analyte: ITGB1.GEVFNELVGK

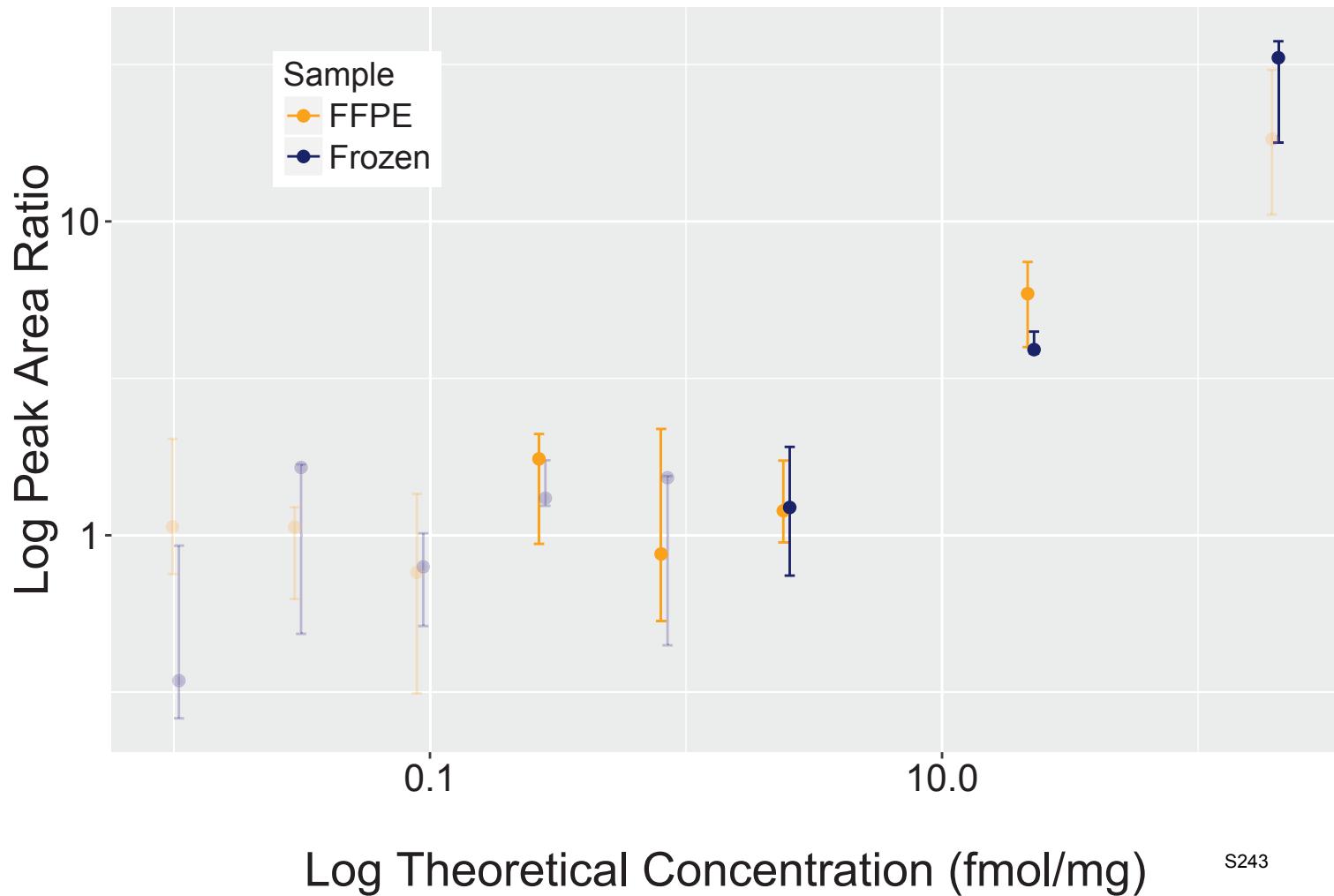


Analyte: DSP.GFFDPNTEENLTYLQLK

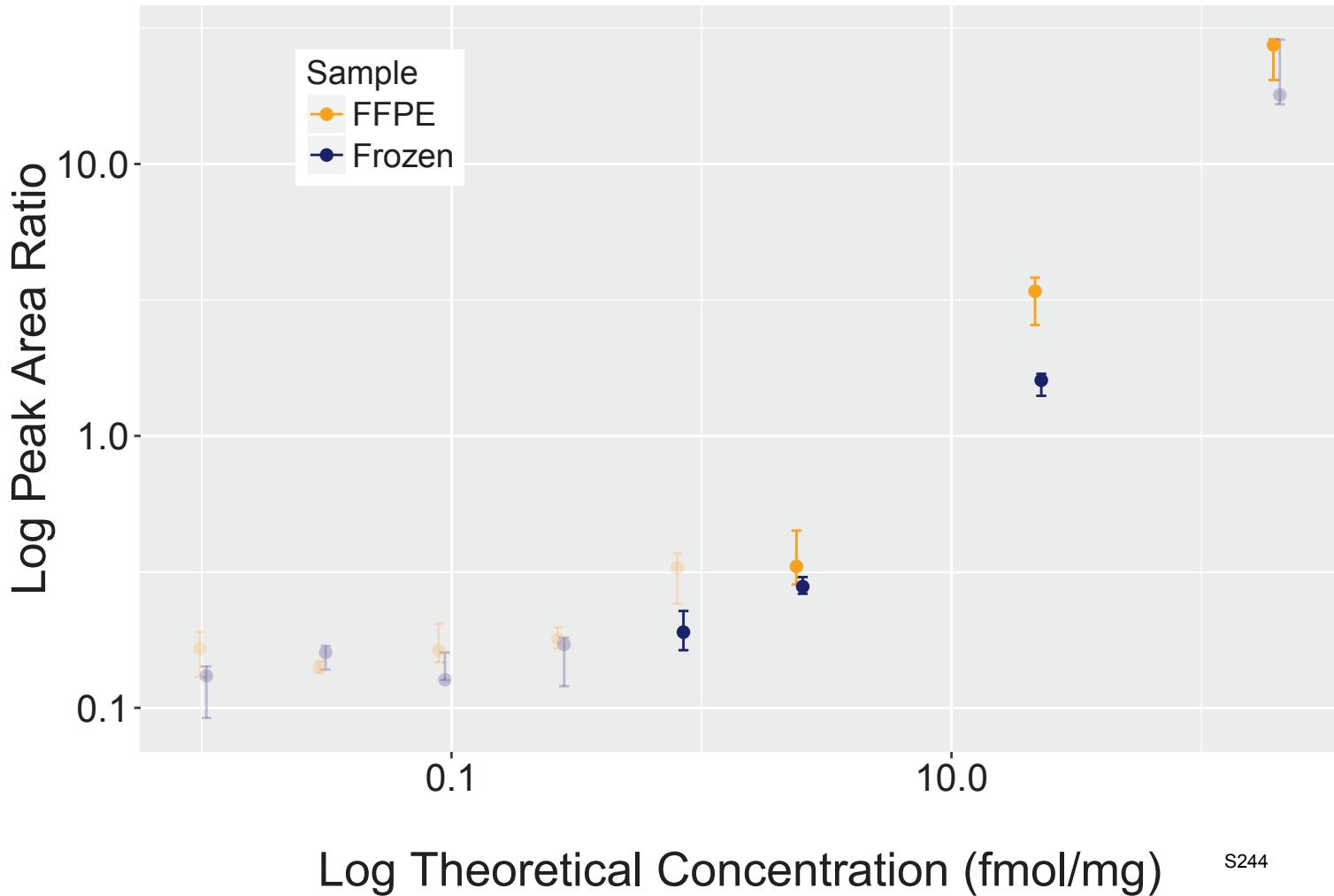


S²⁴²

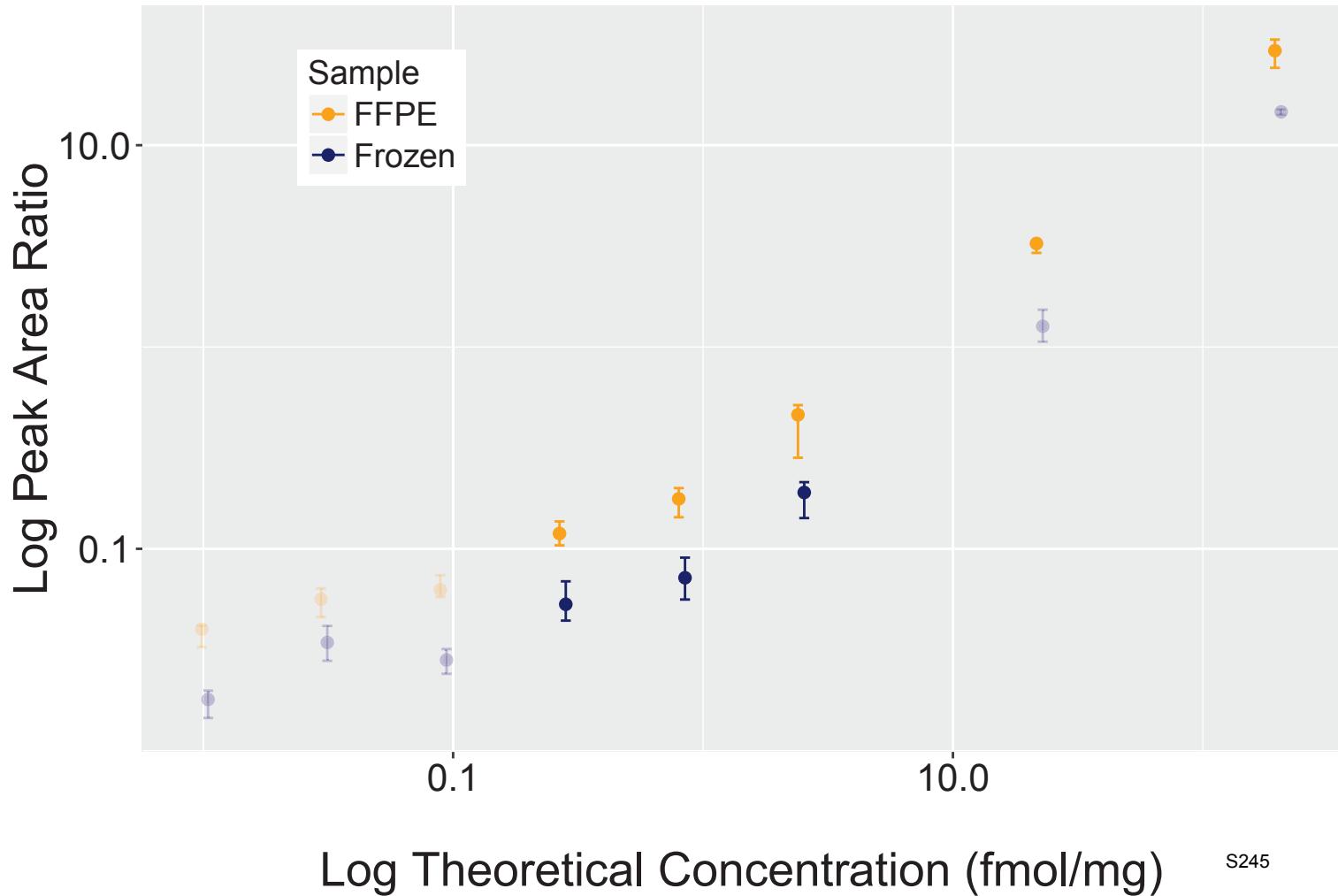
Analyte: EPRS.GFFIC[+57]DQPYEPVSPYSC[+57]K



Analyte: CNBP.GFQFVSSSLPDIC[+57]YR

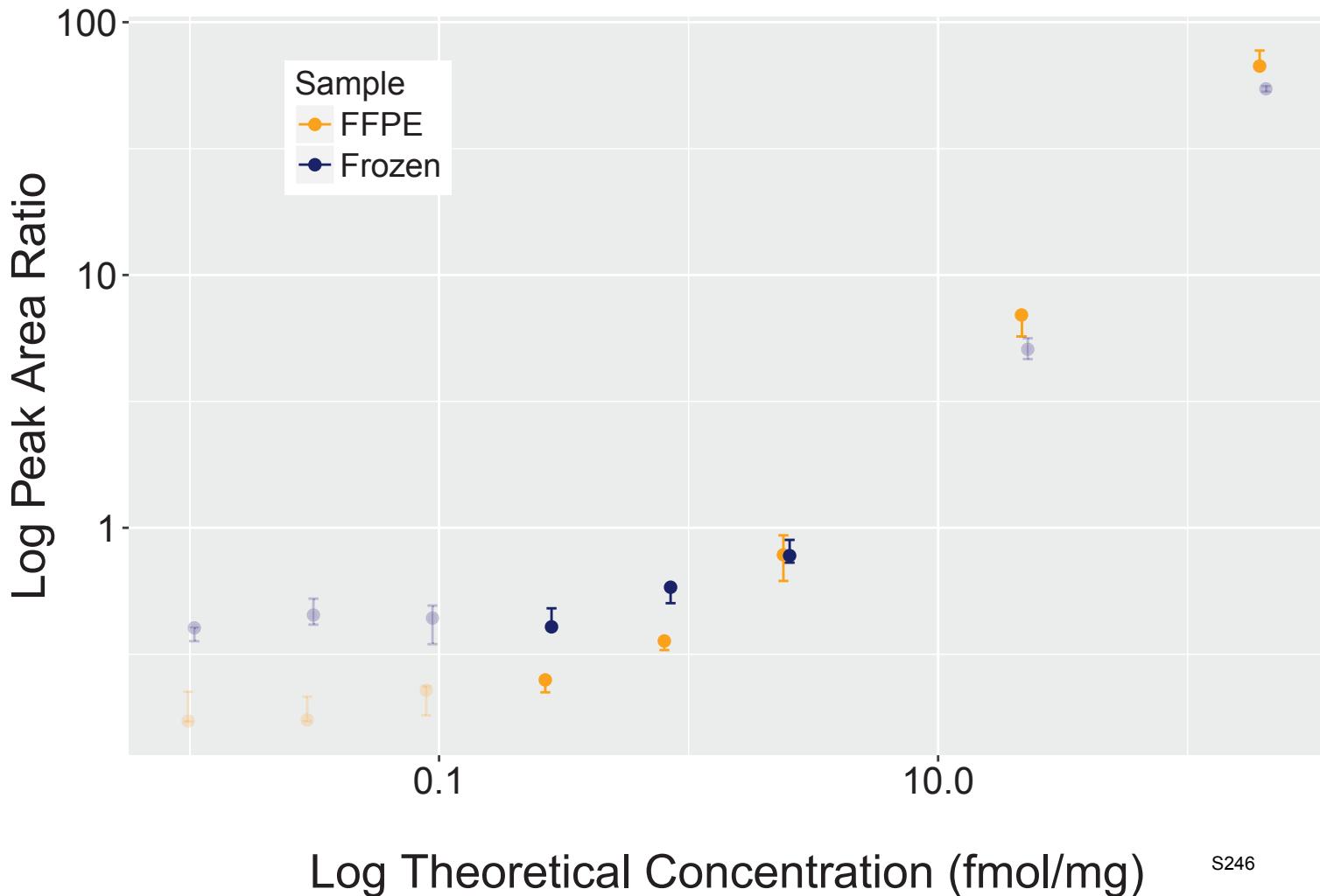


Analyte: LASP1.GFSVVADTPELQR



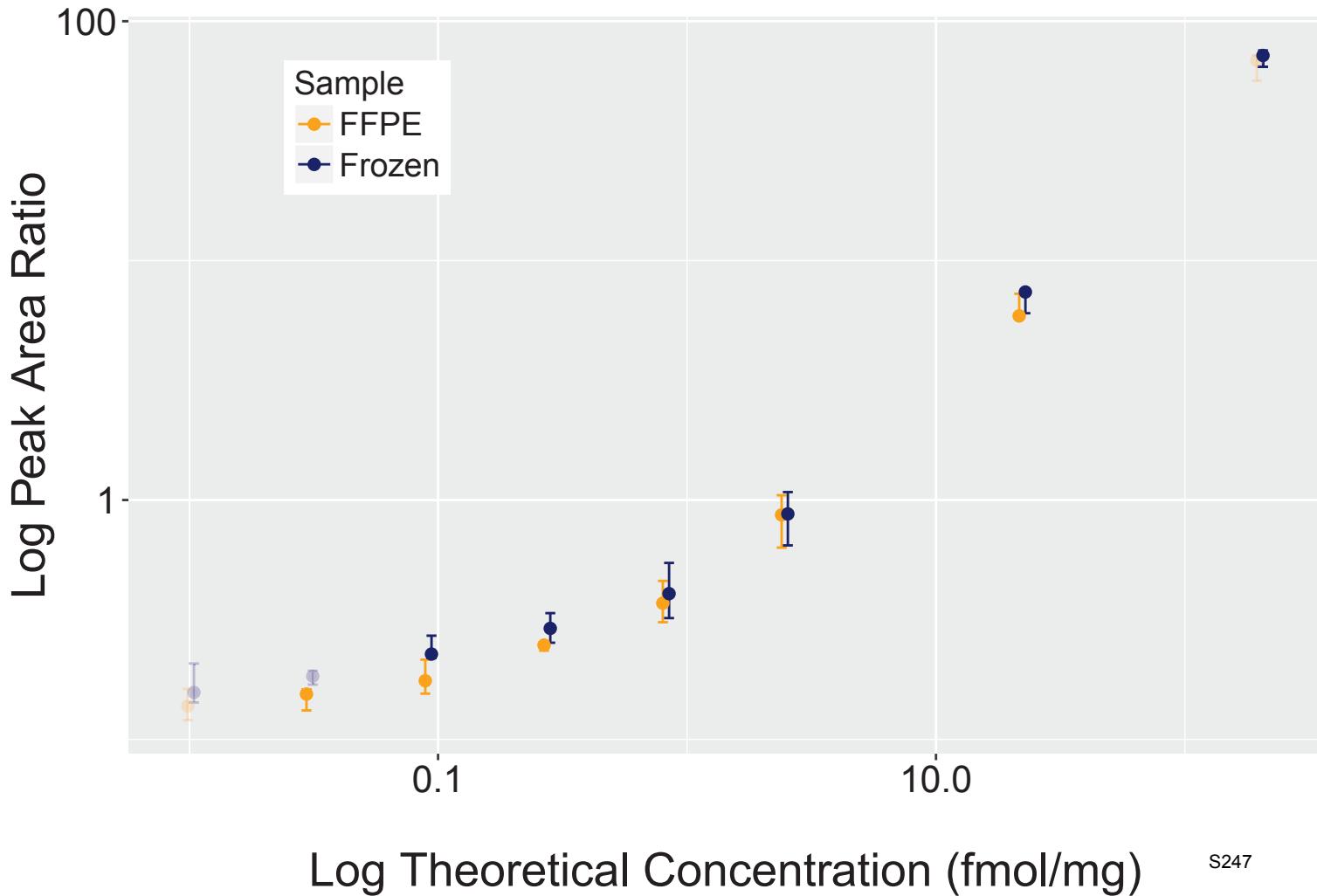
S245

Analyte: PAPSS1.GFTGIDSEYEKPEAPELVLK

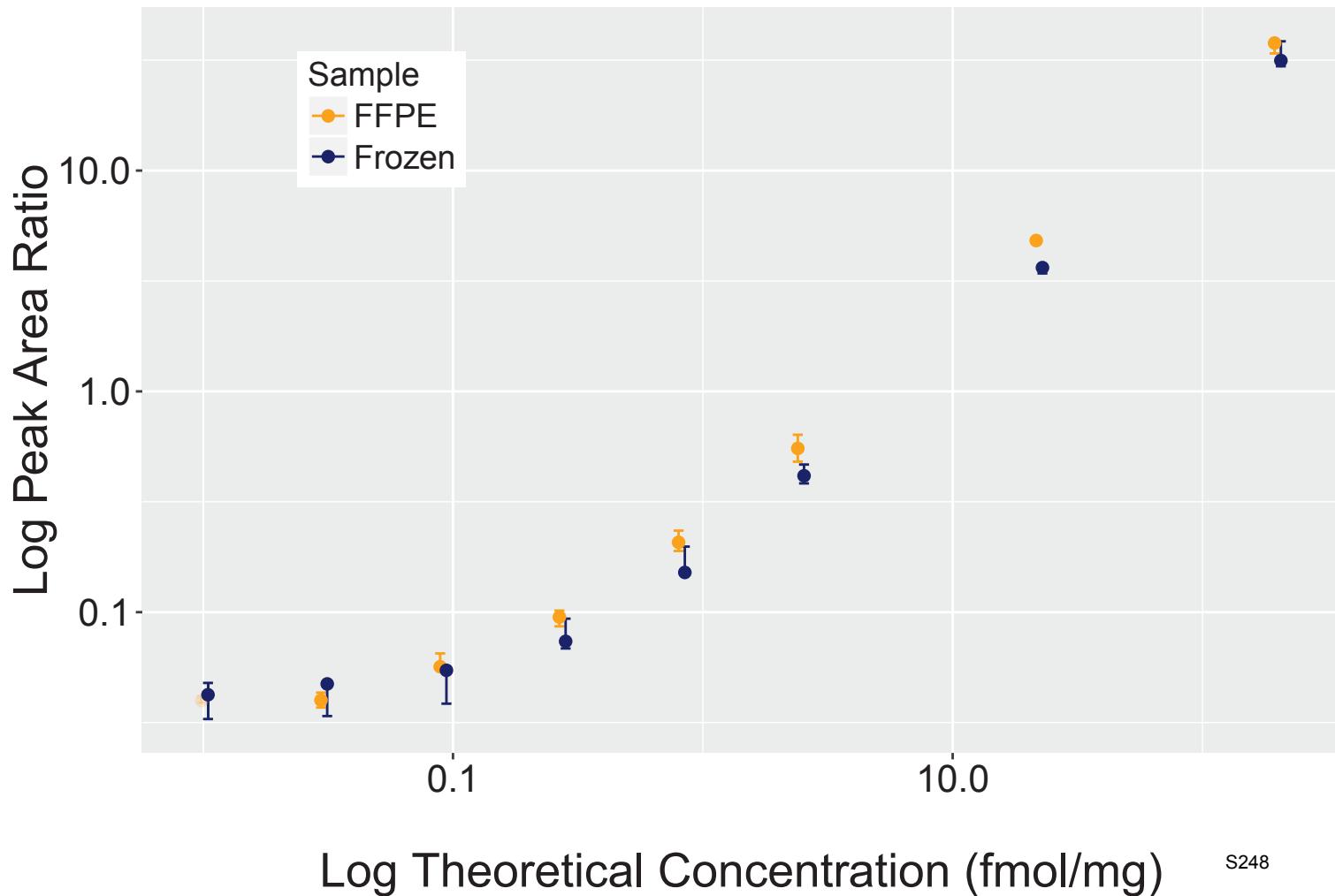


S²⁴⁶

Analyte: MARS.GFVLQDTVEQLR

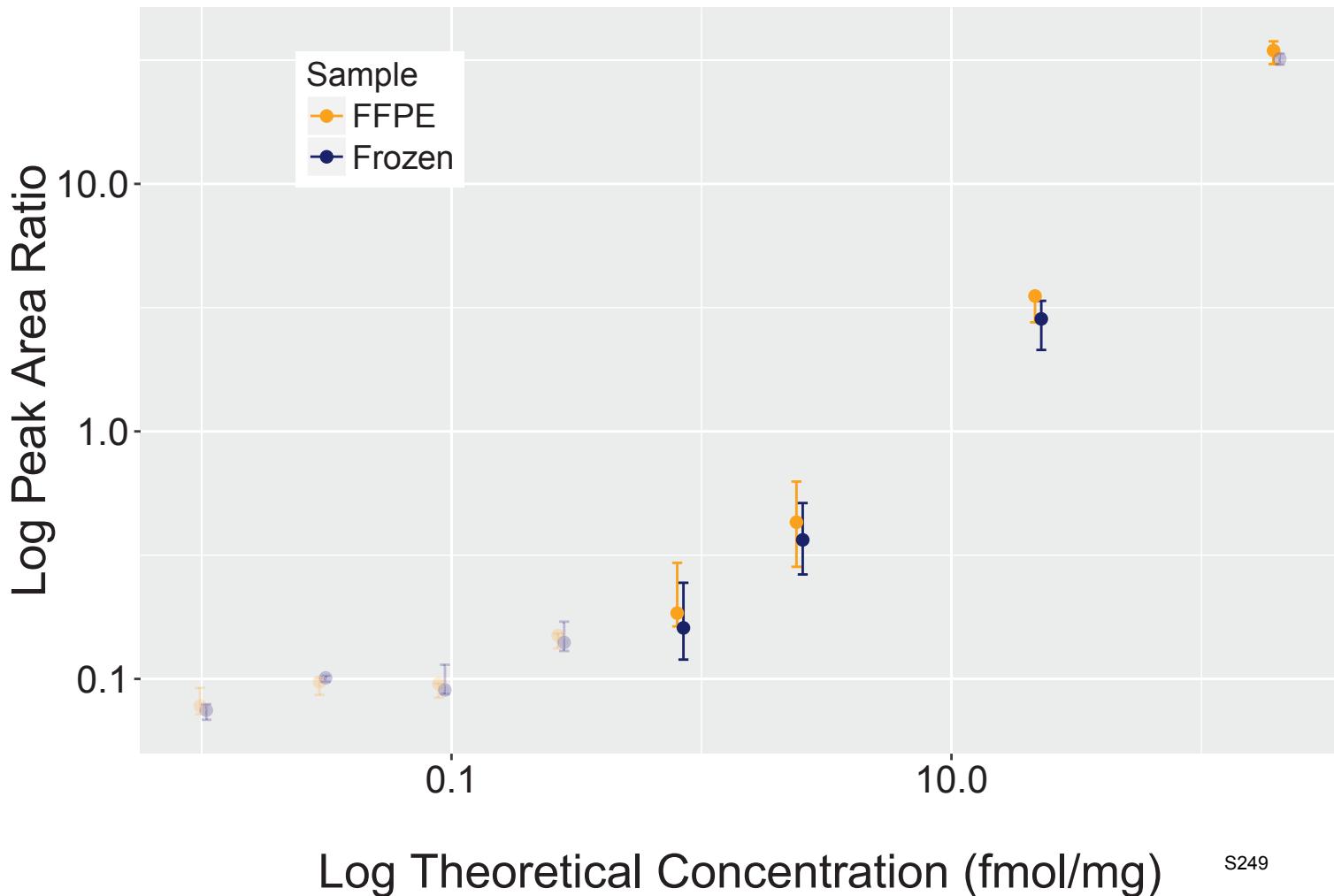


Analyte: PLEC1.GGAEGELQALR



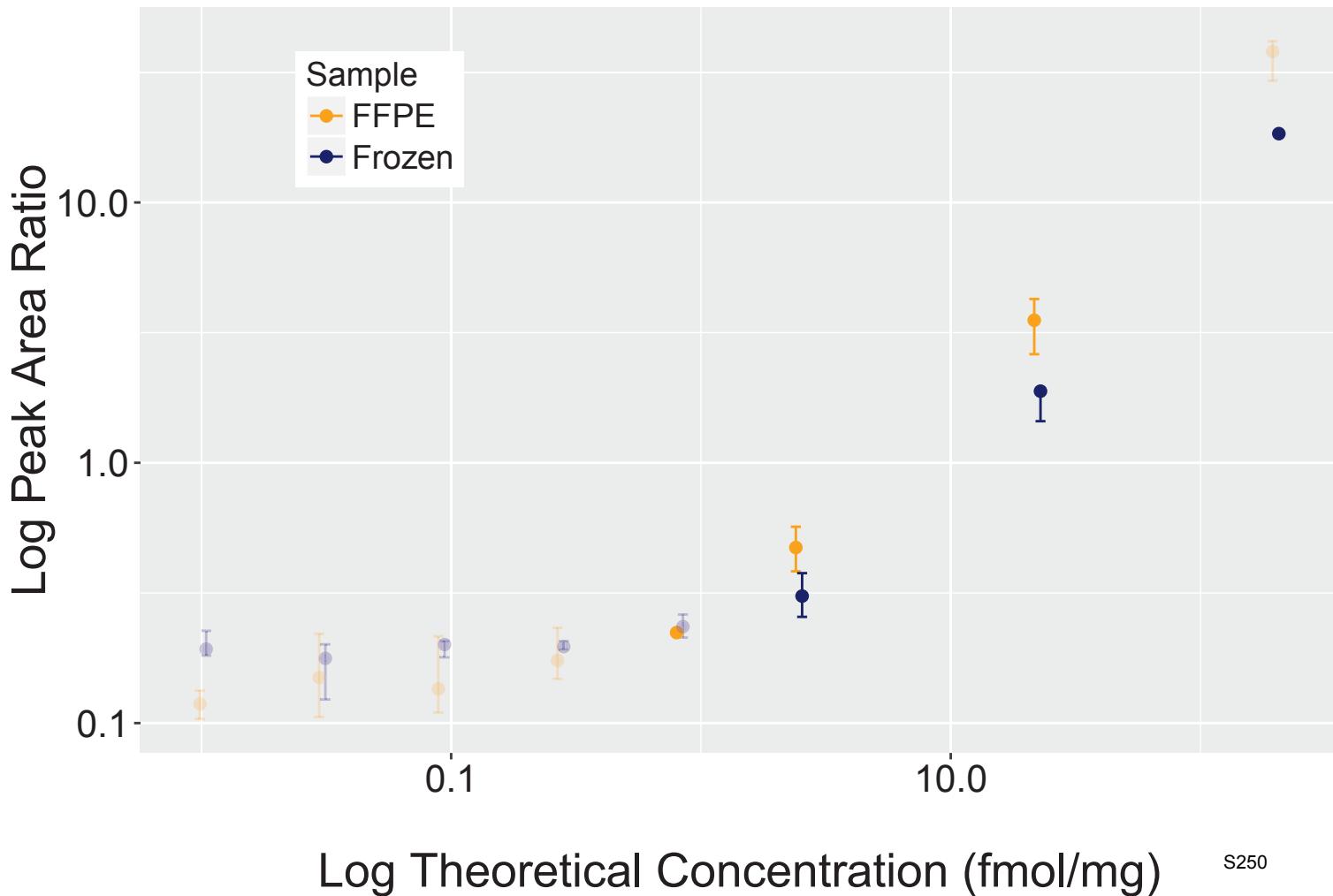
S²⁴⁸

Analyte: G6PD.GGYFDEFGIIR



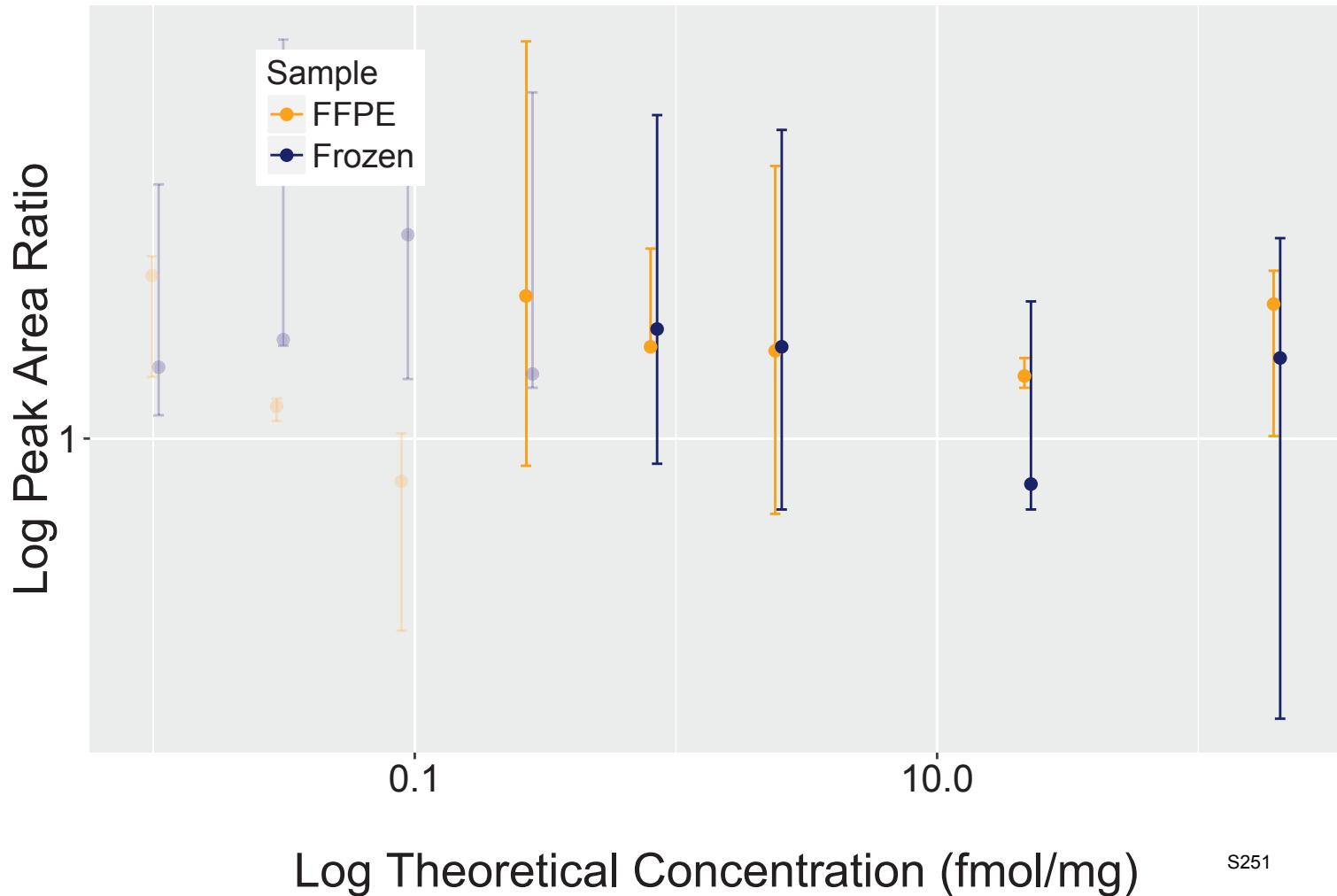
S²⁴⁹

Analyte: DDX1.GHVDILAPTVQELAALEK



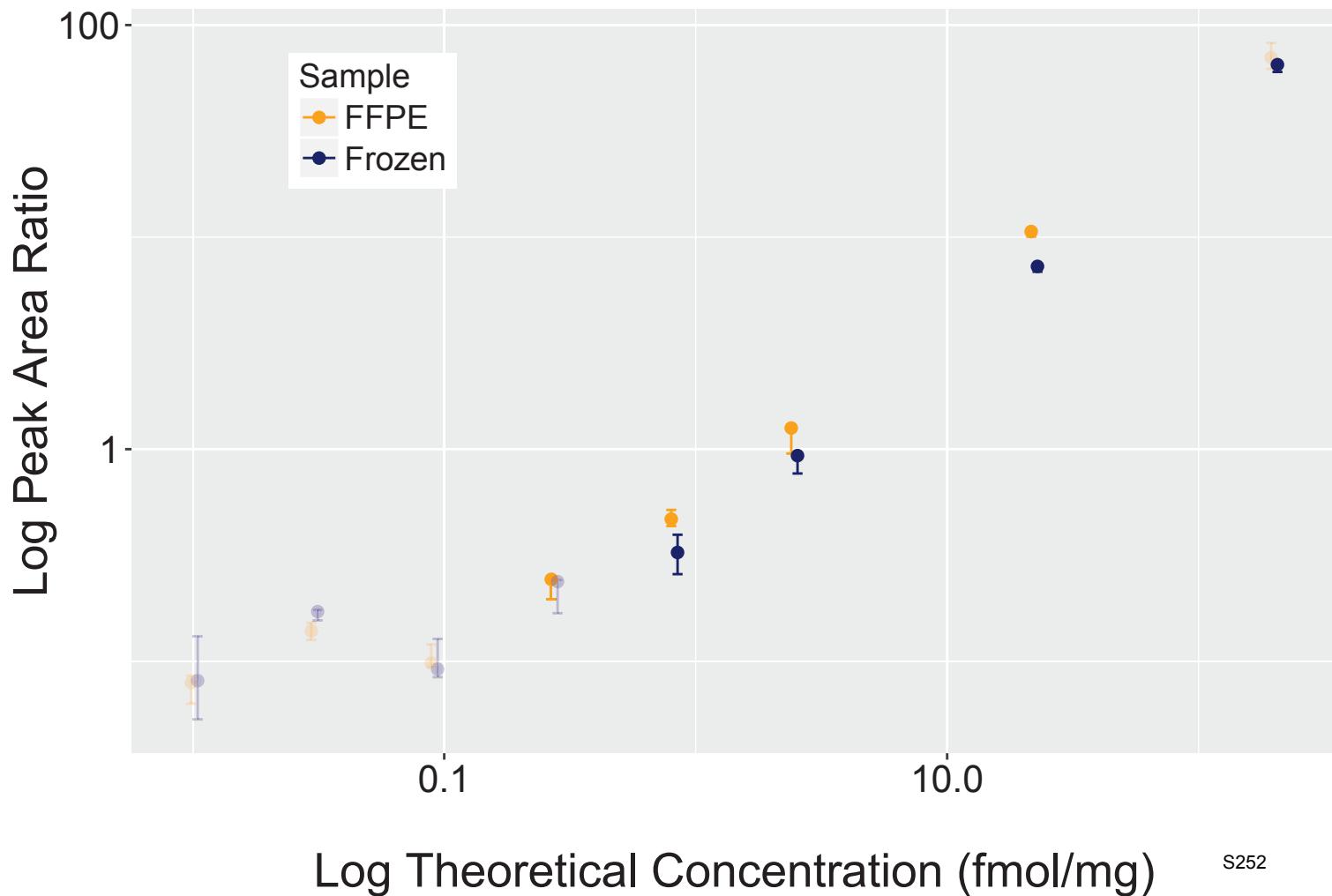
S²⁵⁰

Analyte: ABCD3.GIEGVQVIPLIPGAGEIIIADNIK



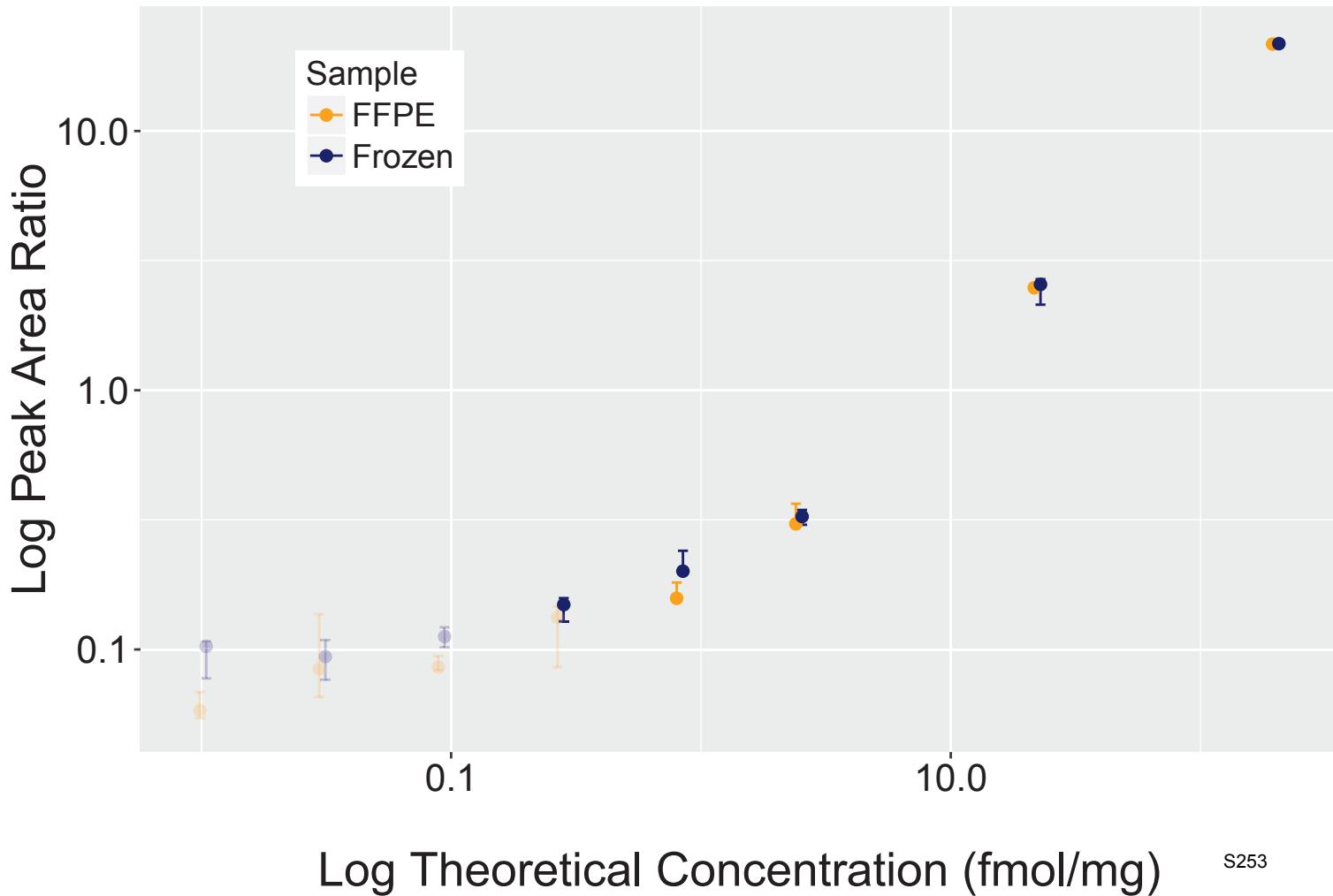
S251

Analyte: ANXA3.GIGTDEFTLNR



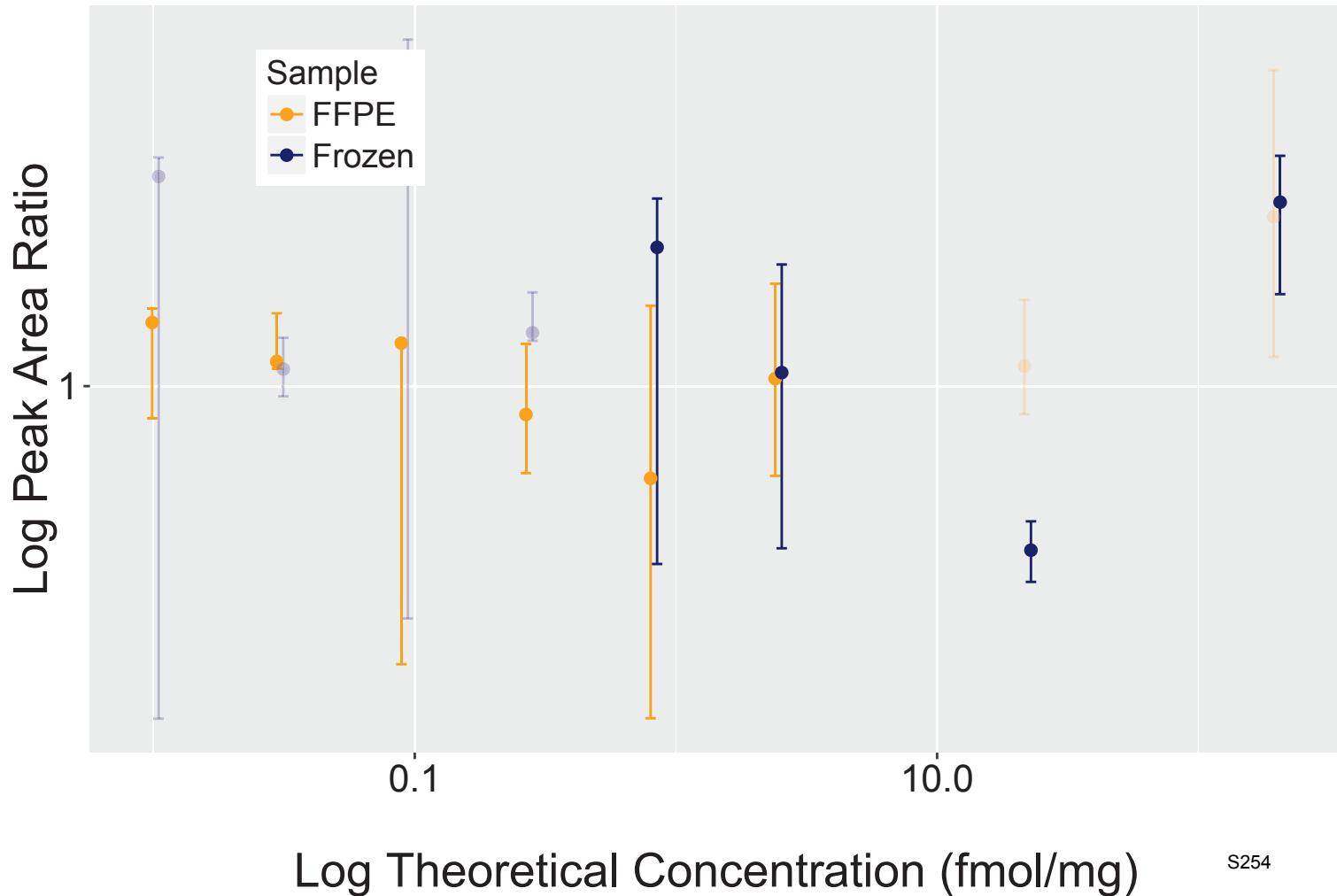
S²⁵²

Analyte: KPNA2.GINSSNVENQLQATQAAR



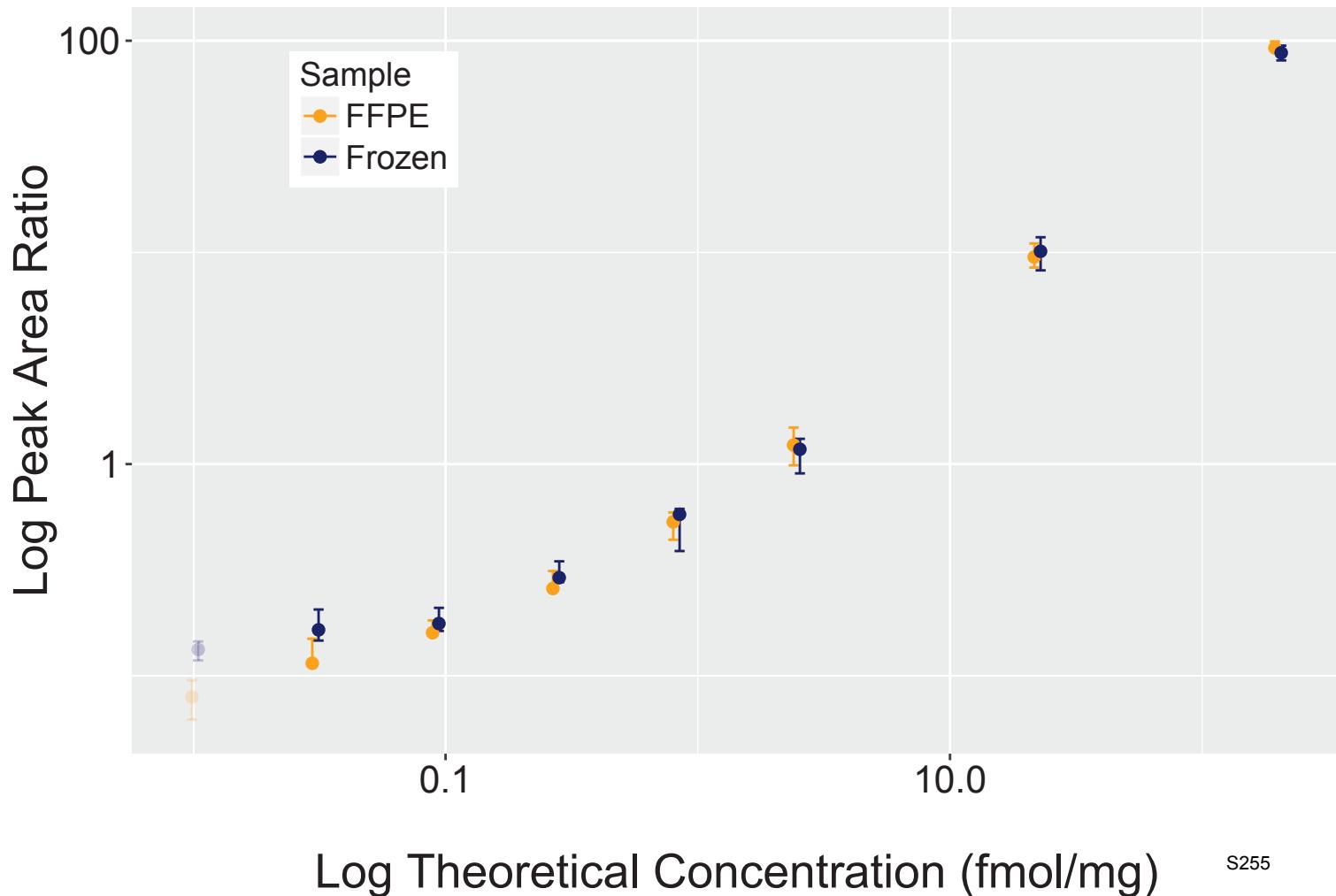
S²⁵³

Analyte: NAP1L1.GIPEFWLTVFK



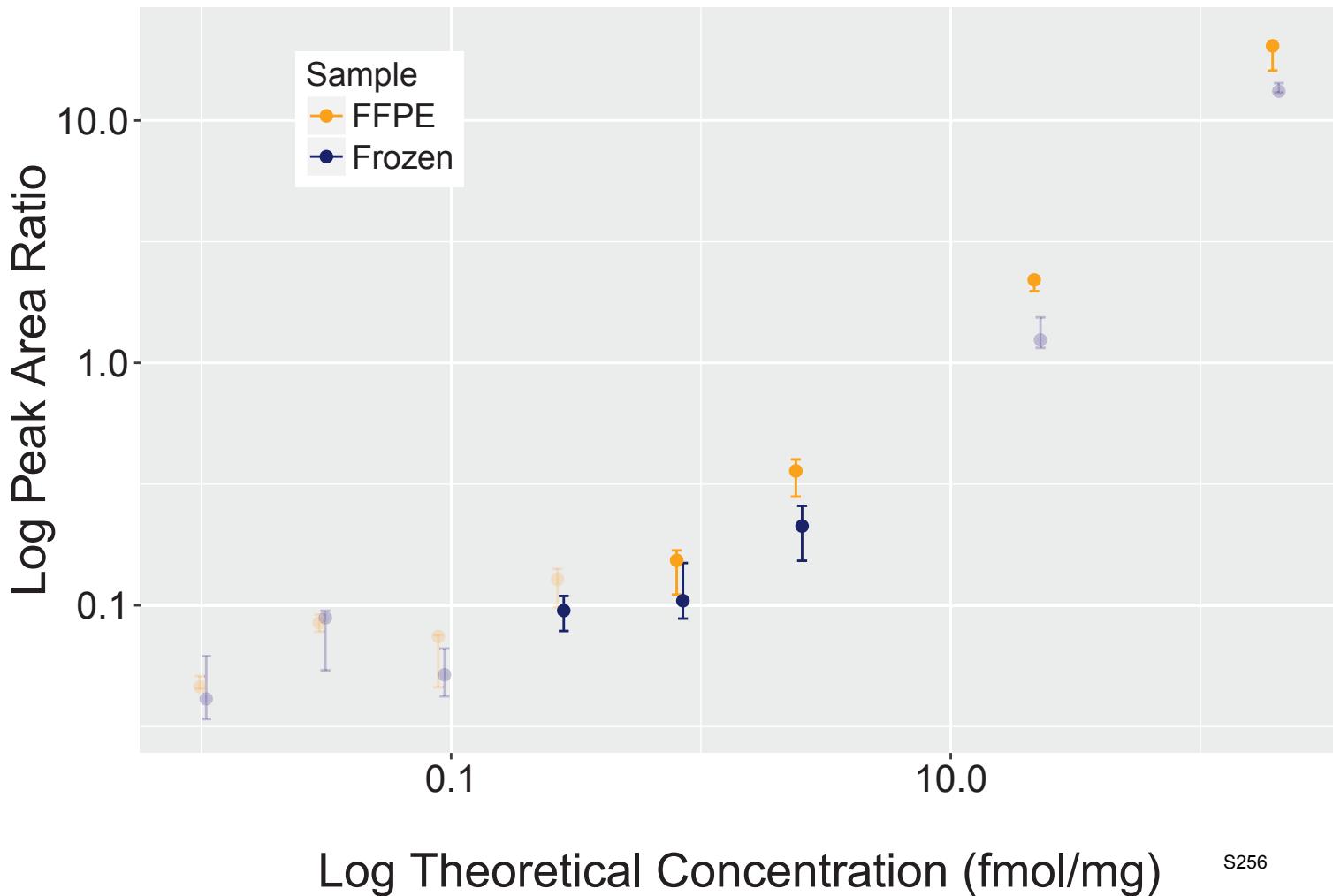
S254

Analyte: TPM2.GIQLVEEELDR



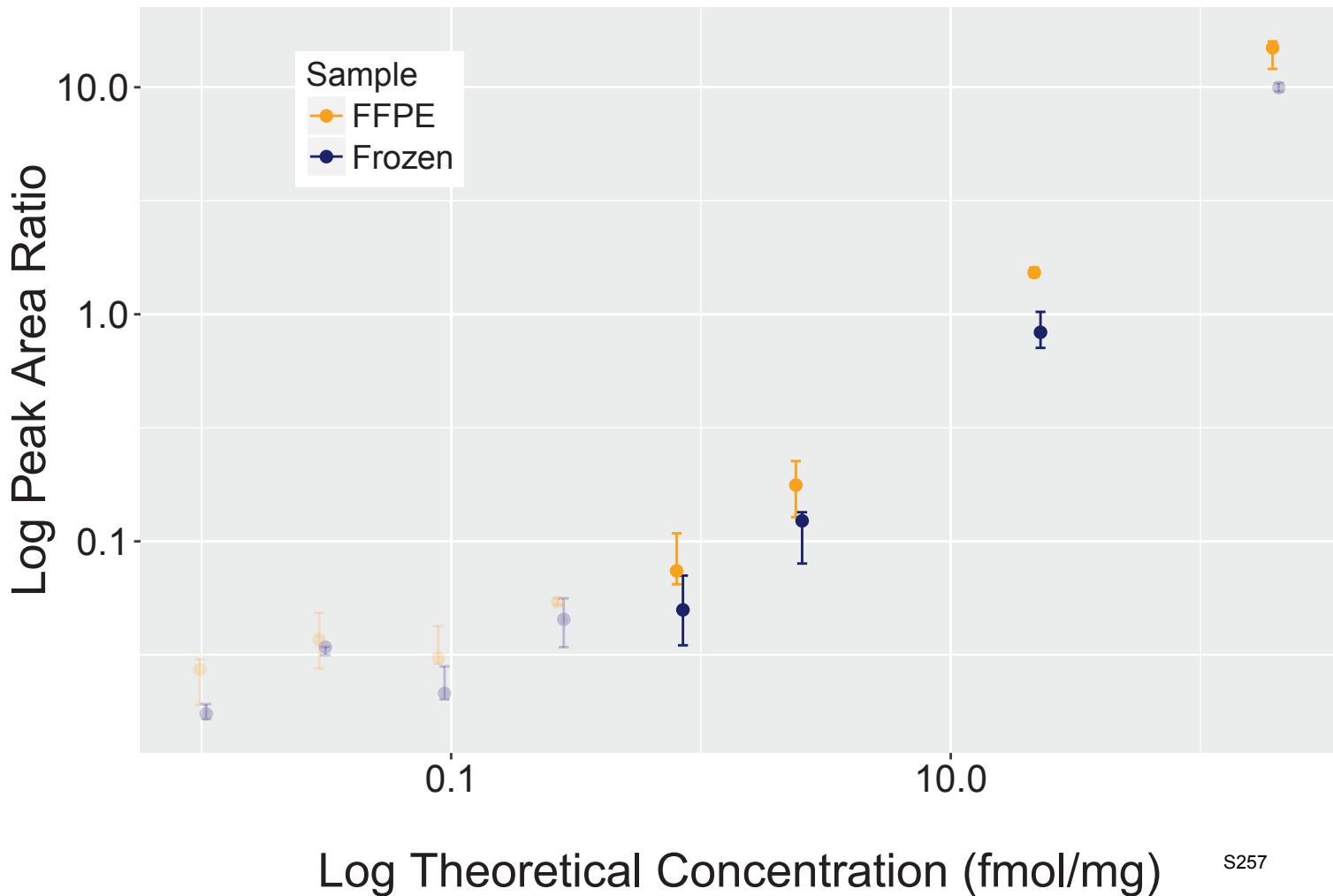
S255

Analyte: AKR1A1.GLEVTAISPLGSSDR

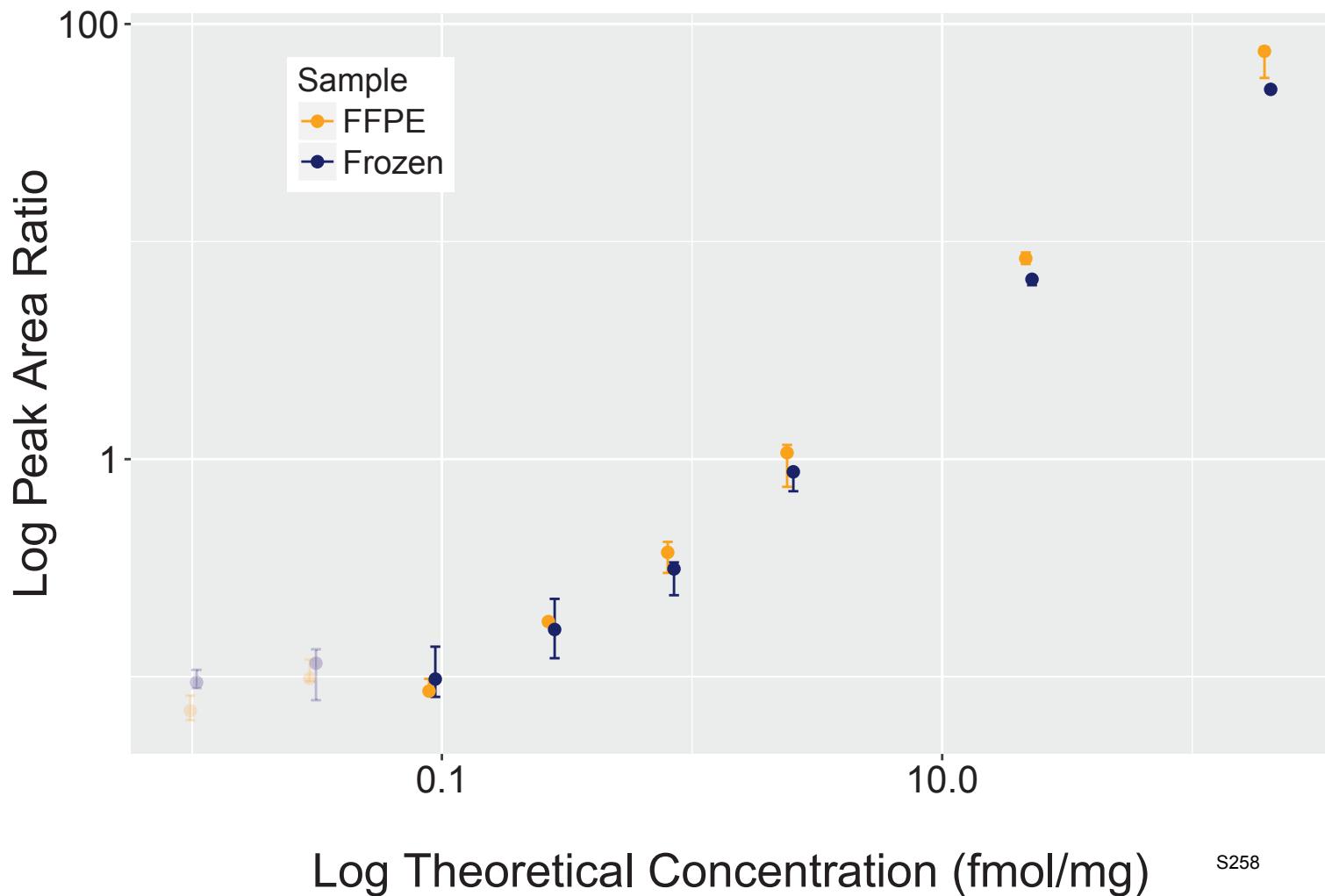


S²⁵⁶

Analyte: PRDX3.GLFIIDPNGVIK

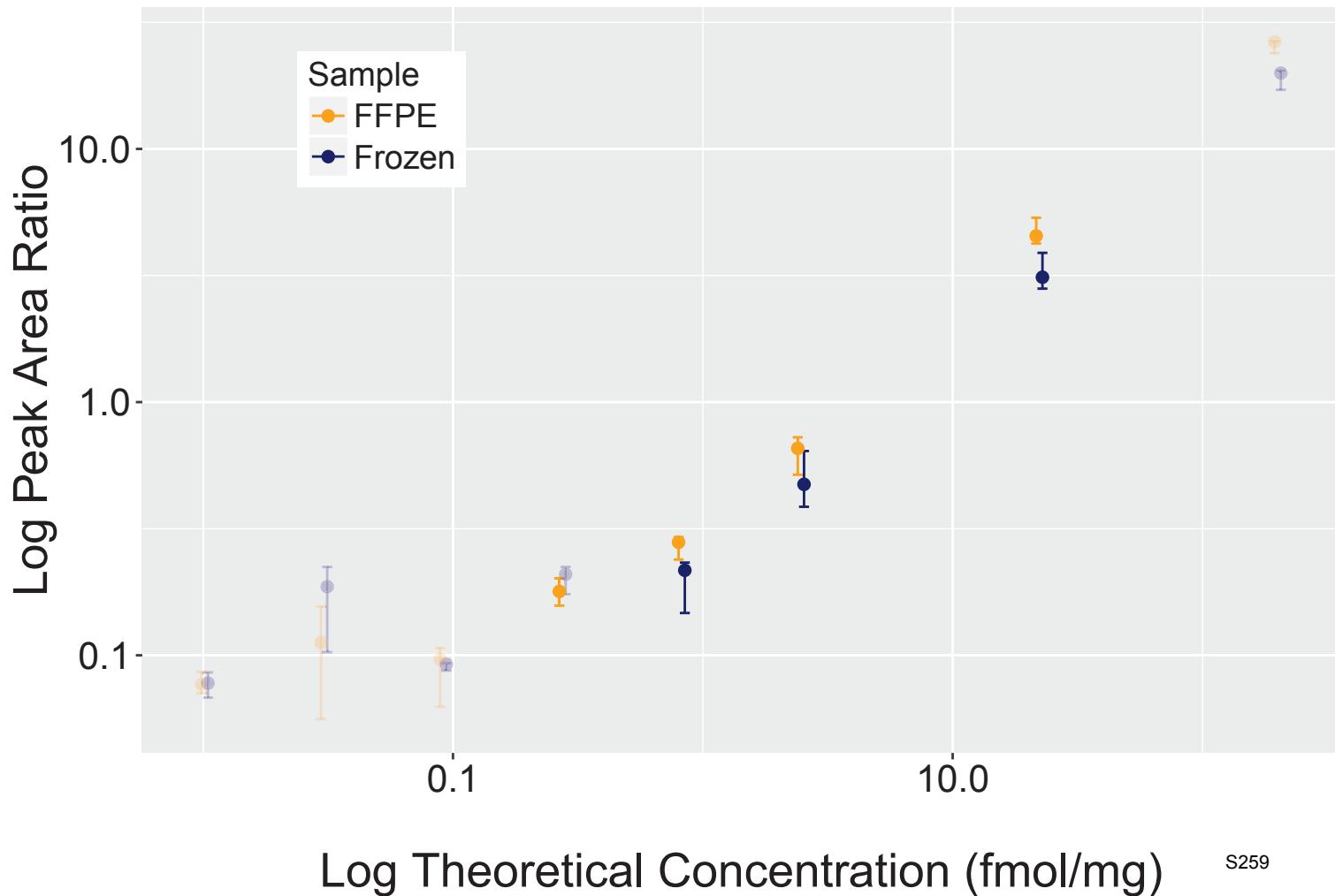


Analyte: RUVBL2.GLGLDDALEPR

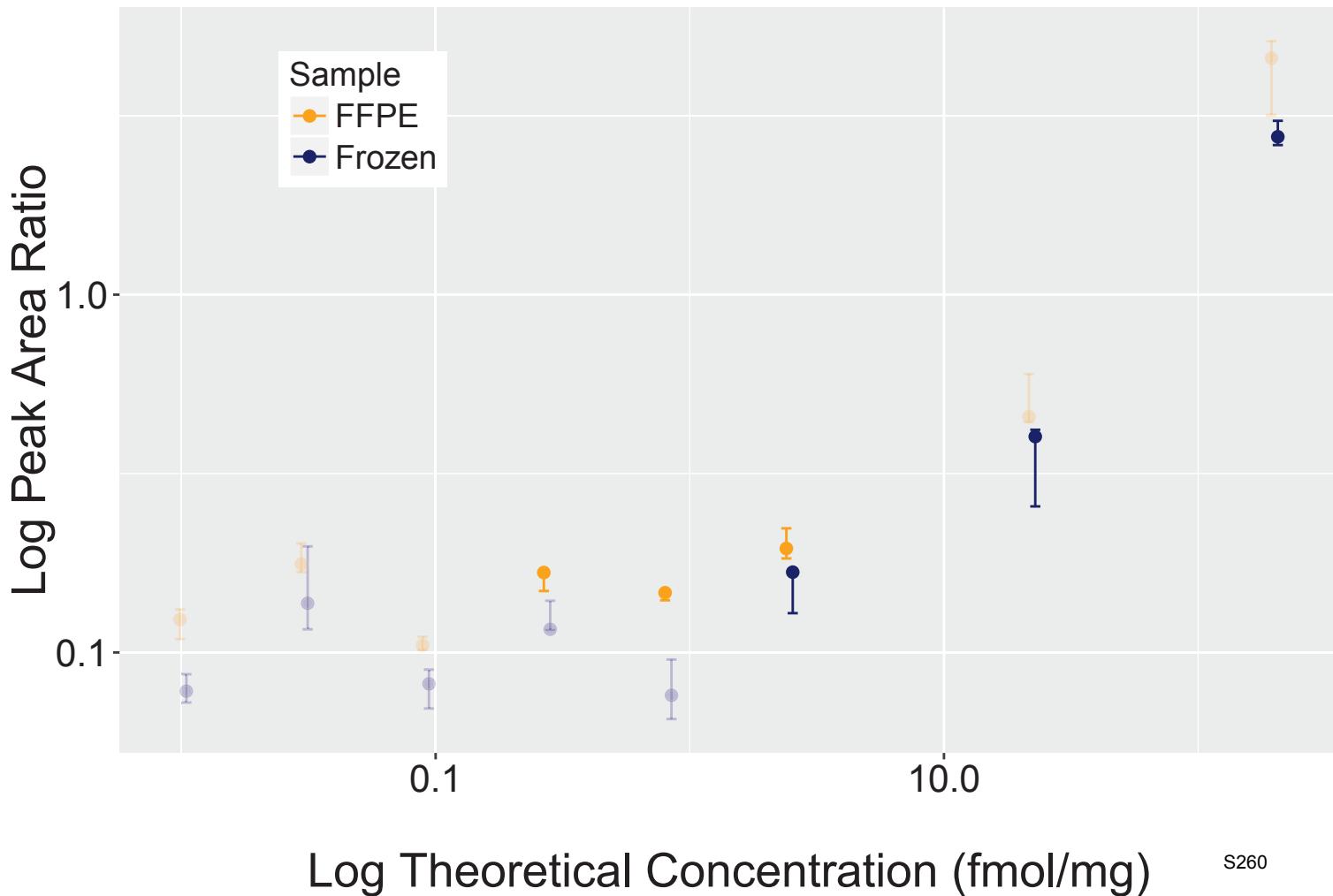


S²⁵⁸

Analyte: ISOC1.GLGSTVQEIDLTVK

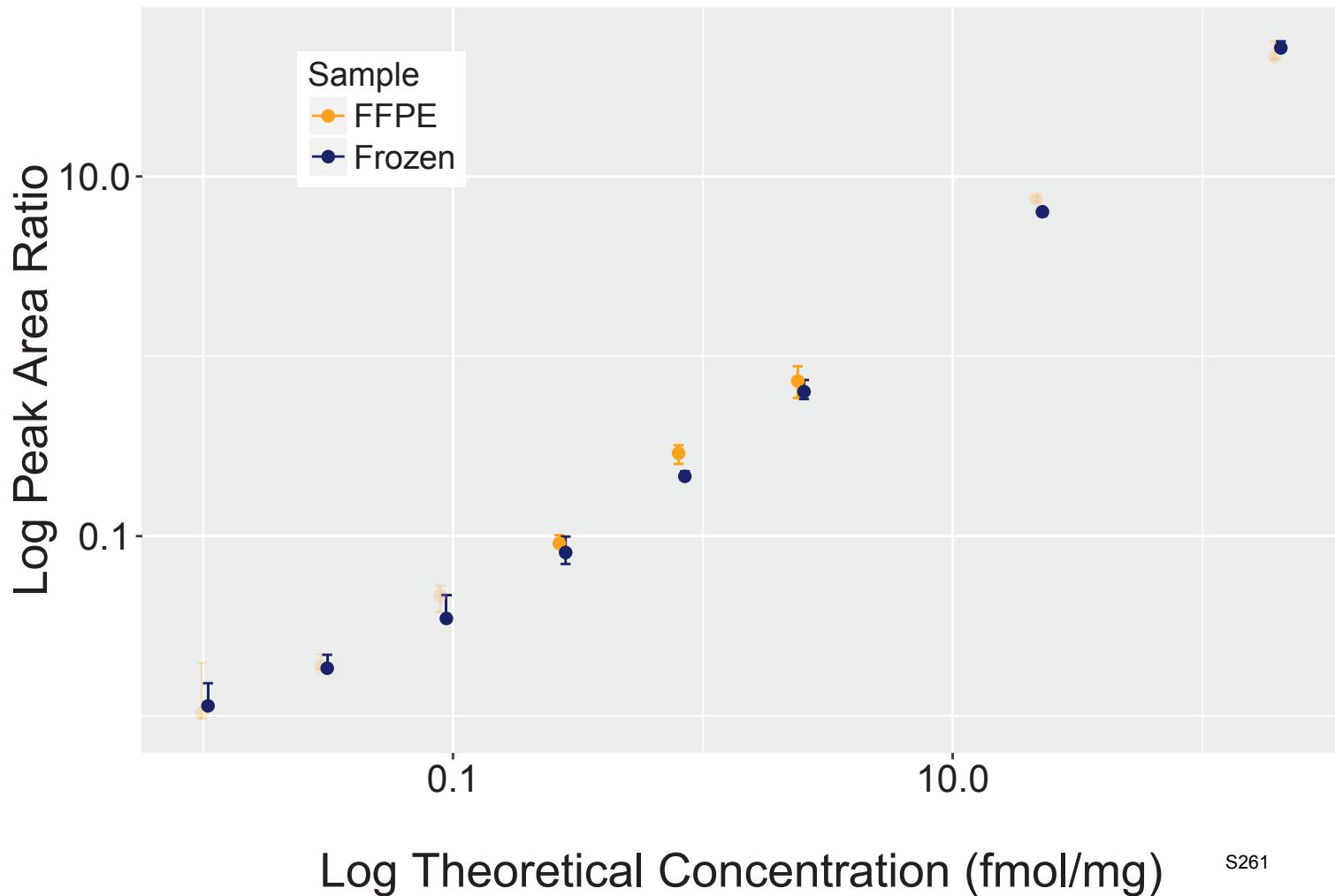


Analyte: ANXA4.GLGTDEDAAIISVLAGR

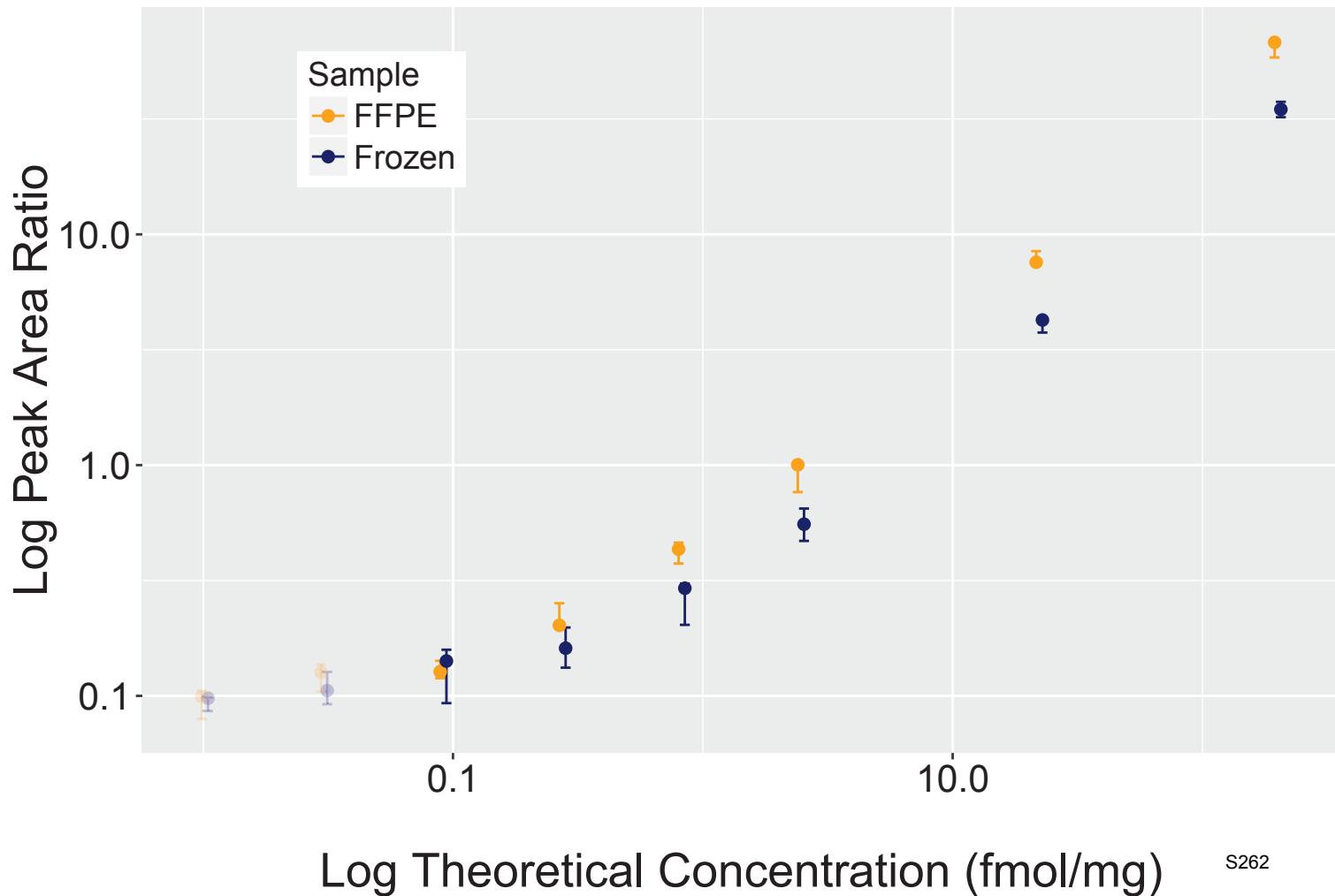


S²⁶⁰

Analyte: CYC1.GLLSSLDHTSIR

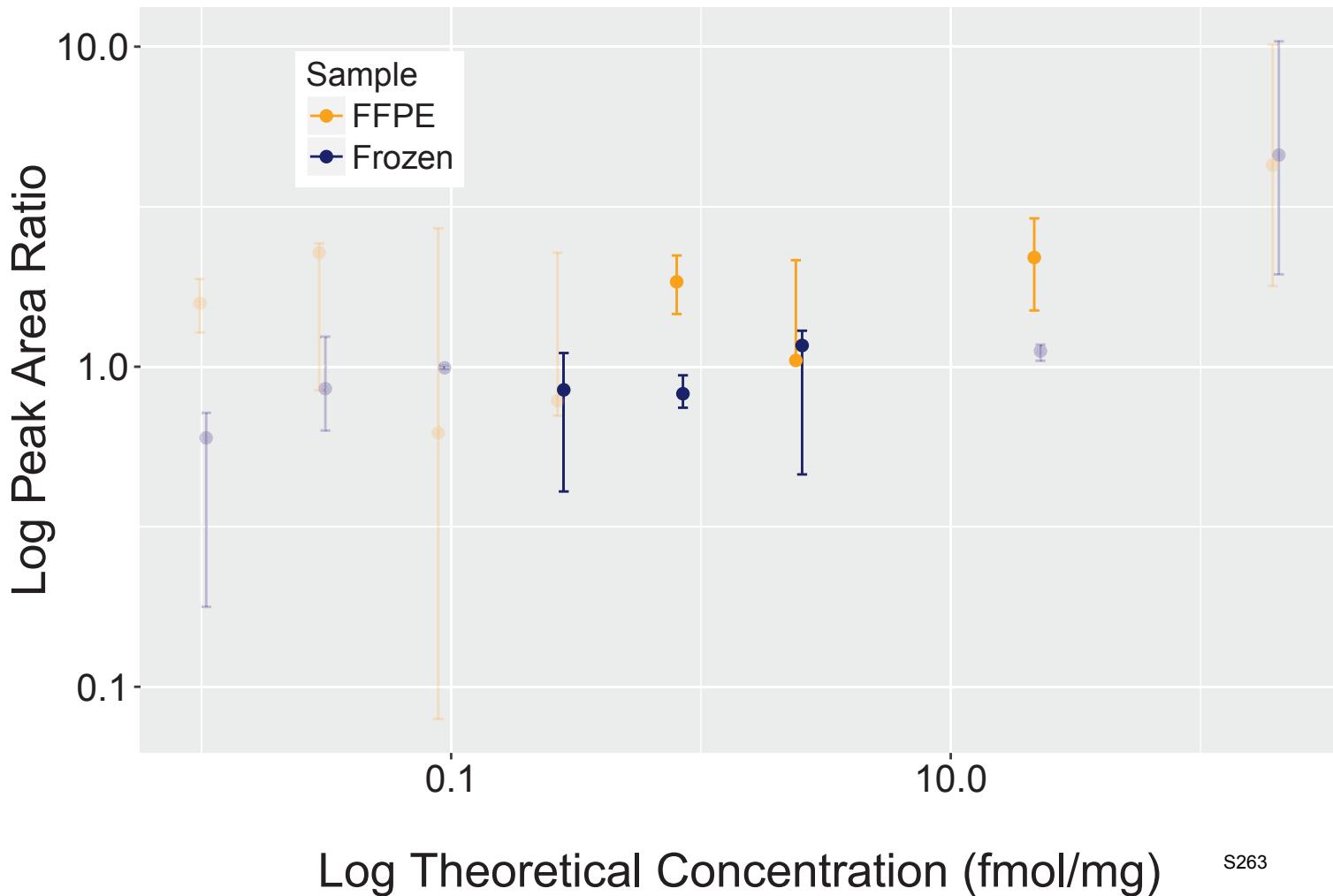


Analyte: UGP2.GLPDNISSVLNK



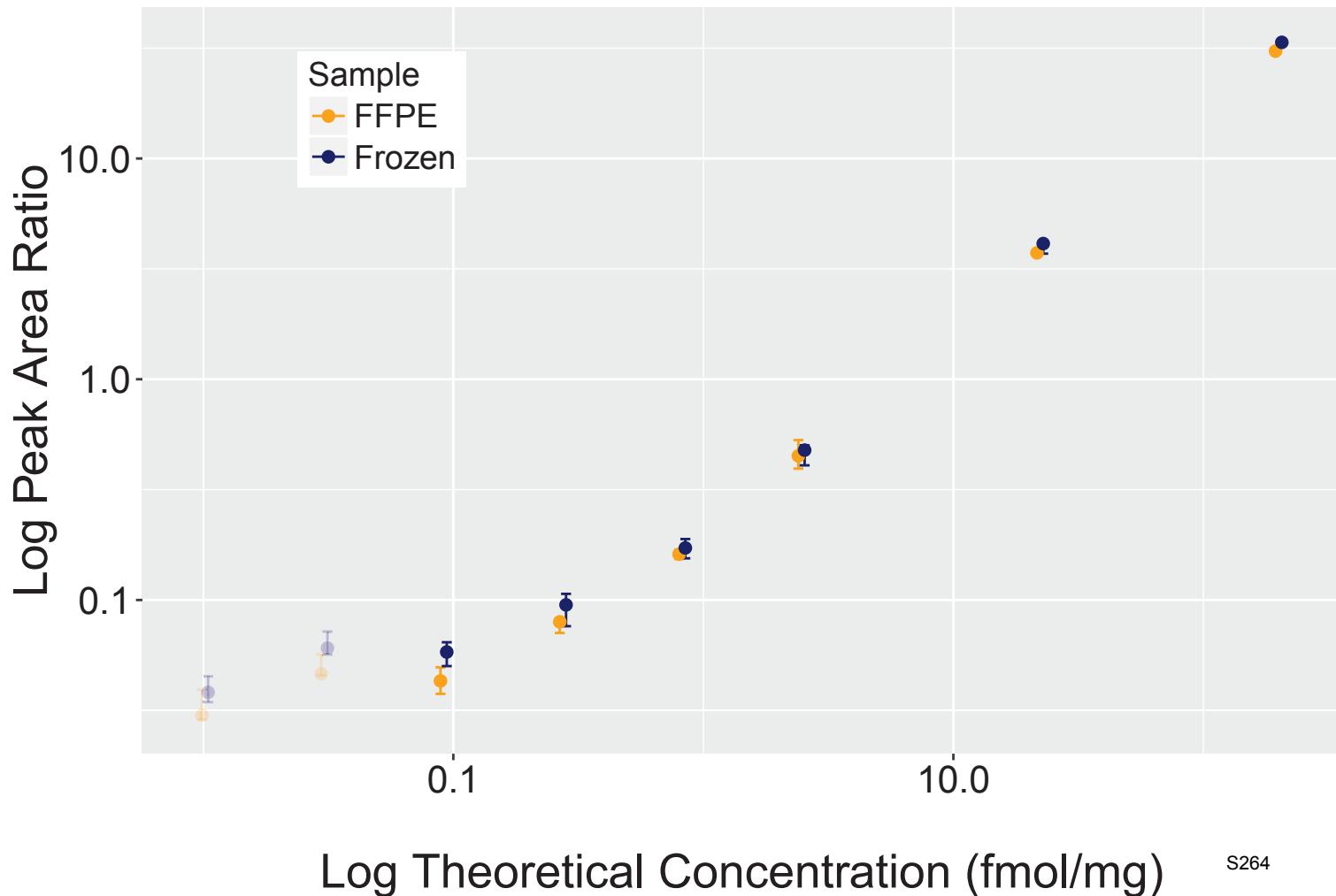
S²⁶²

Analyte: CNN2.GLQSGVDIGVK



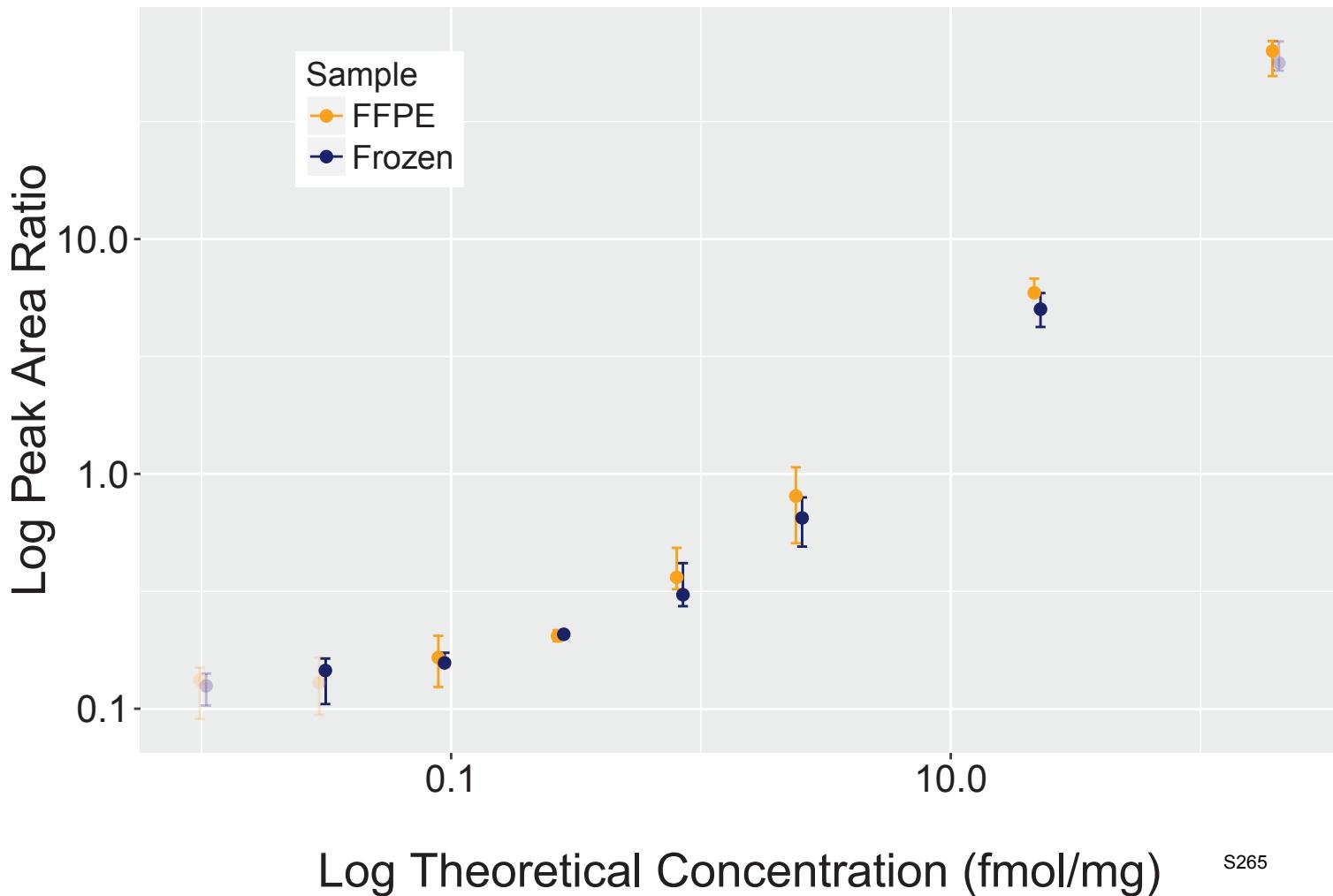
S²⁶³

Analyte: ERBB2.GLQSLPTHDP SPLQR



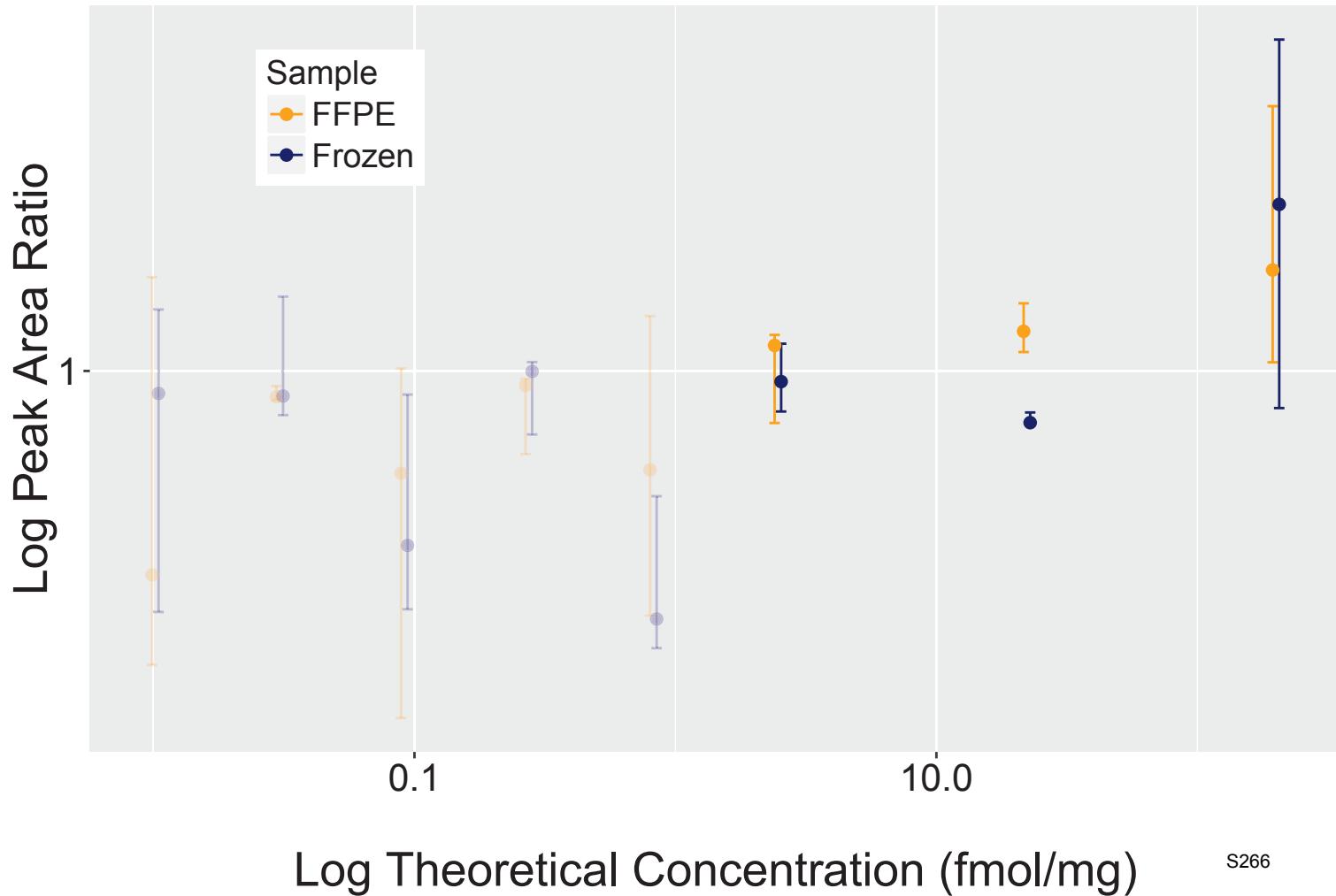
S264

Analyte: SLC25A1.GLSSLLYGSIPK

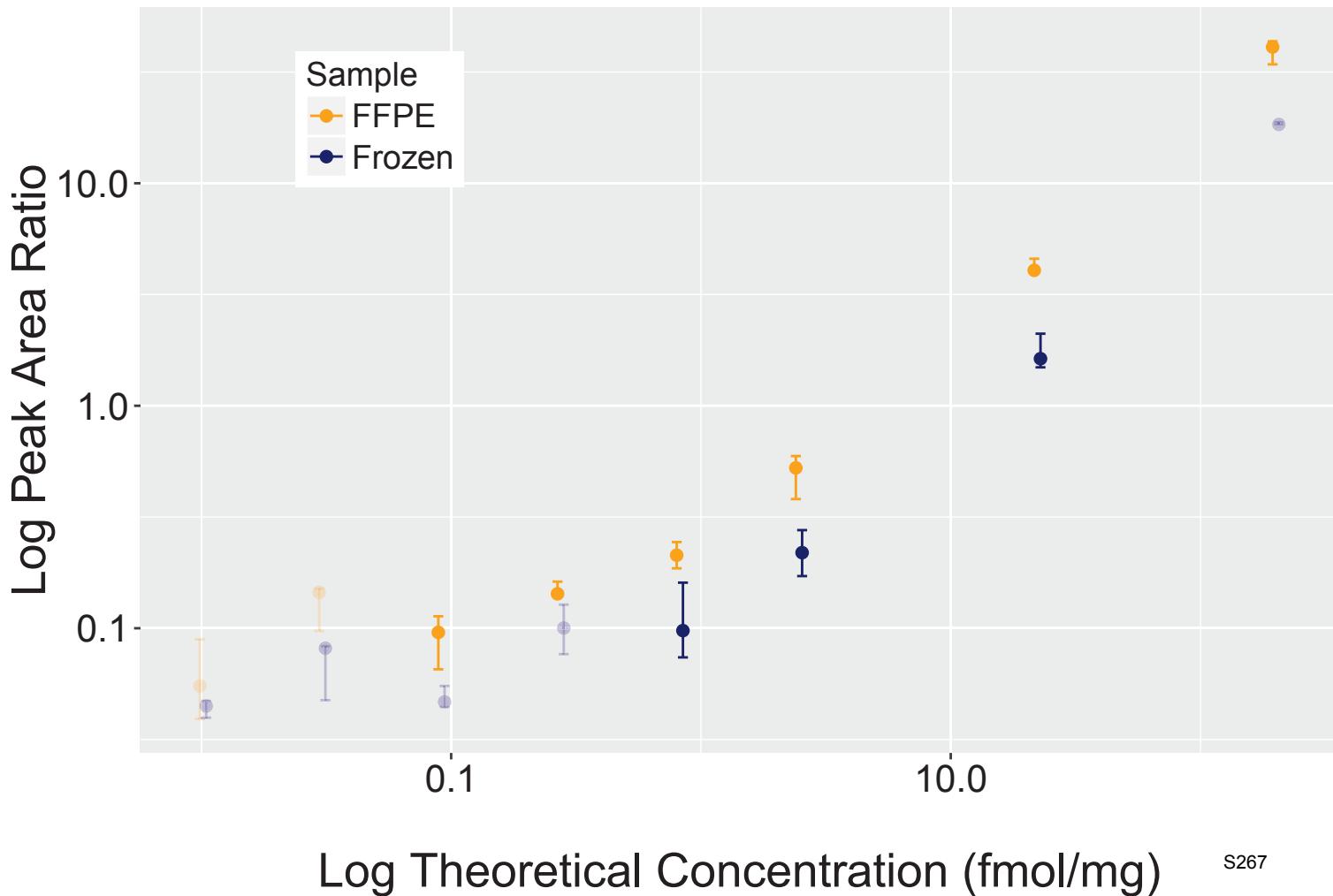


S²⁶⁵

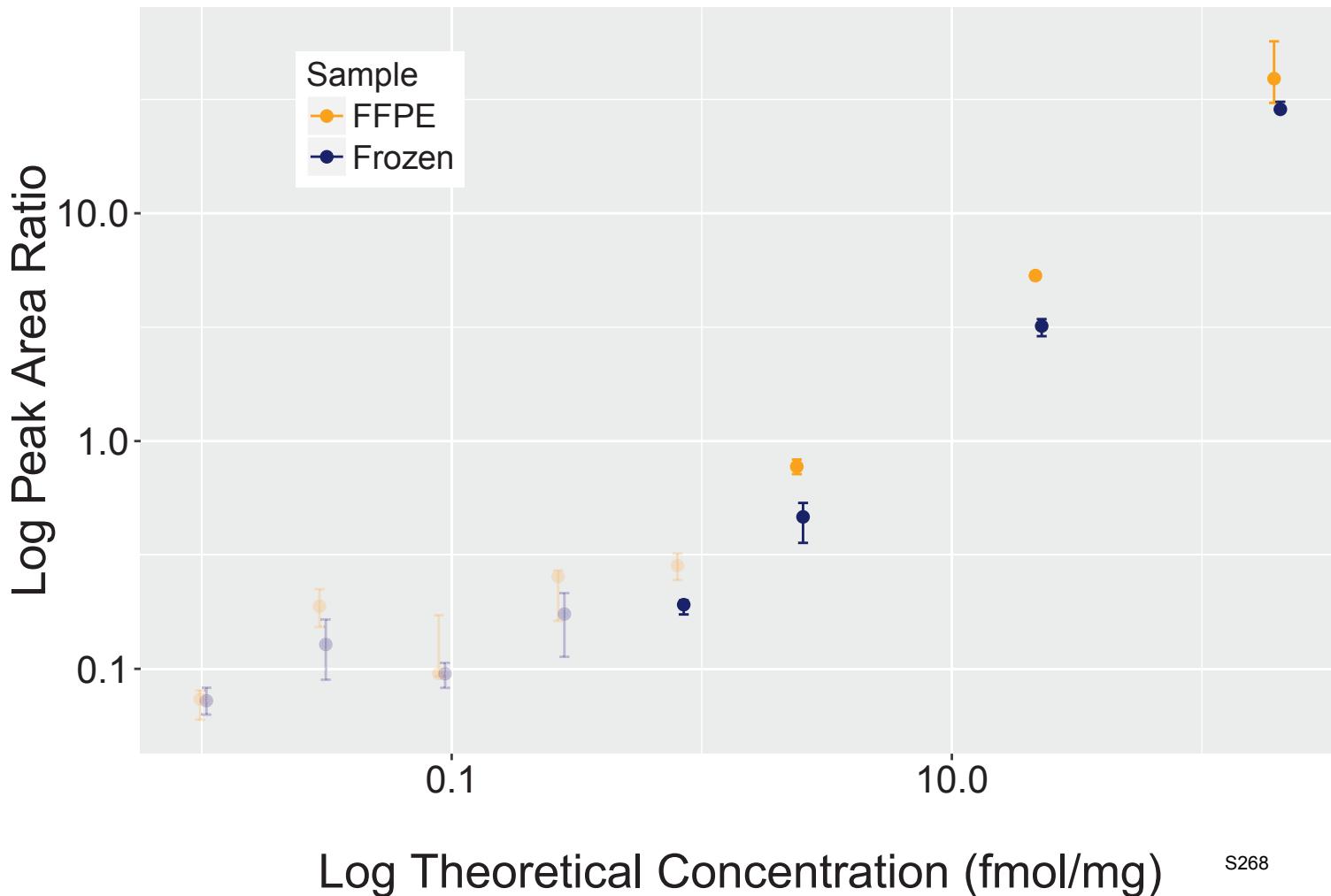
Analyte: APOA1BP.GLTVPIASIDIPSGWDVEK



Analyte: AKR1A1.GLVQALGLSNFNSR

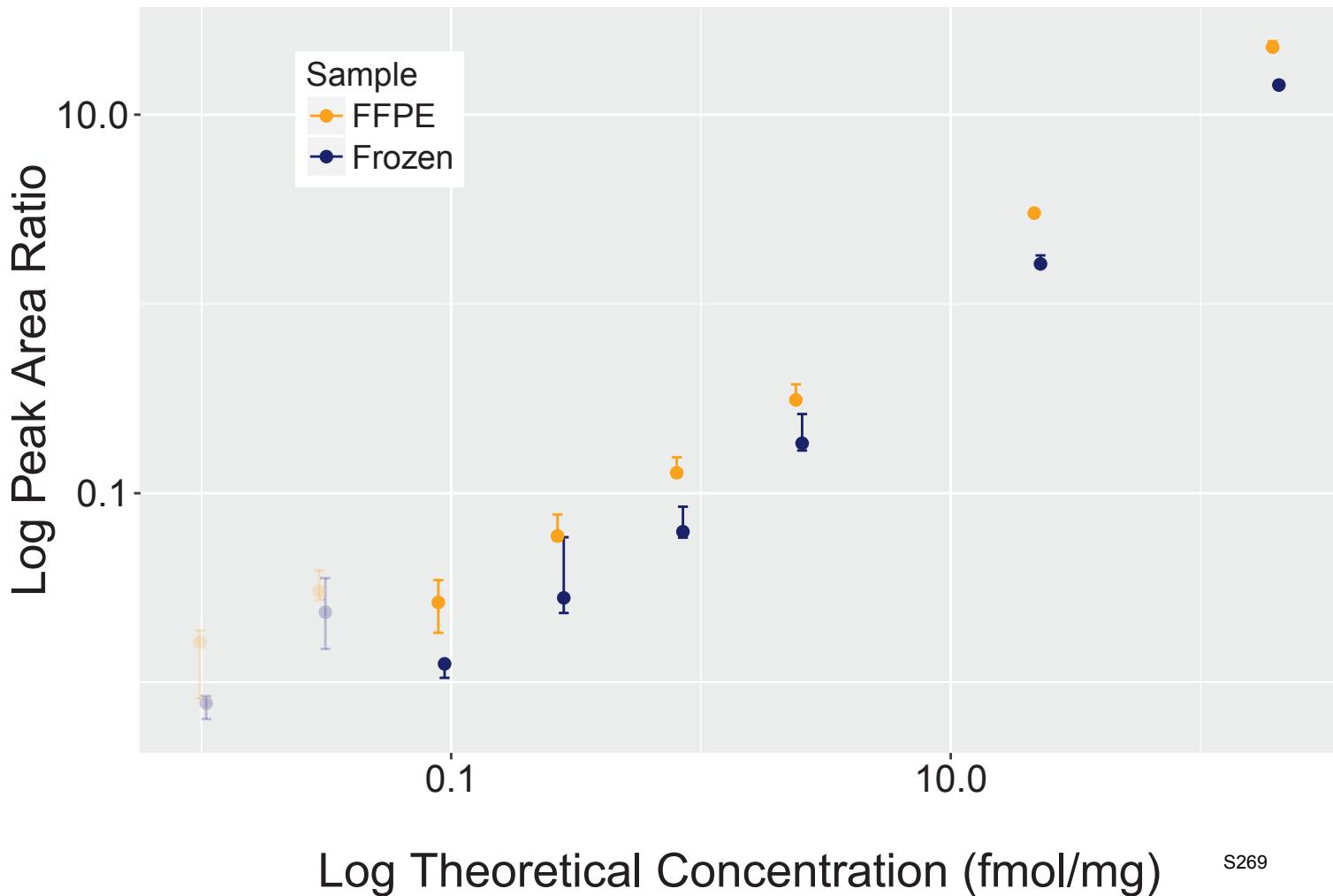


Analyte: DPYSL2.GLYDGPVC[+57]EVSVTPK



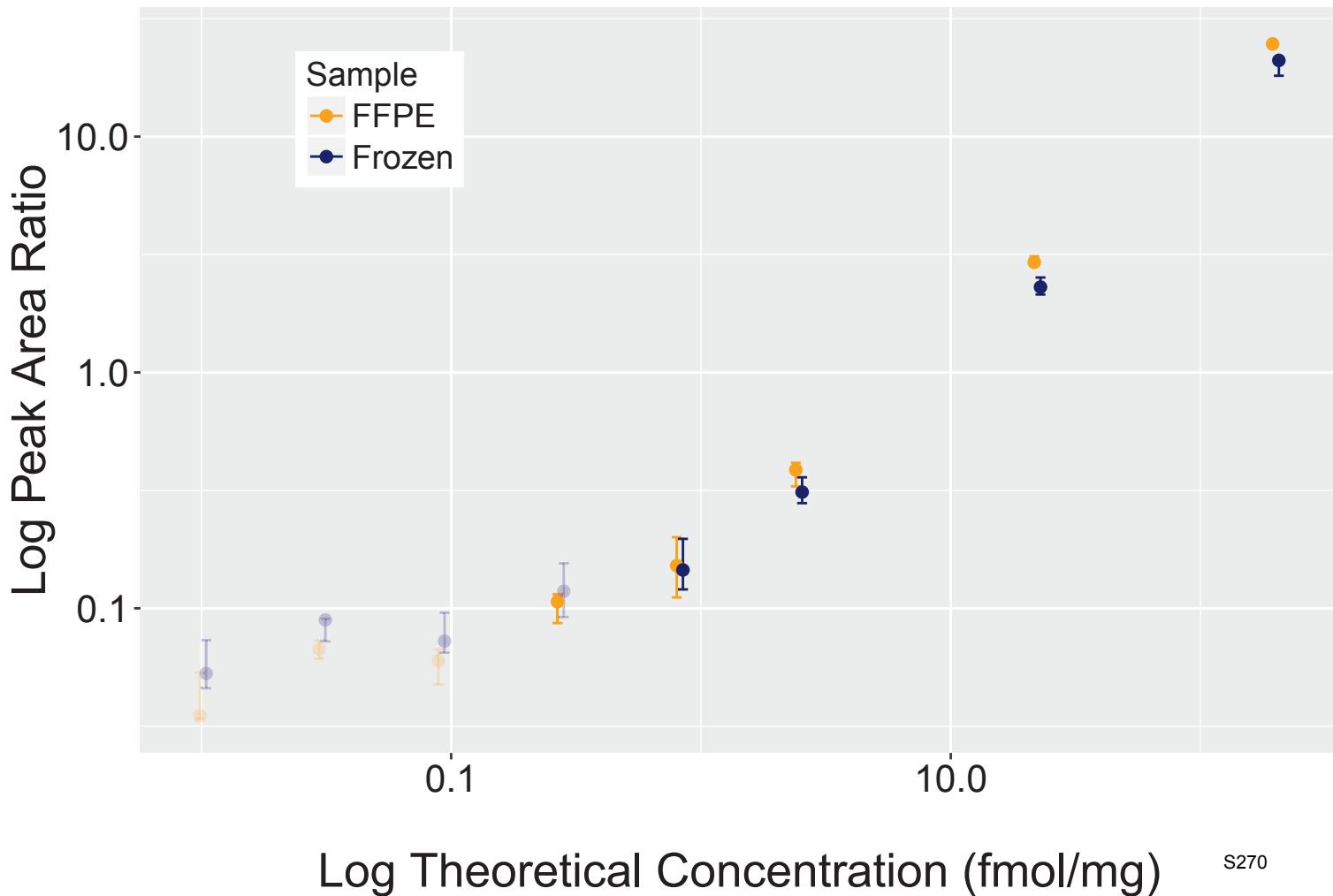
S²⁶⁸

Analyte: CALD1.GNVFSSPTAAGTPNK

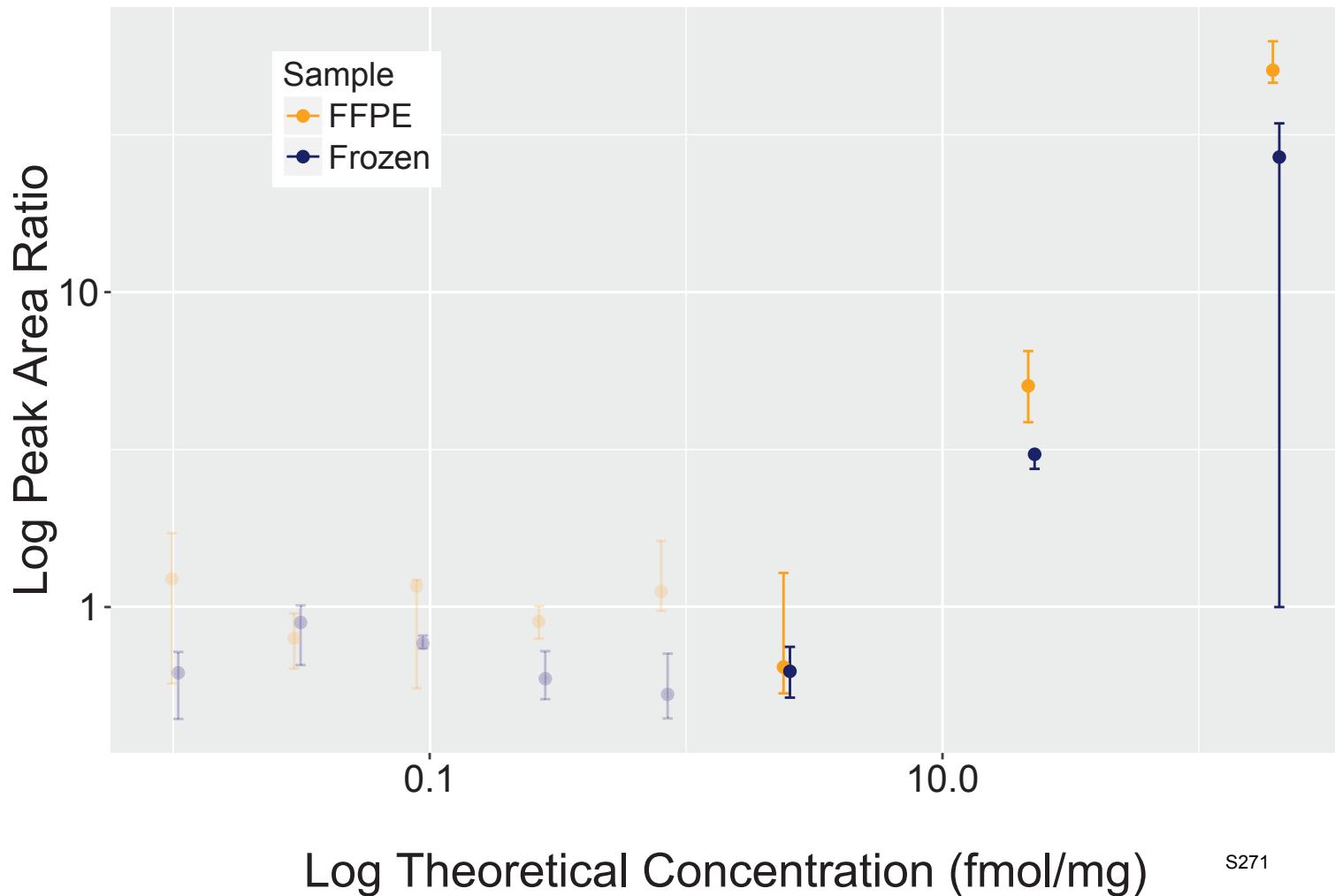


S²⁶⁹

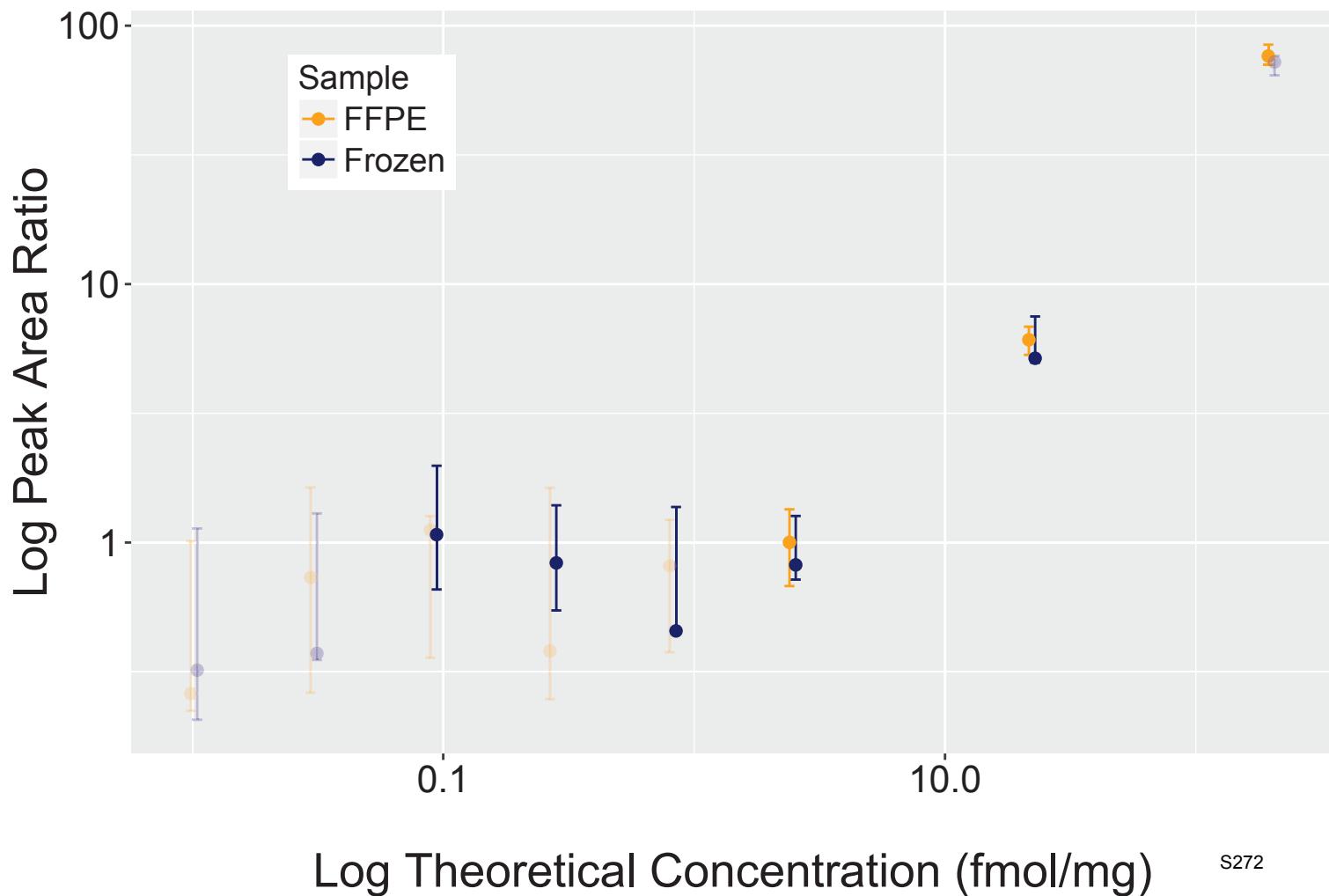
Analyte: DUT.GNPGVVLNFNGK



Analyte: STOM.GPGLFFILPC[+57]TDSFIK

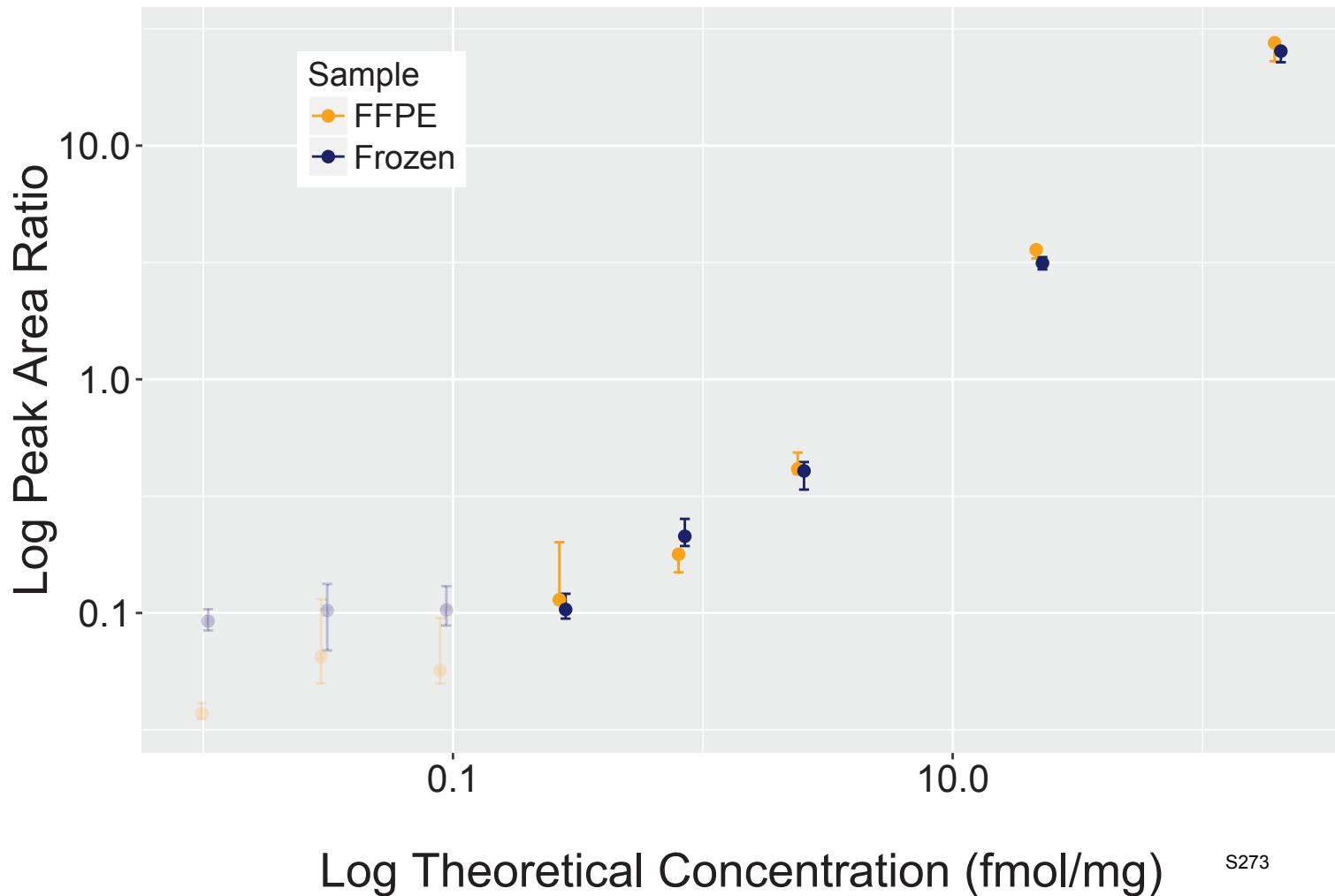


Analyte: NT5E.GPIOASQISGLYLPYK



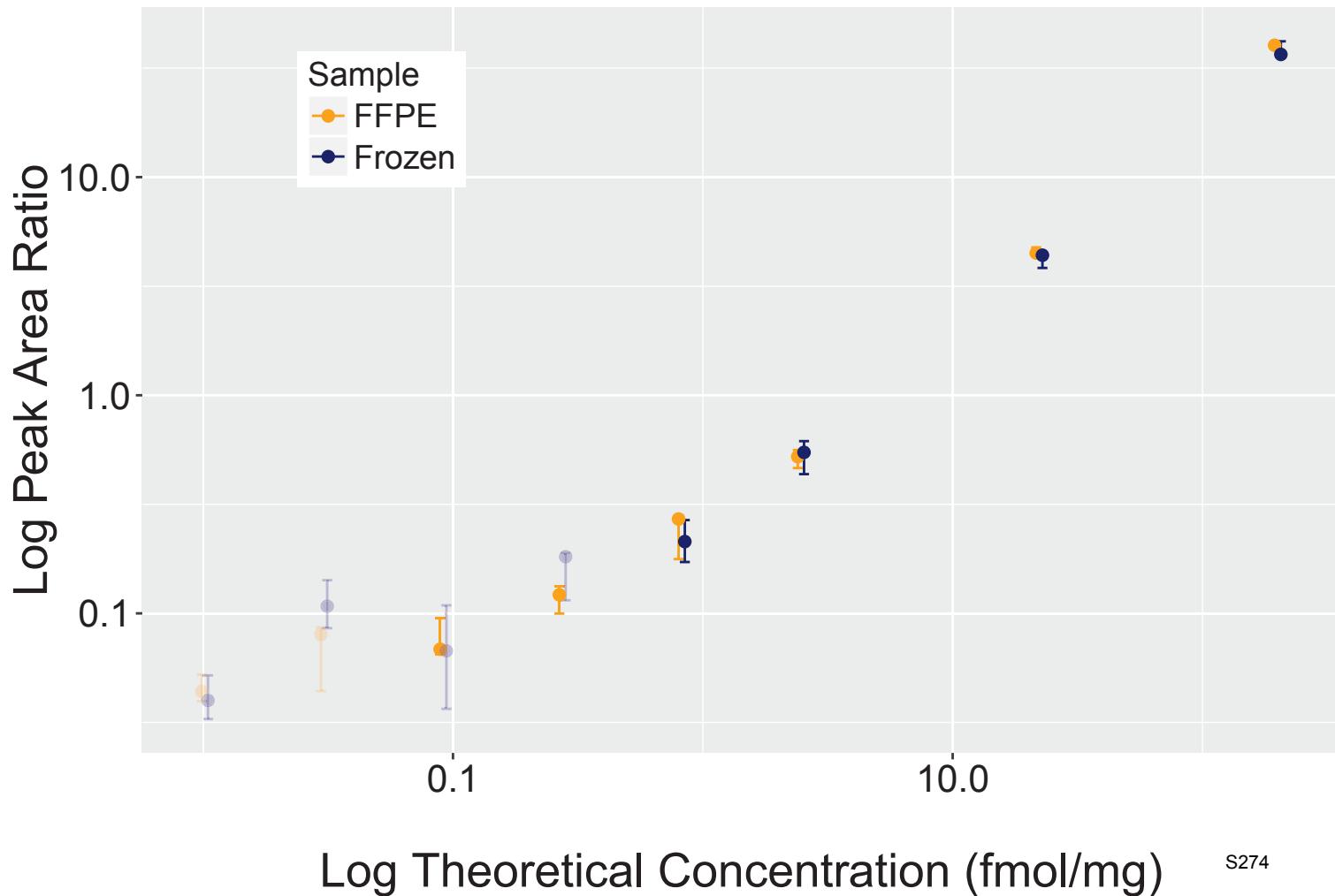
S272

Analyte: CYB5R3.GPSGLLVYQGK

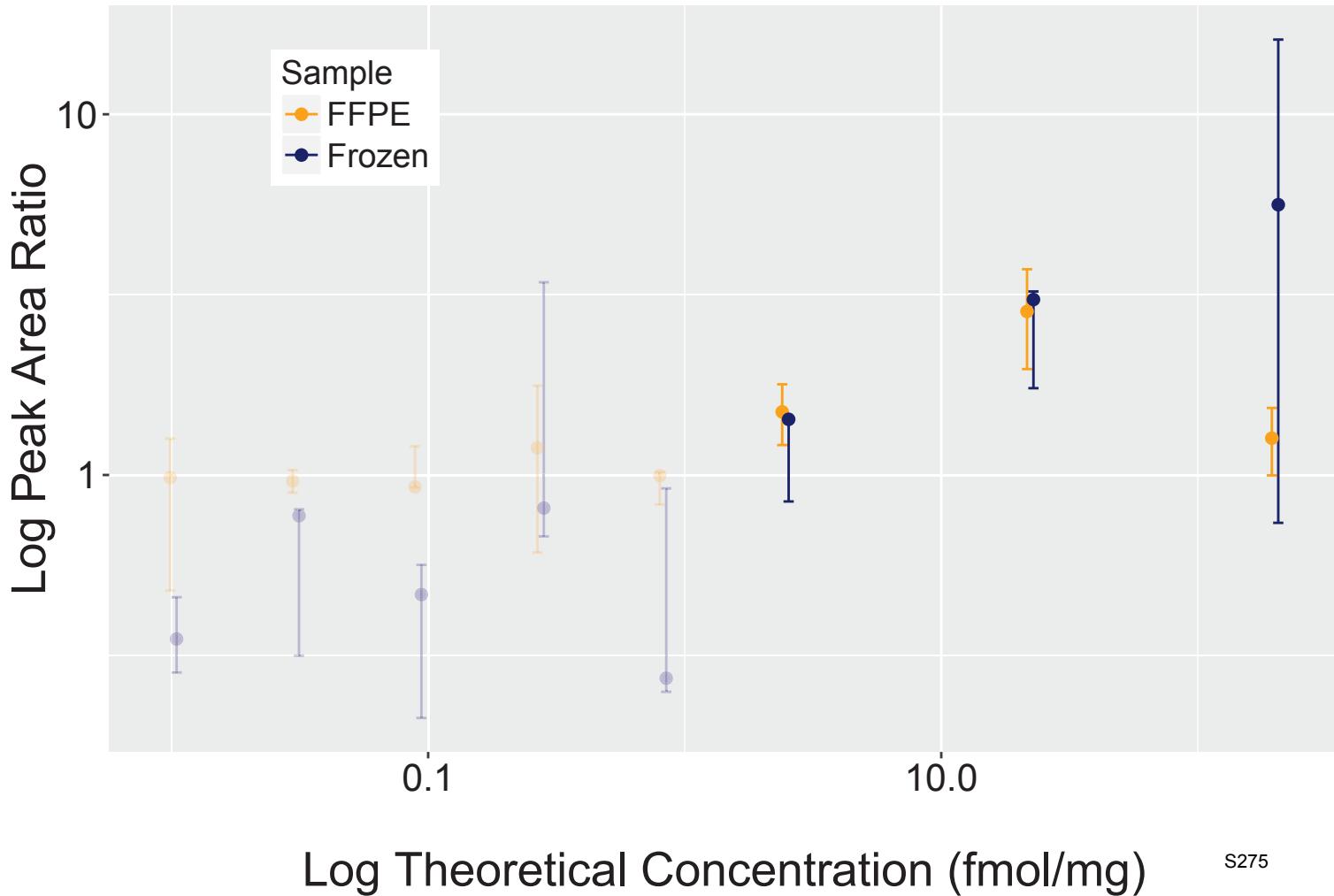


S273

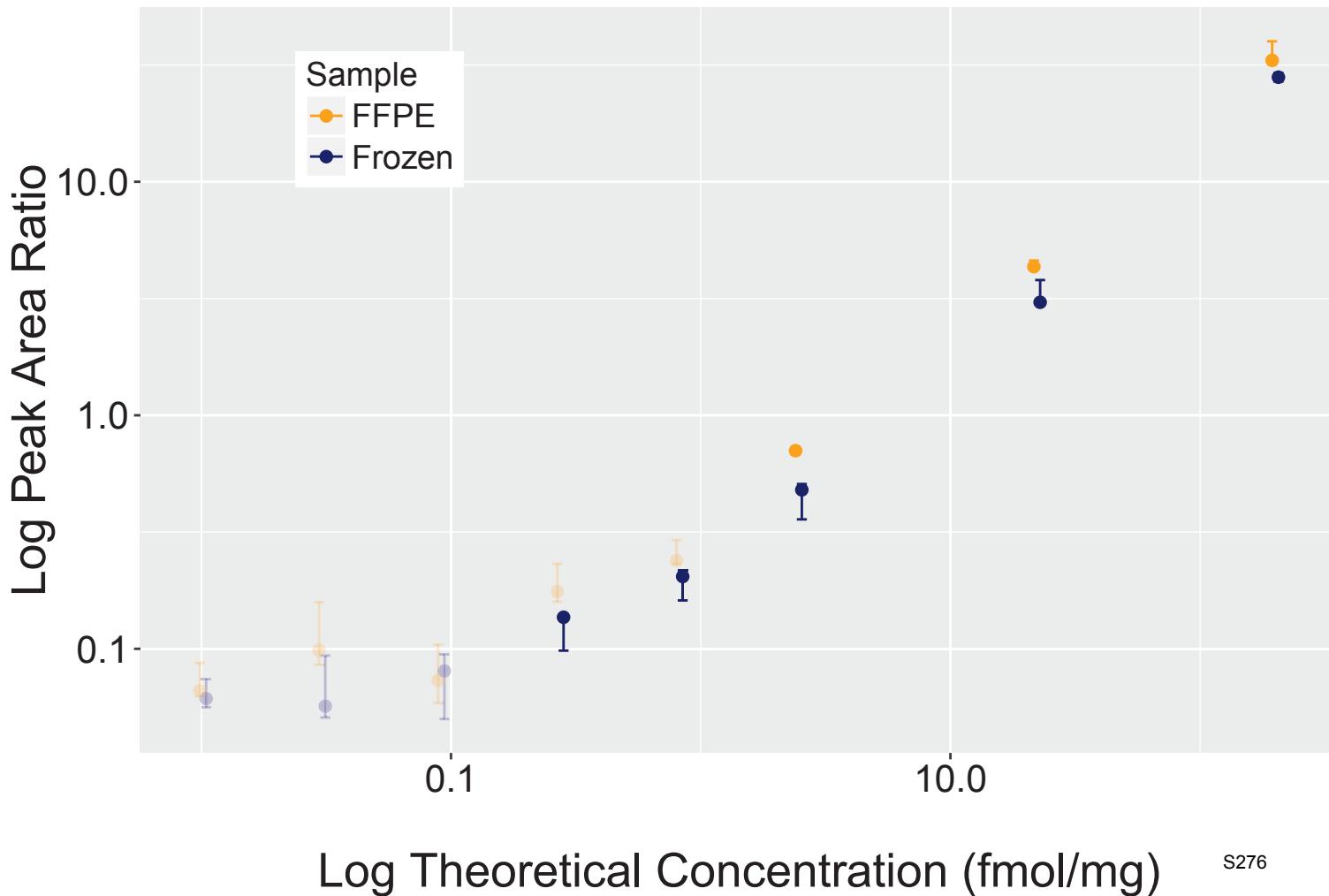
Analyte: ALDH18A1.GPVGLEGLLTK



Analyte: PFKL.GQVQEVGWHDVAGWLGR

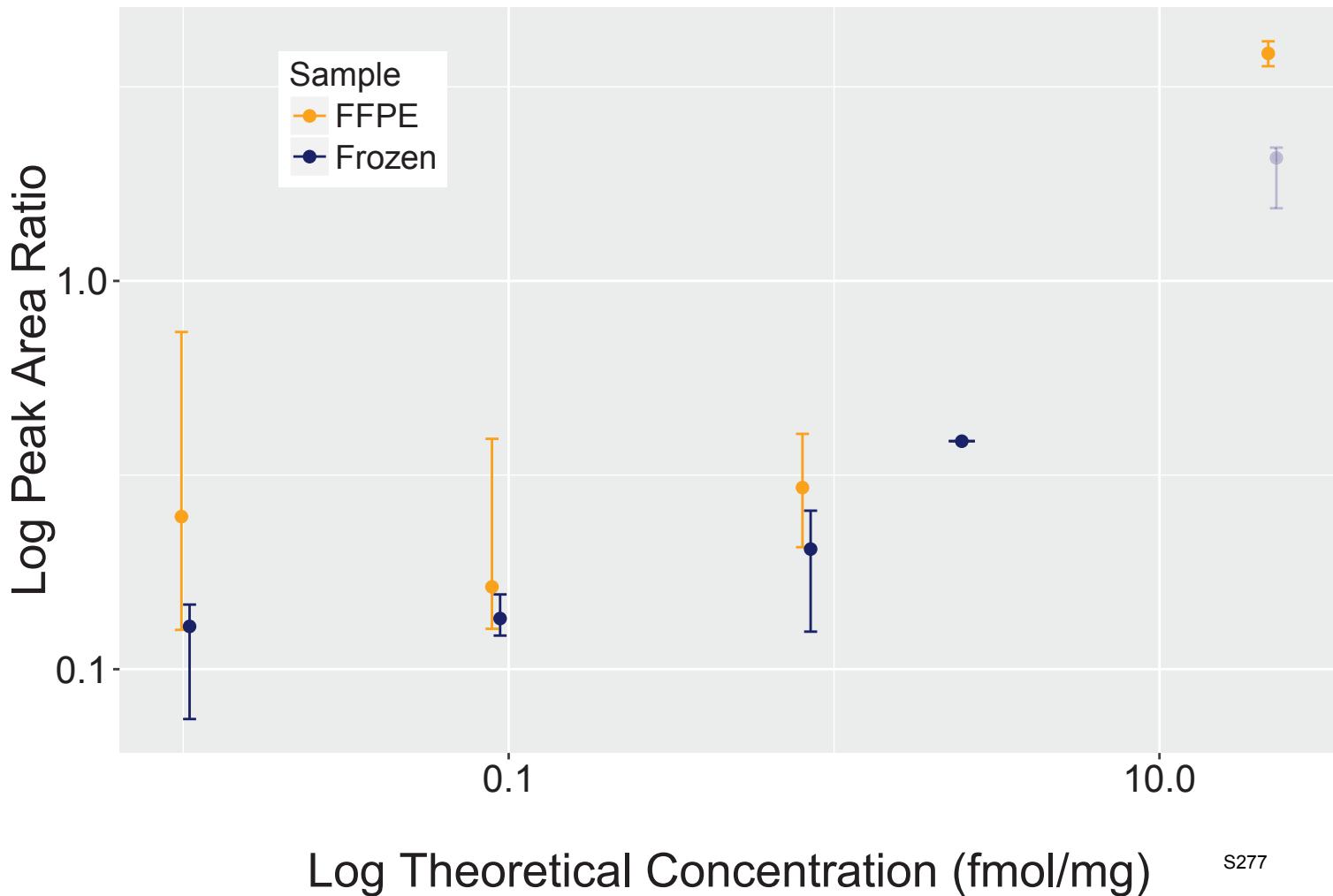


Analyte: DDX1.GSAFAIGSDGLC[+57]C[+57]QSR

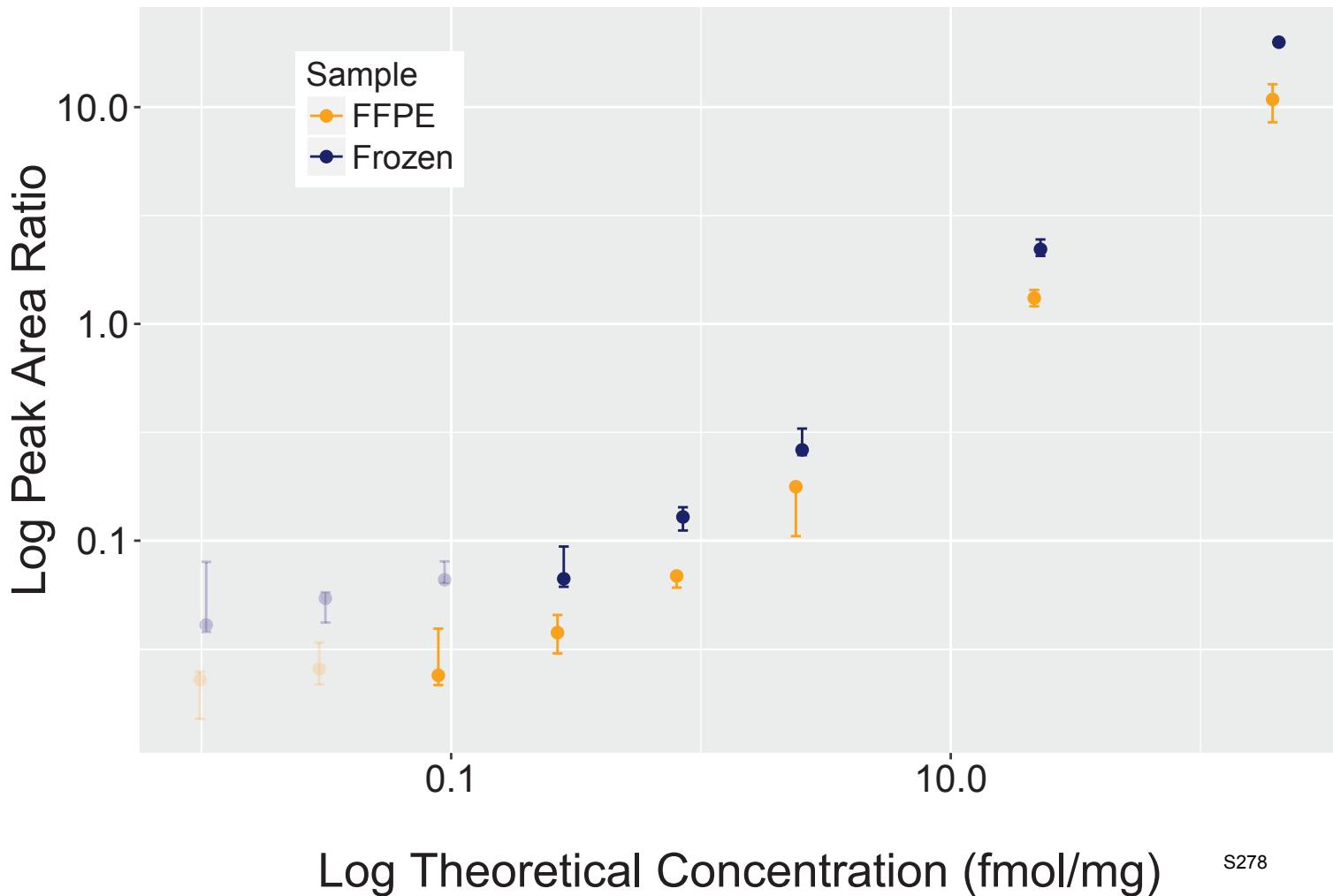


S276

Analyte: HEXB.GSIVWQEVFDDK

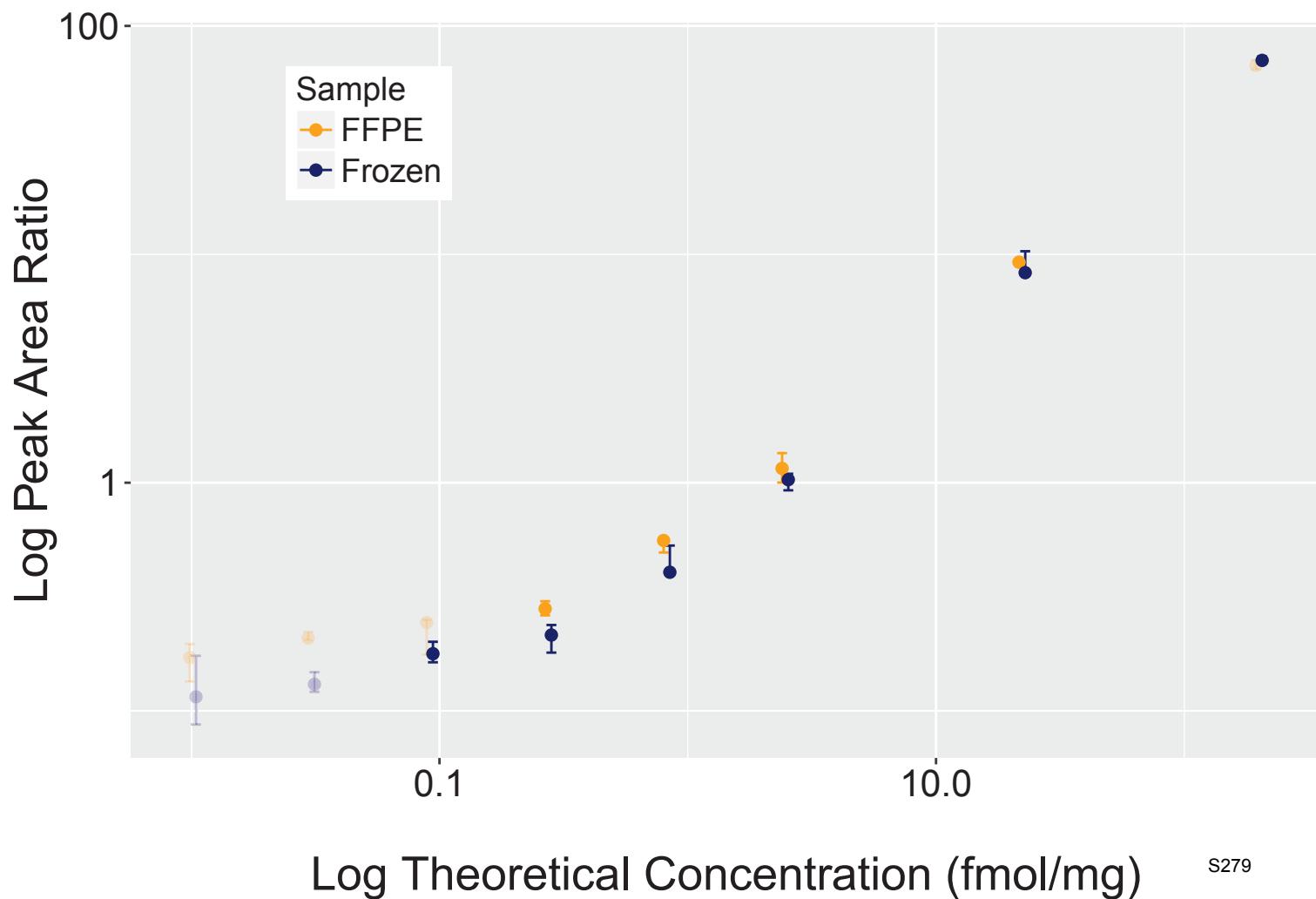


Analyte: PDIA6.GSTAPVGGGAFPTIVER



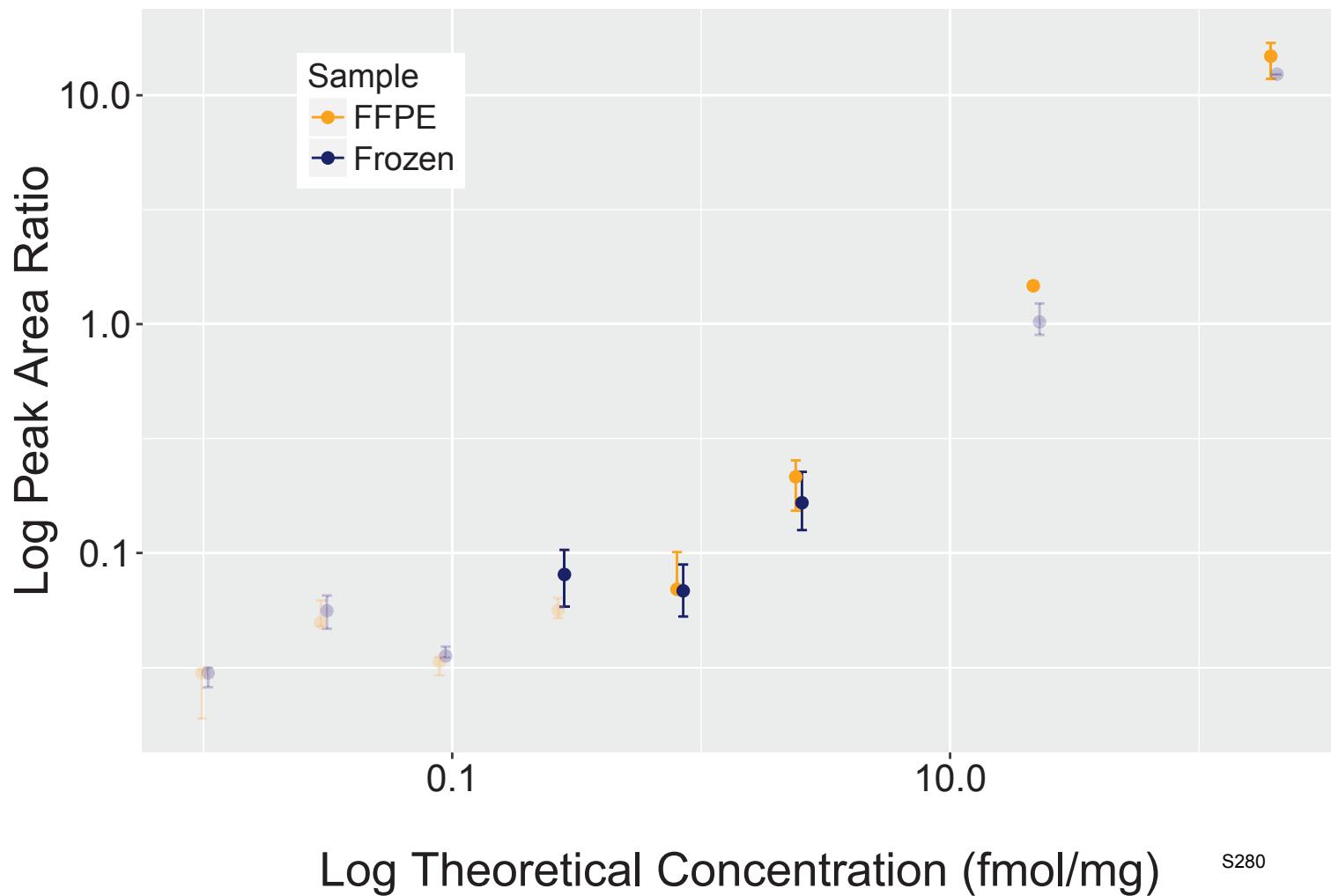
S278

Analyte: GLS.GSTHPQPGVSPPAAPAAPGPK

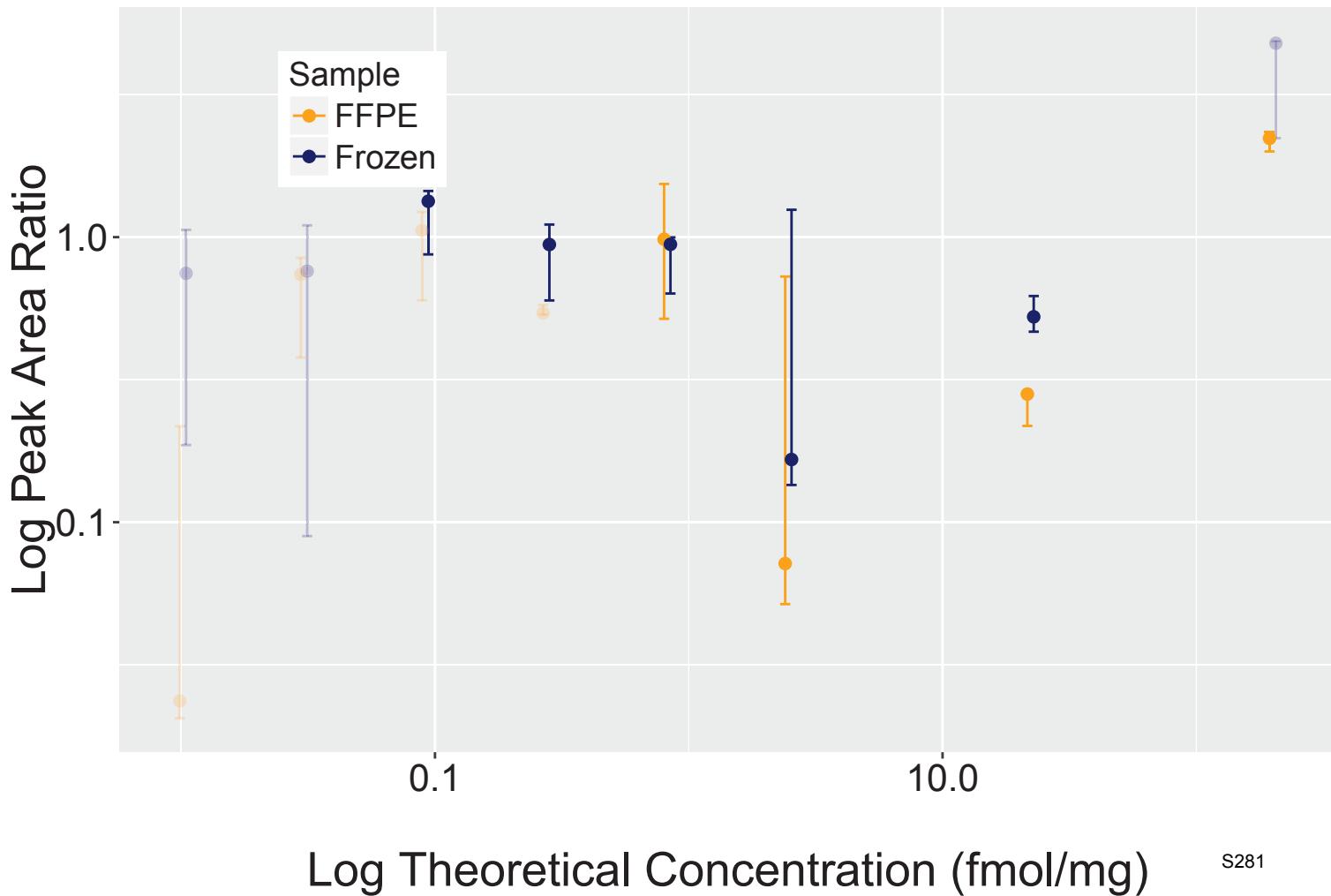


S²⁷⁹

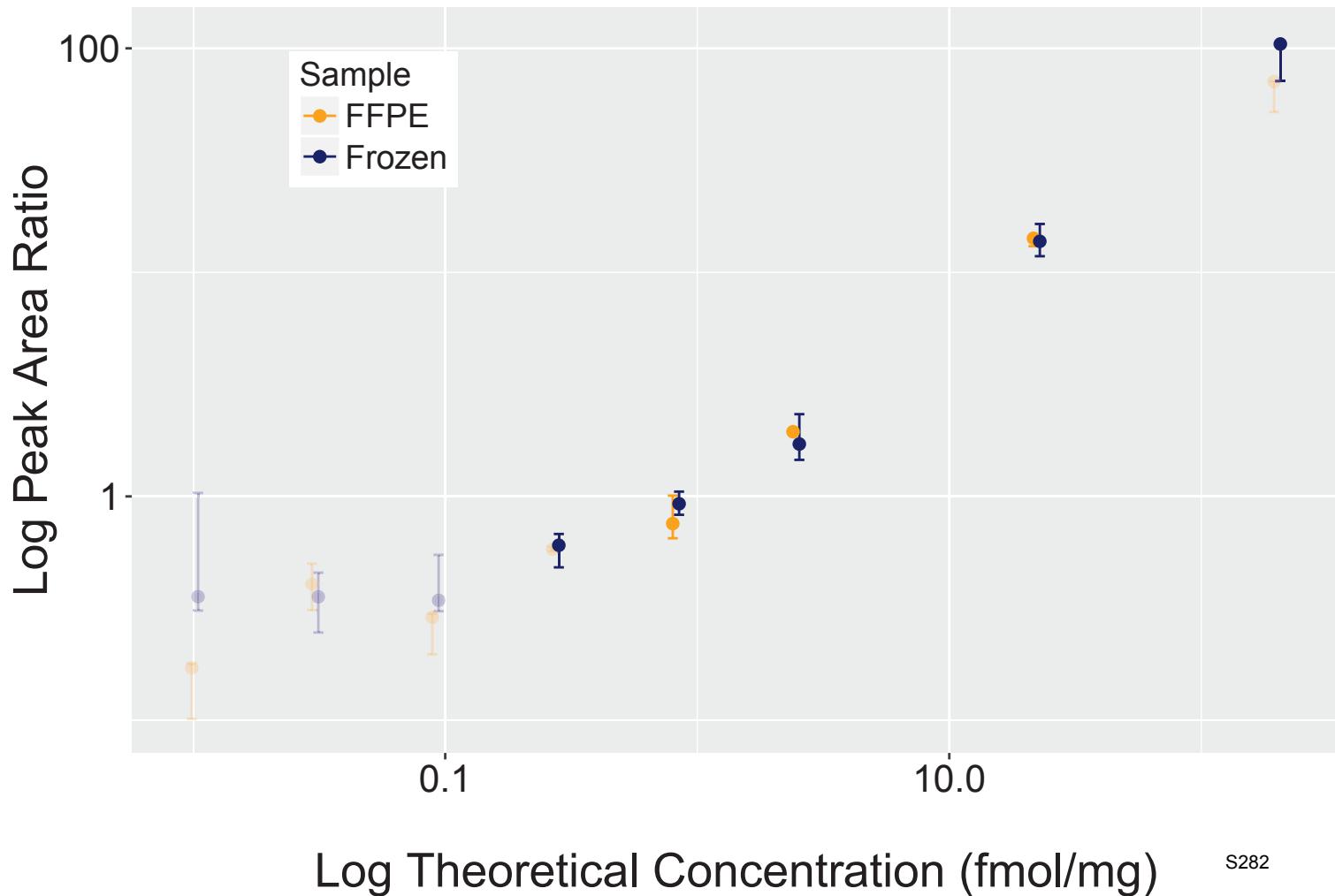
Analyte: ANXA1.GTDVNVFNTILTTR



Analyte: SSR1.GTEDFIVESLDASFR

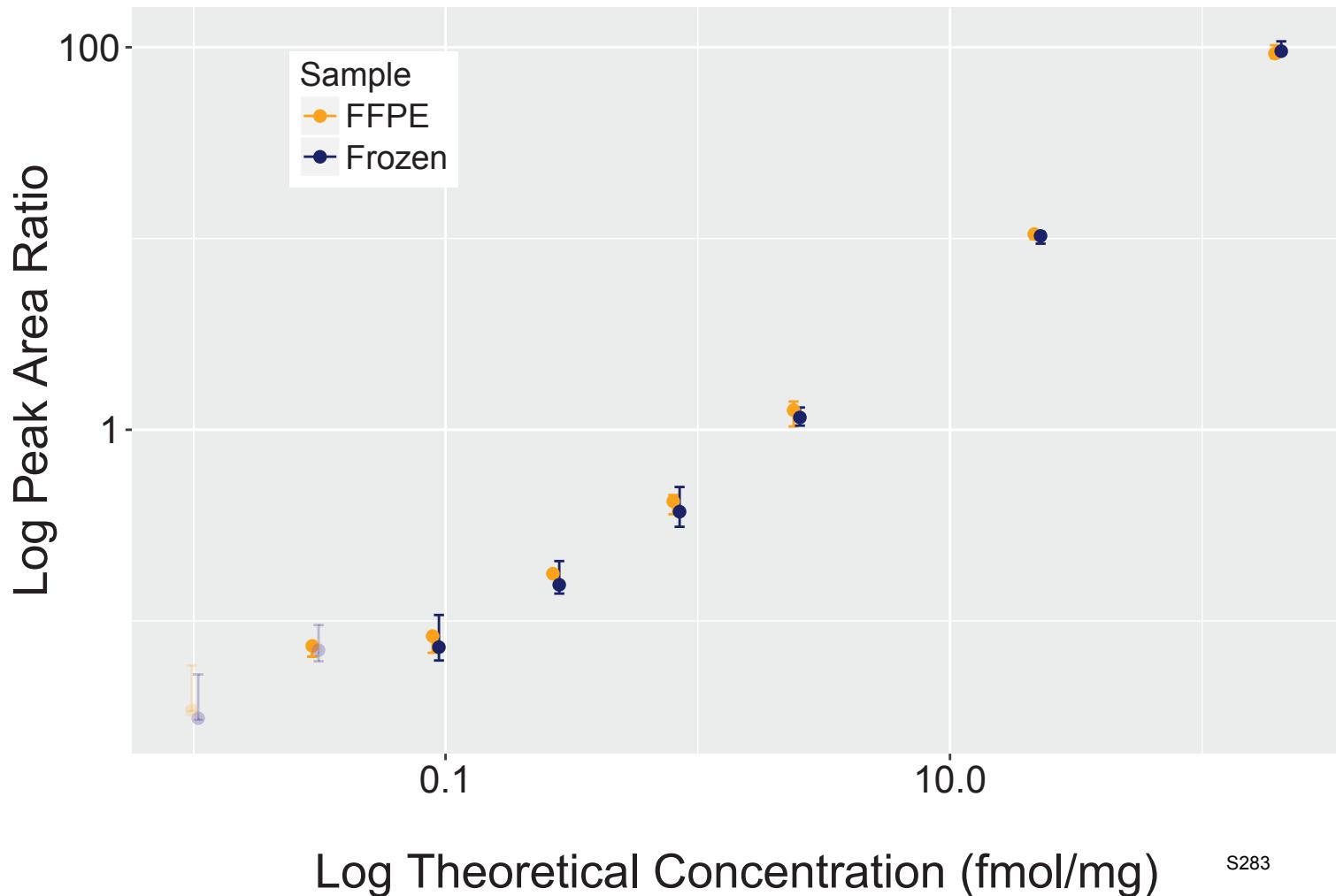


Analyte: ABAT.GTFC[+57]SFDTTPDDSSIR



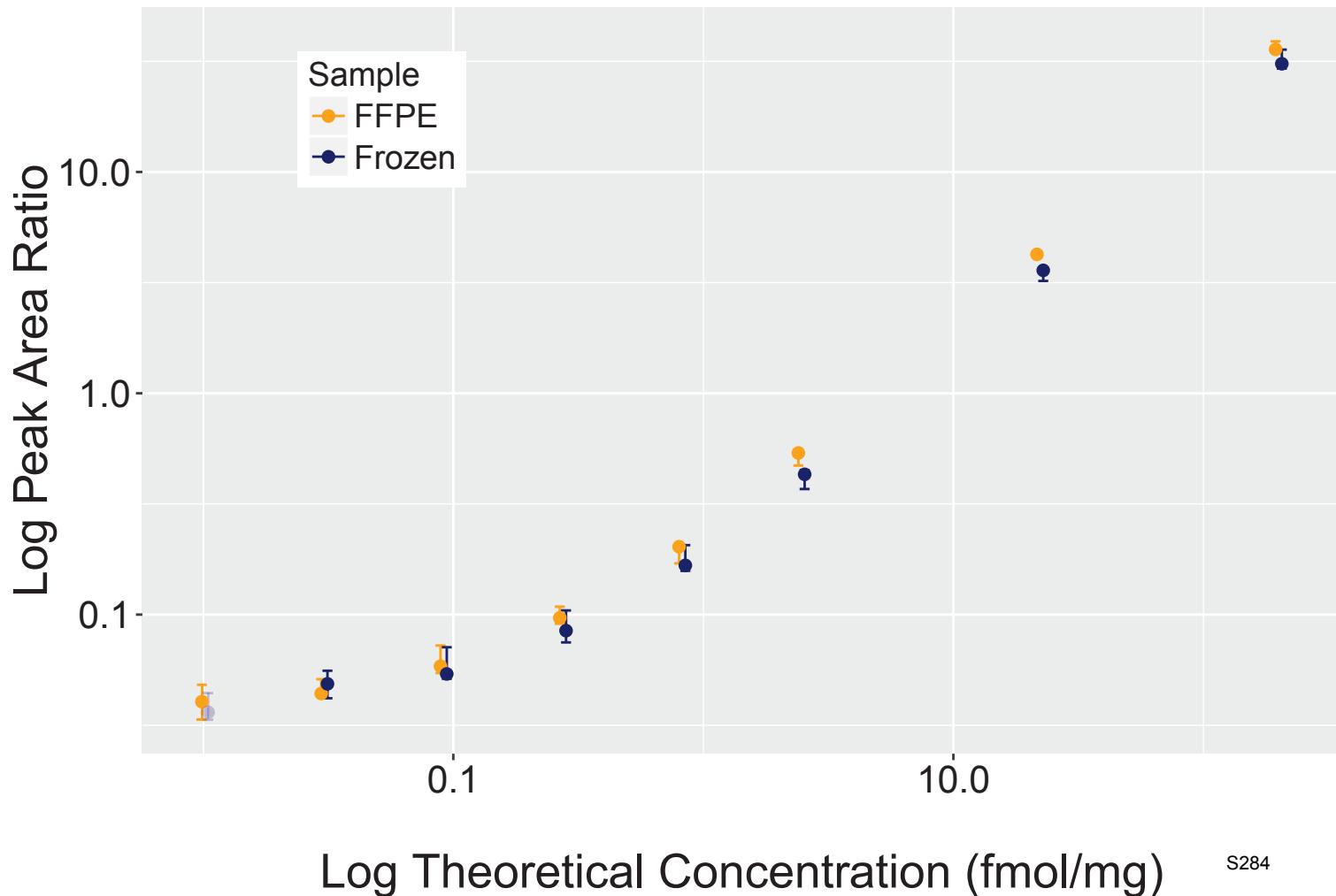
S²⁸²

Analyte: PHGDH.GTIQVITQGTSLK



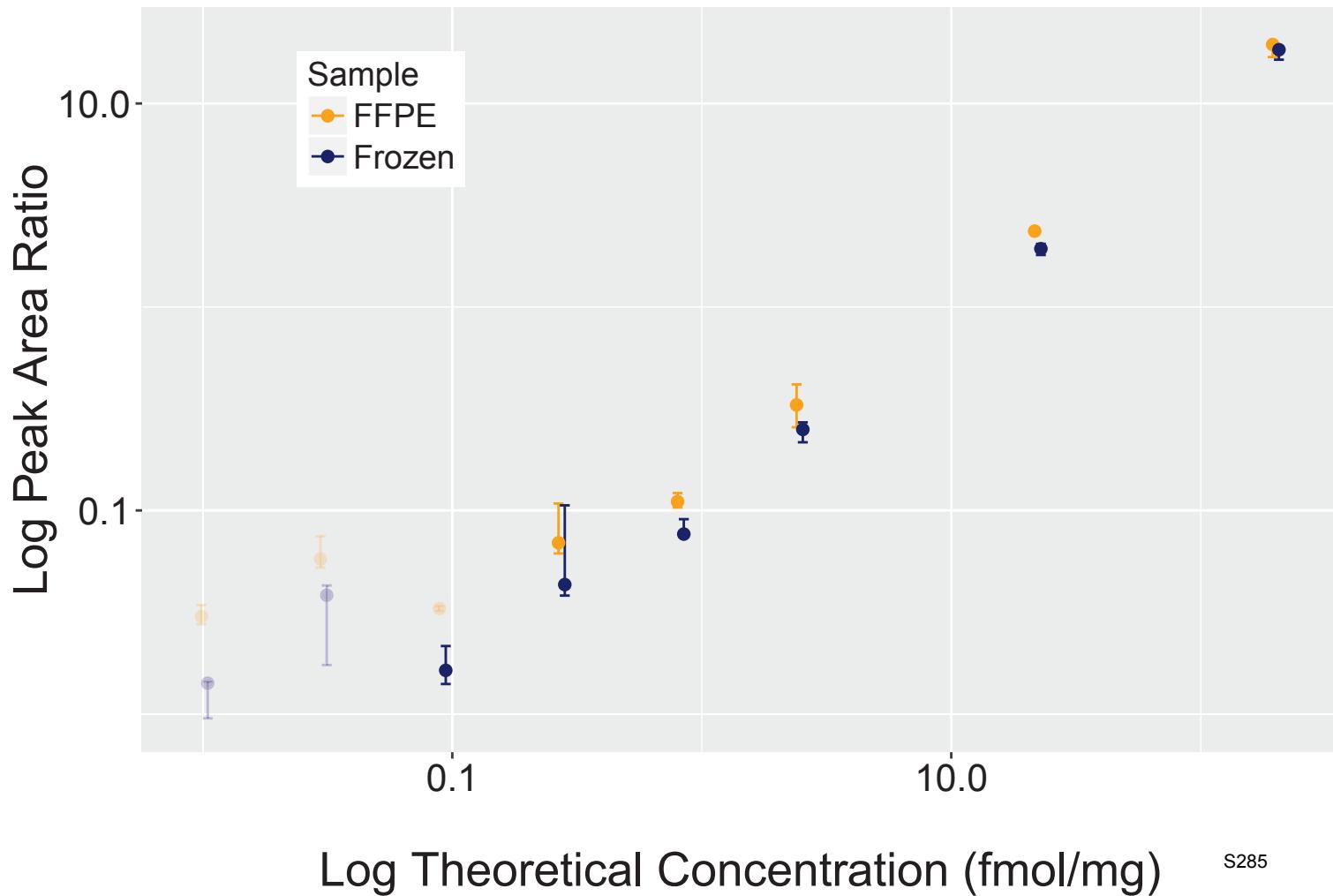
S²⁸³

Analyte: CPNE1.GTITVSAQELK



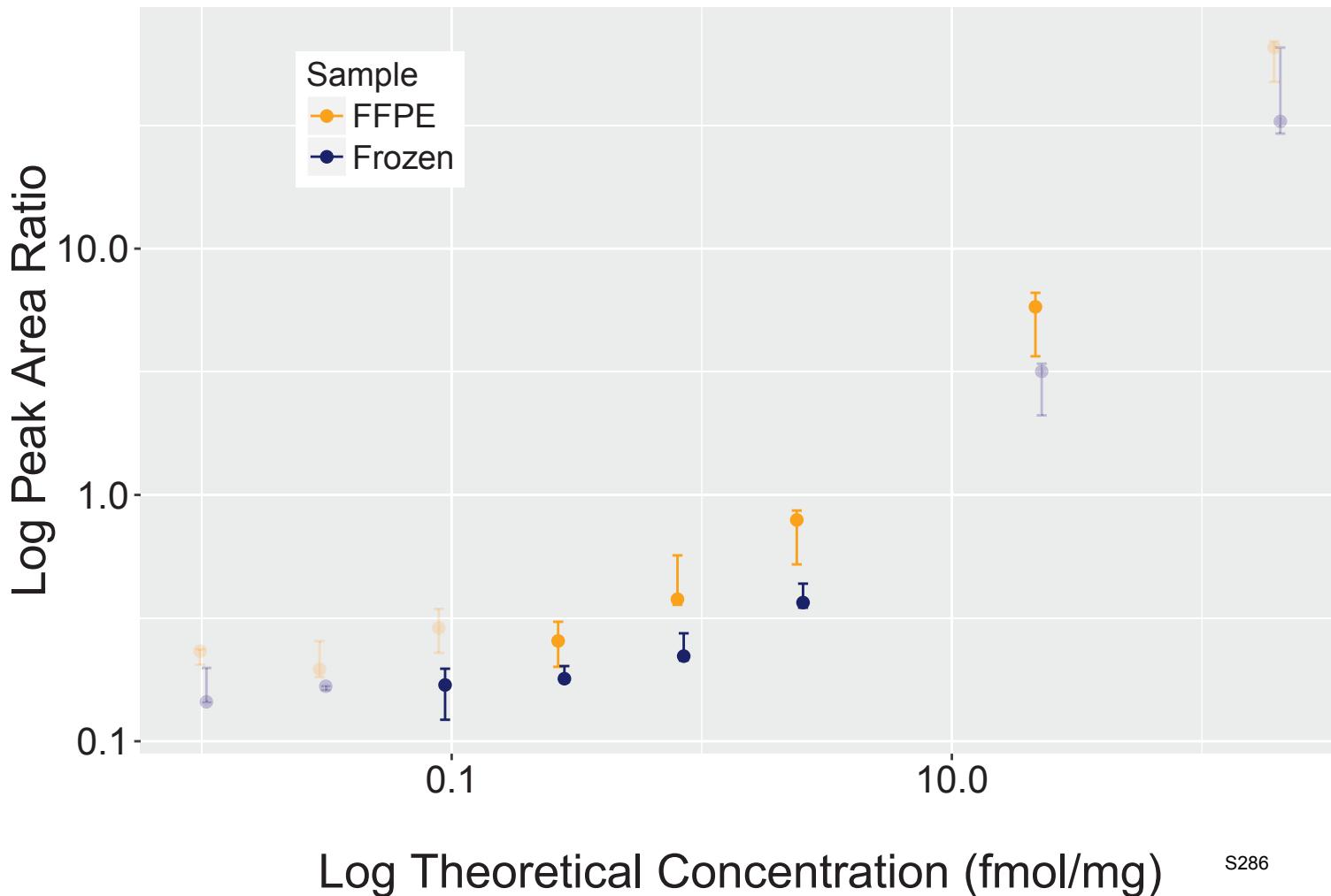
S²⁸⁴

Analyte: ETFA.GTSFDAAATSGGSASSEK



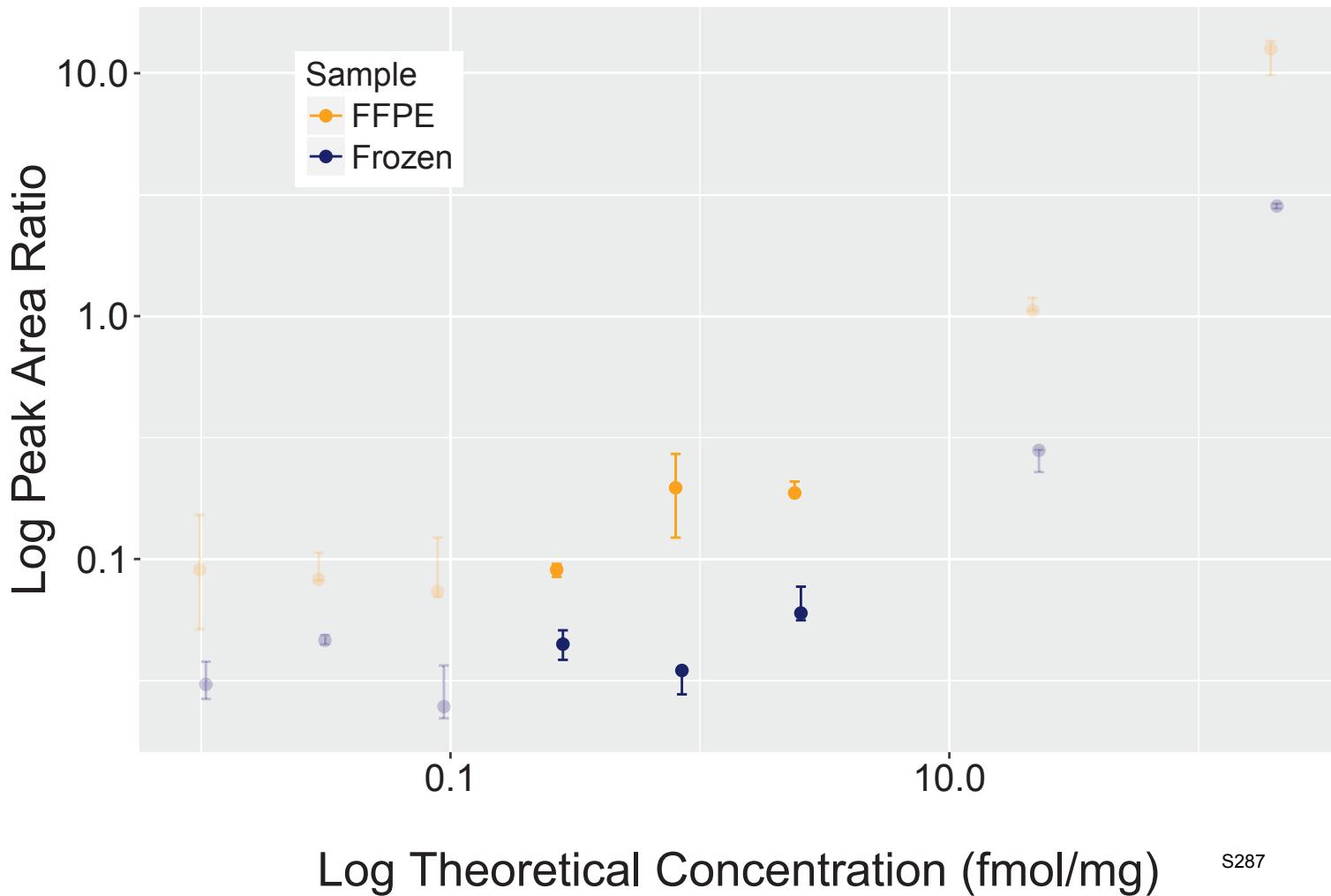
S285

Analyte: COMT.GTVLLADNVIC[+57]PGAPDFLAHVR

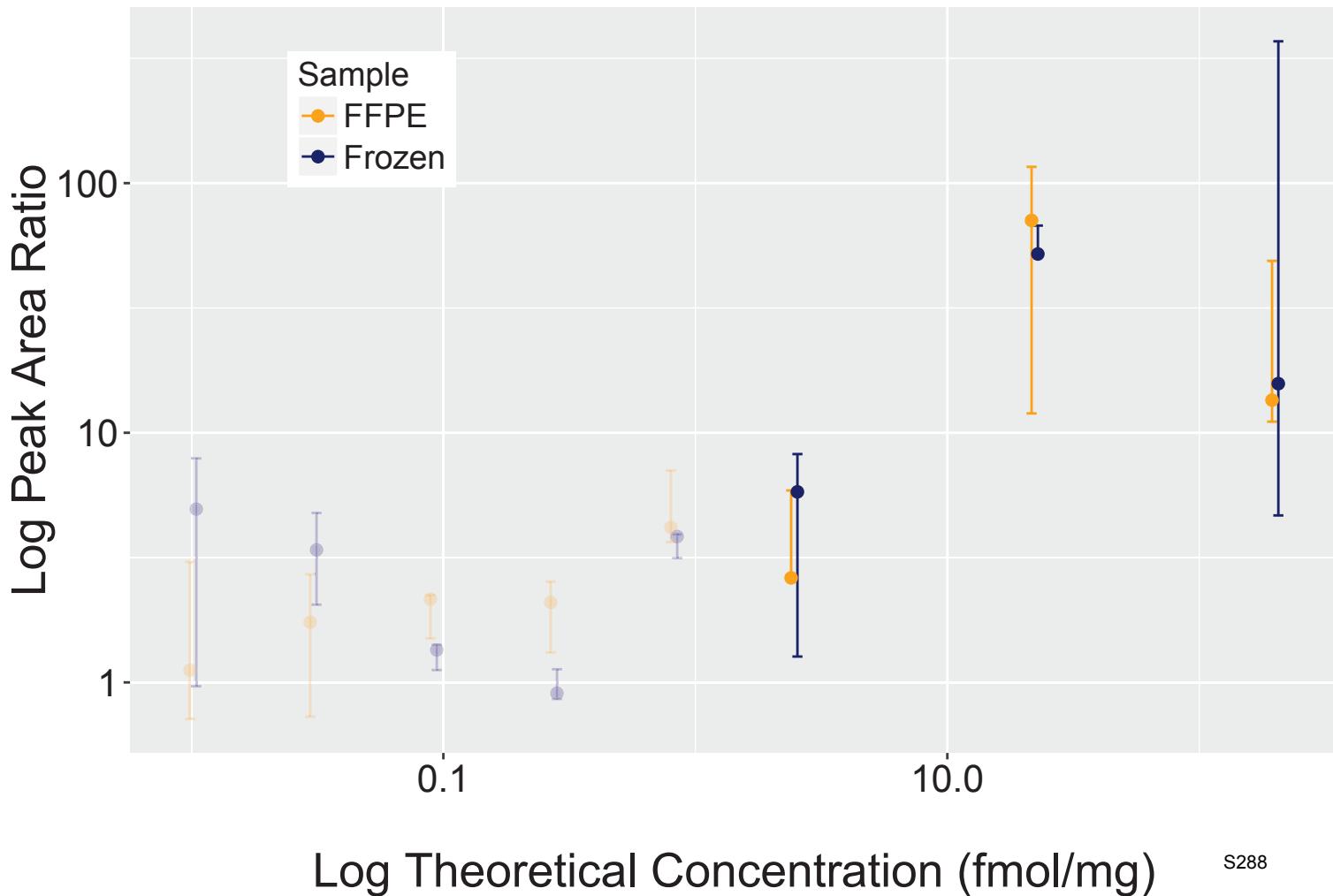


S²⁸⁶

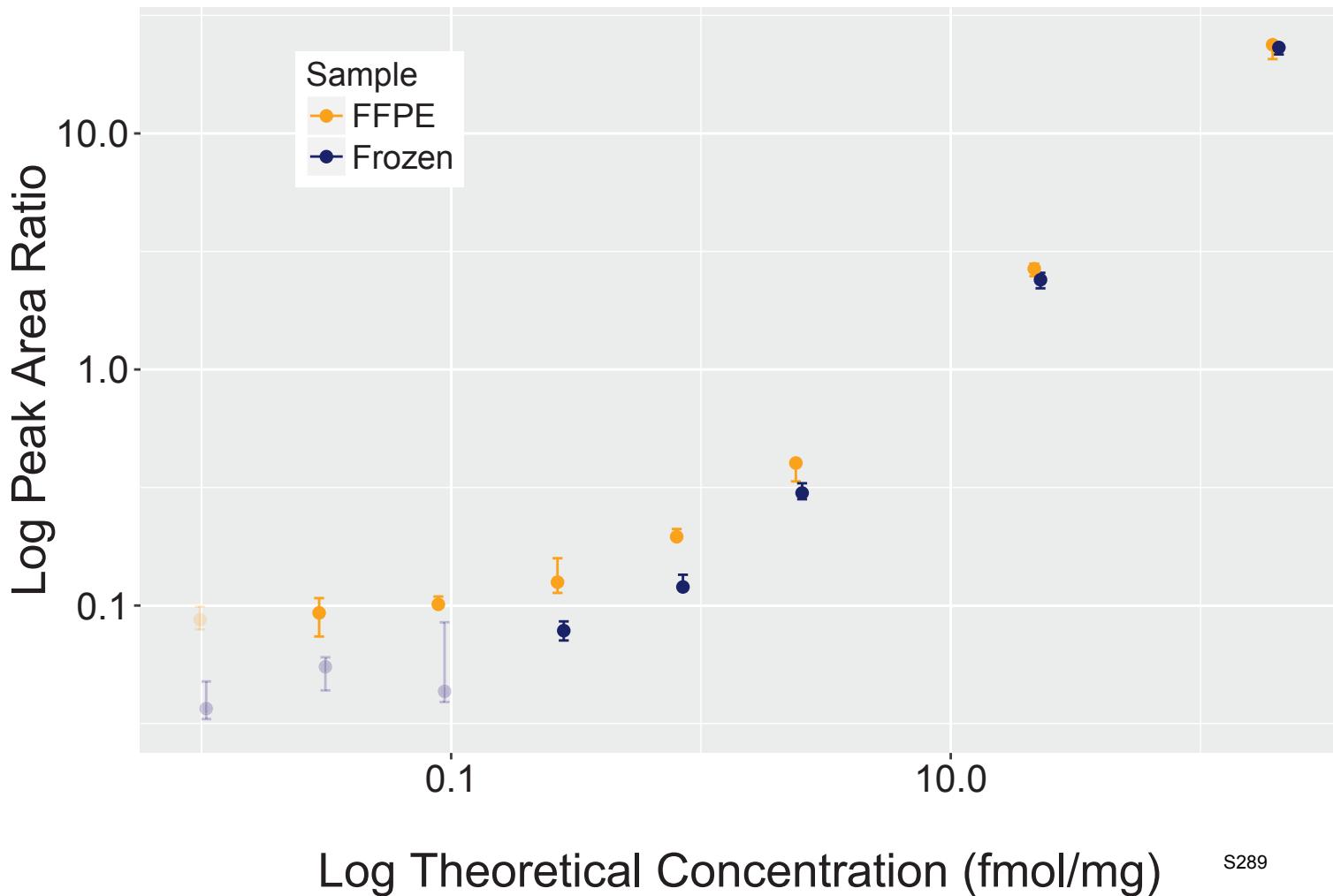
Analyte: ACTR3.GVDDLDFFIGDEAIEKPTYATK



Analyte: PNMT.GVFFAWAQK

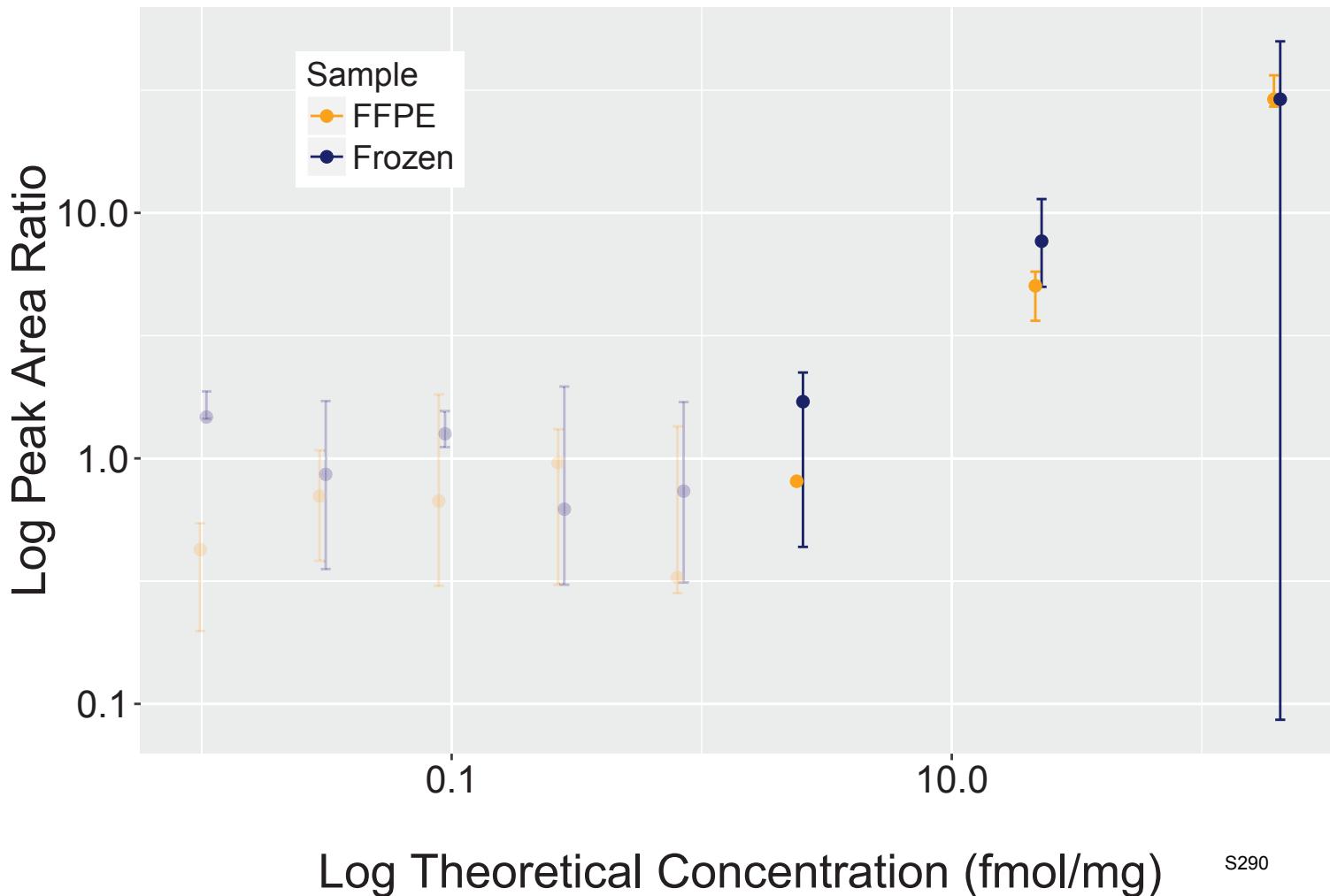


Analyte: DCXR.GVPGAIVNSSQC[+57]SQR

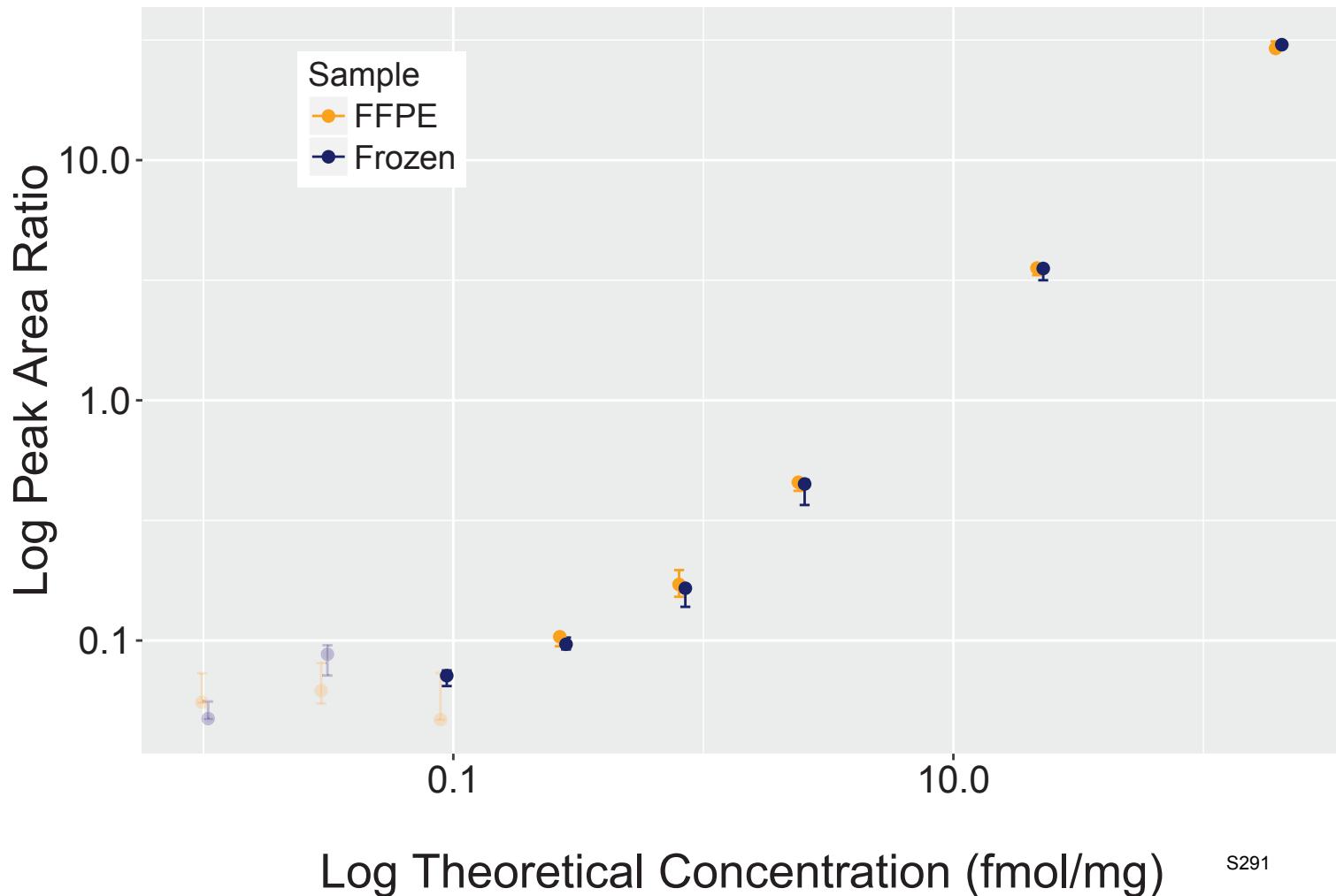


S²⁸⁹

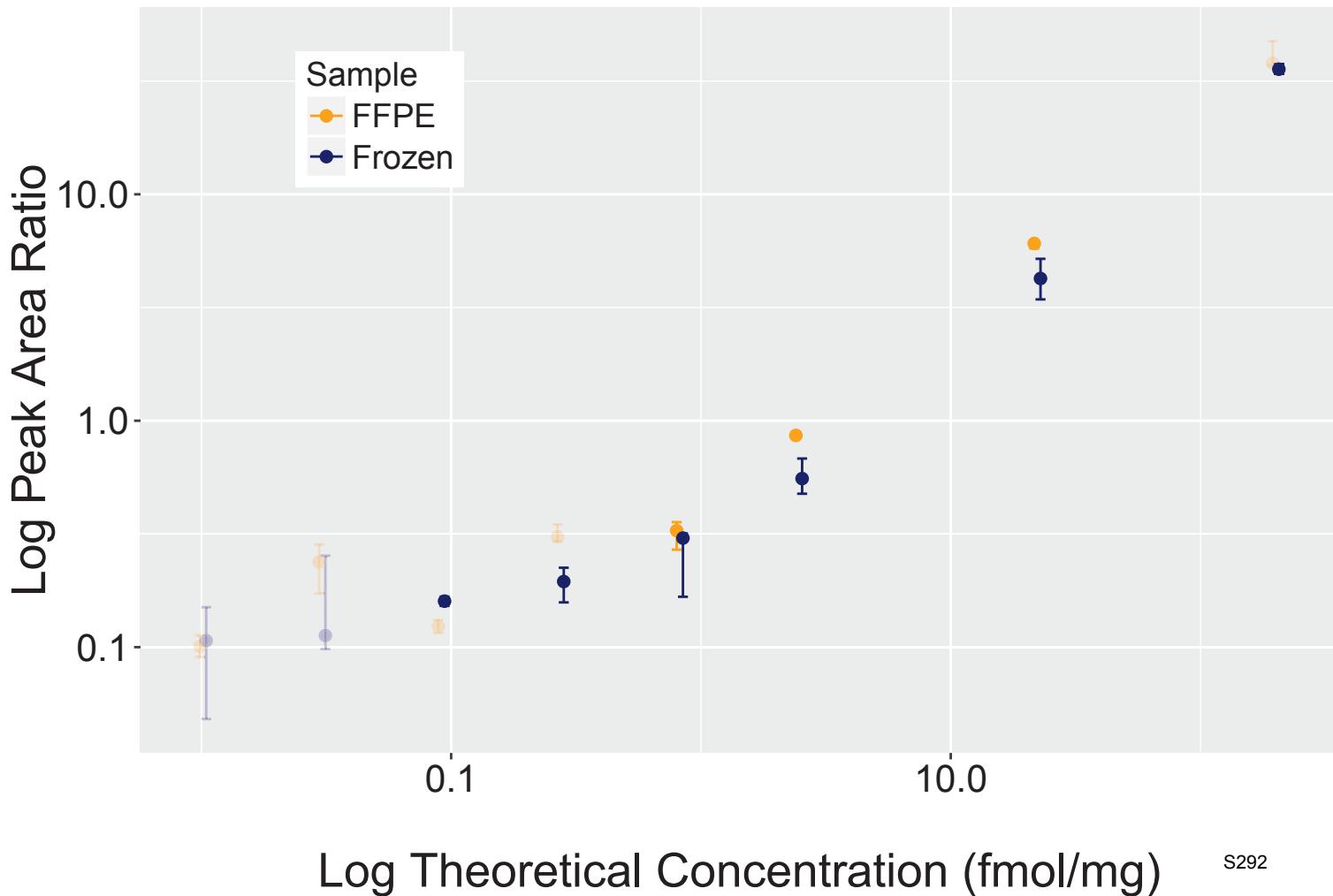
Analyte: ALDOA.GVVPLAGTNGETTQGLDGLSER



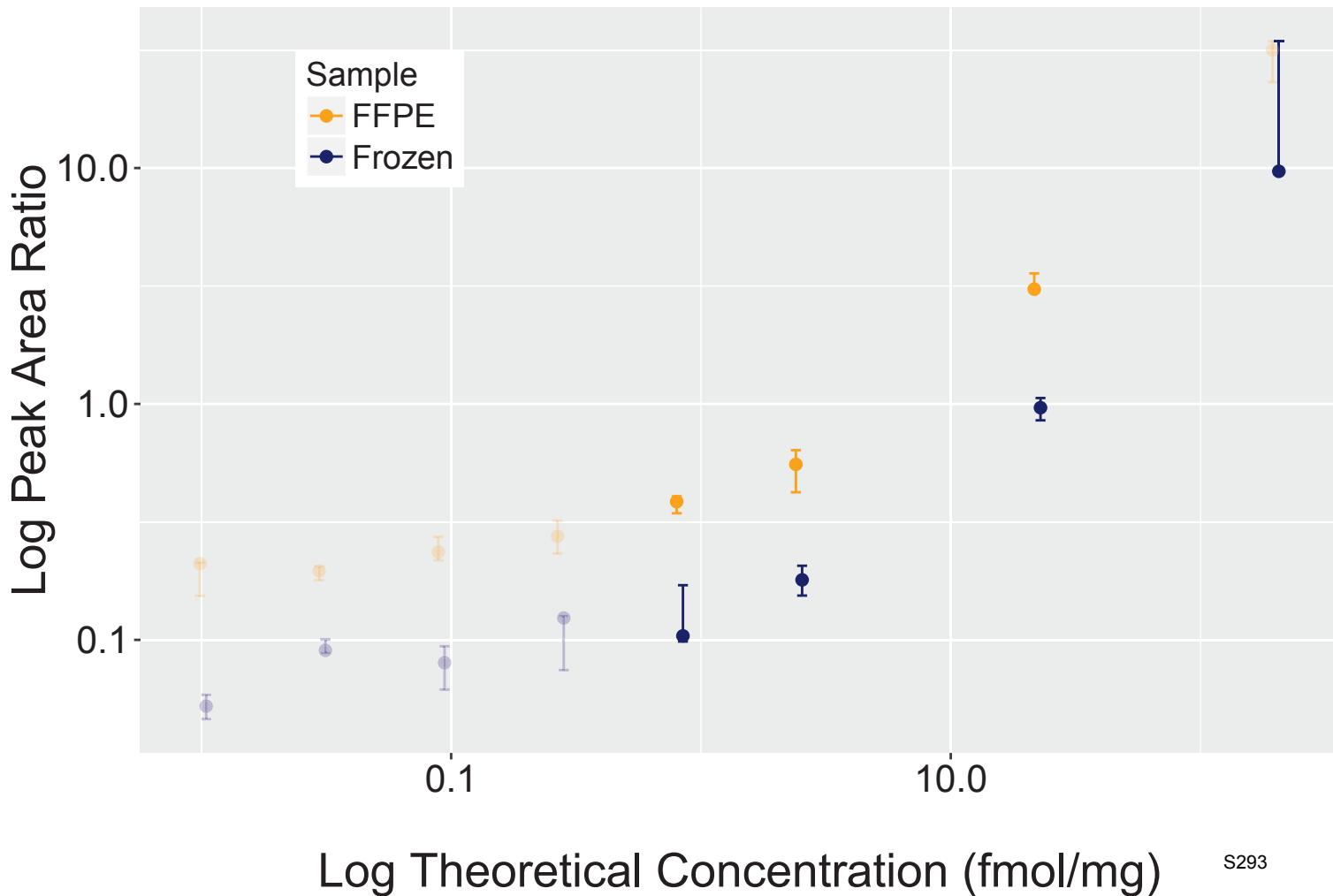
Analyte: RALY.GYAFVQYSNER



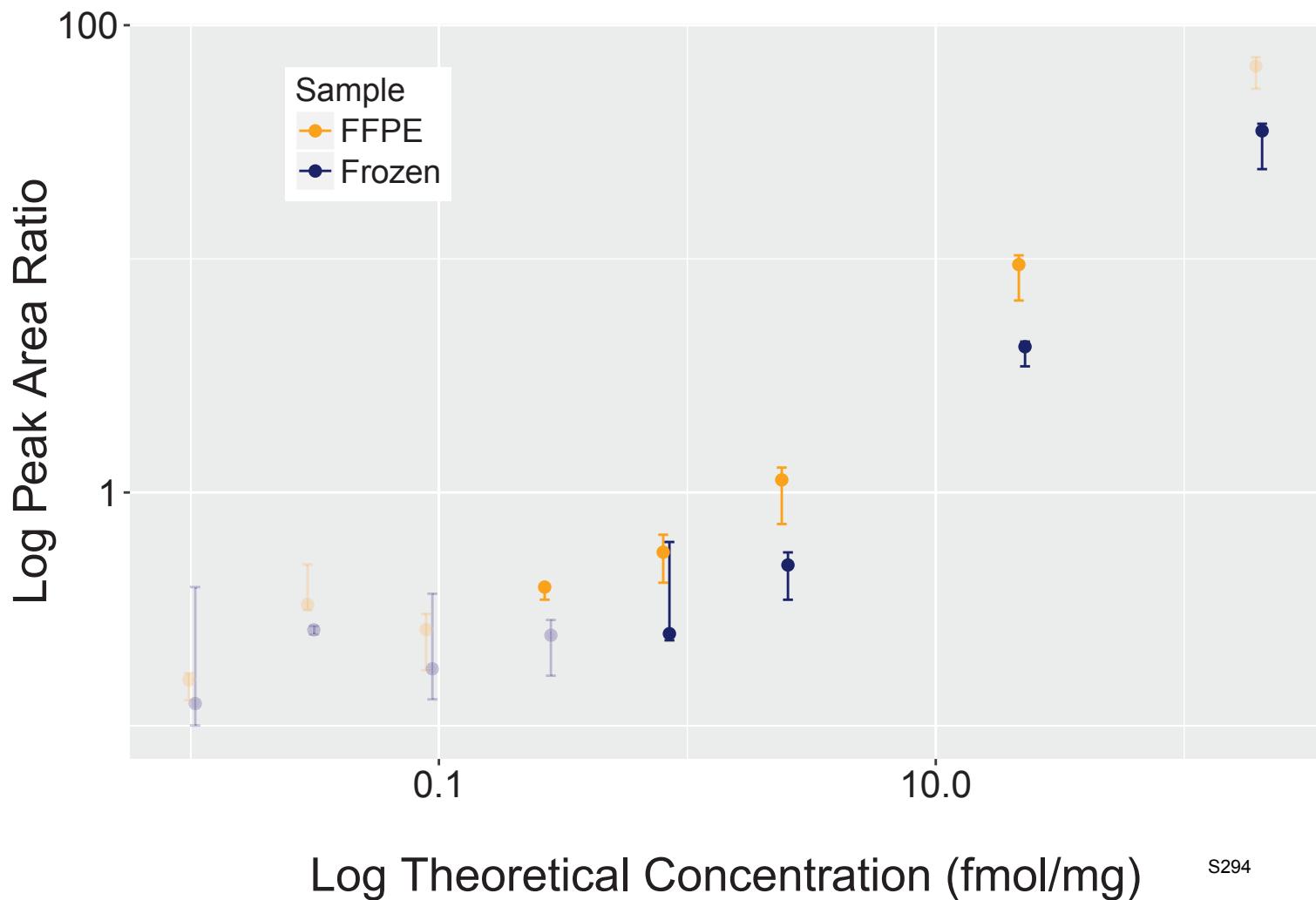
Analyte: GFPT1.GYDFESESETDTETIAK



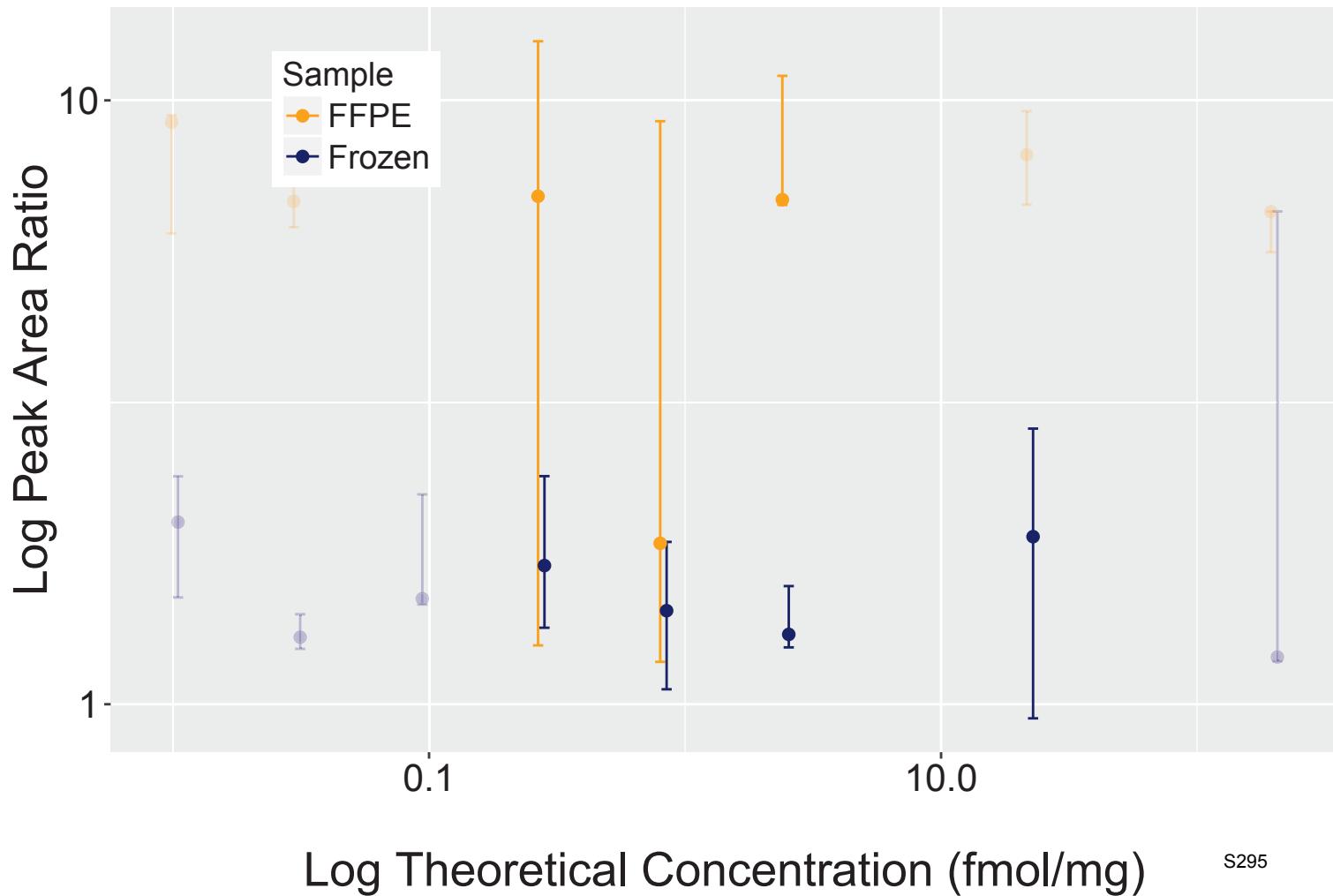
Analyte: MDH2.GYLGPEQLPDC[+57]LK



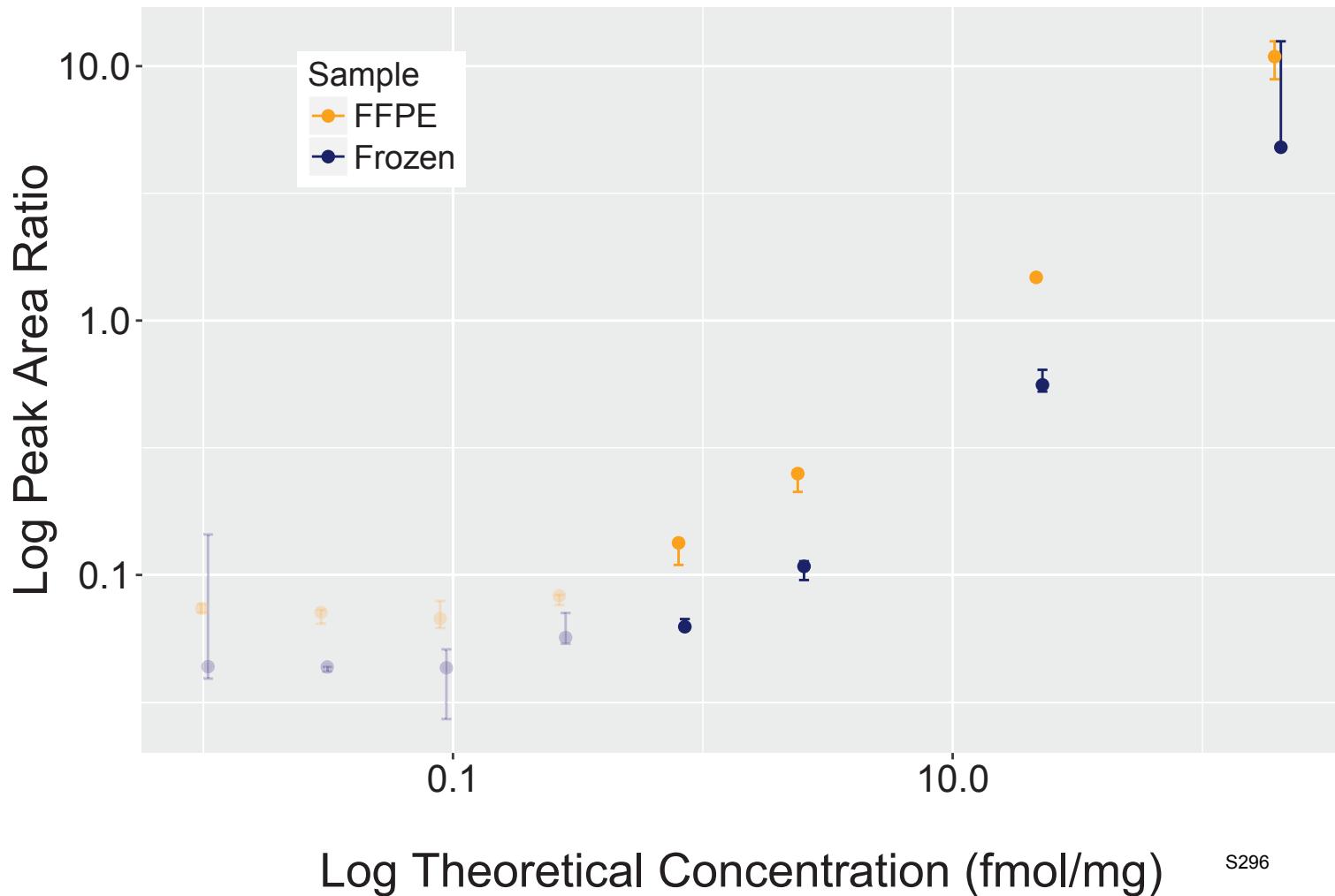
Analyte: PSMD3.HDADGQATLLNLLLR



Analyte: CYC1.HGGEDYVFSLLTGYC[+57]EPPTGVSLF

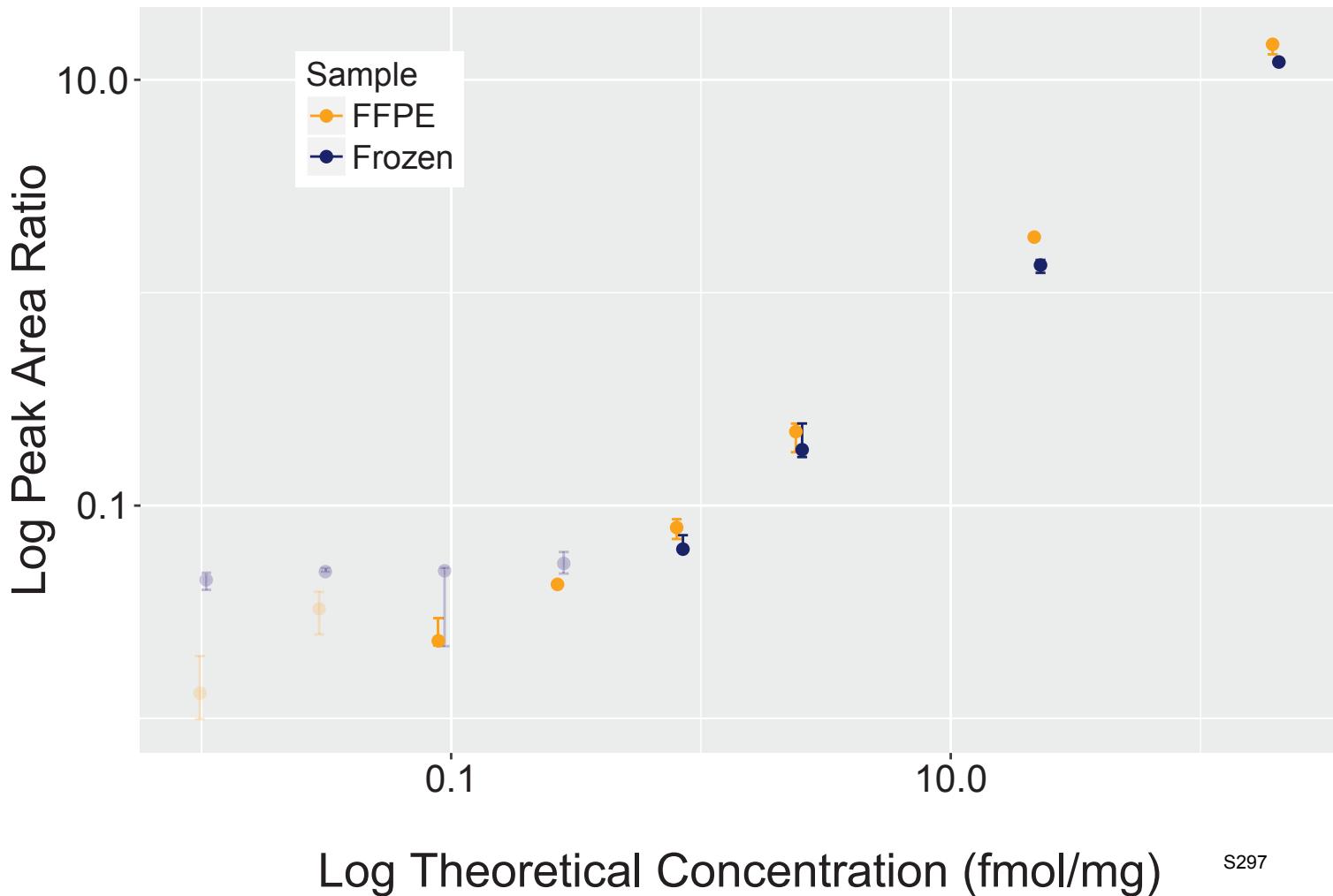


Analyte: AGR2.HLSPDGQYVPR

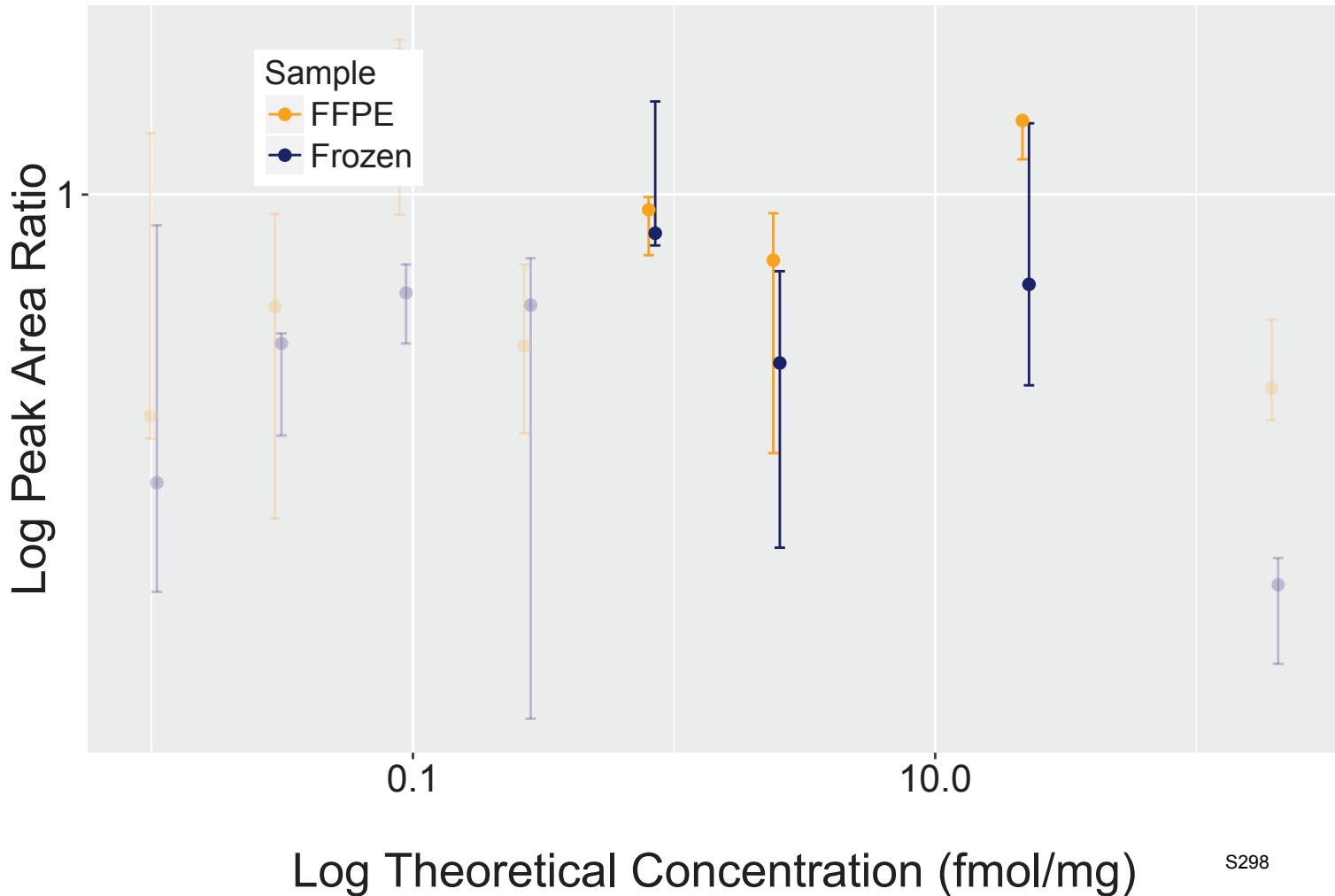


S²⁹⁶

Analyte: PRDX3.HLSVNDLPVGR

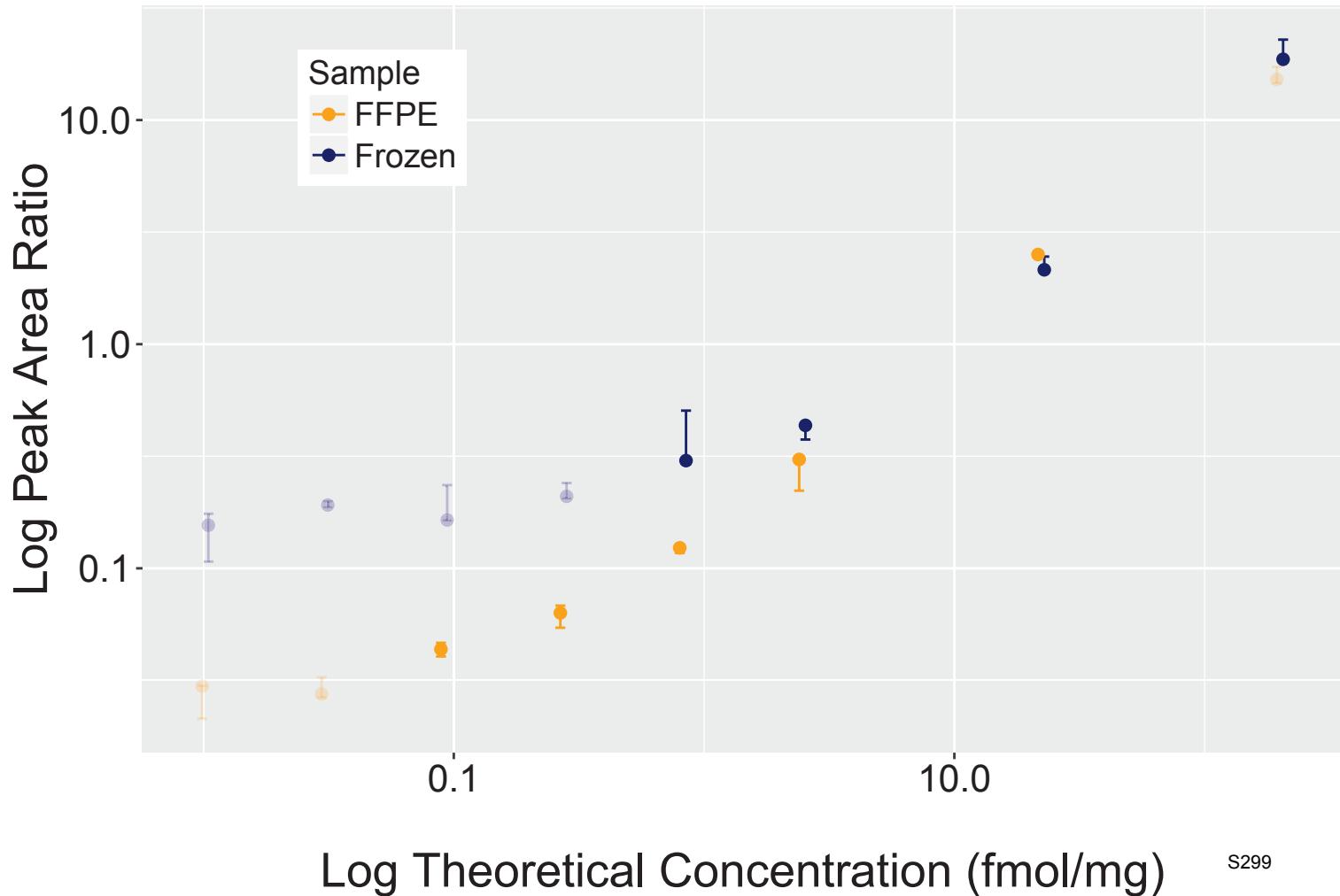


Analyte: DYNC1H1.HVPVYYVDYPGPASLTQIYGTFNR



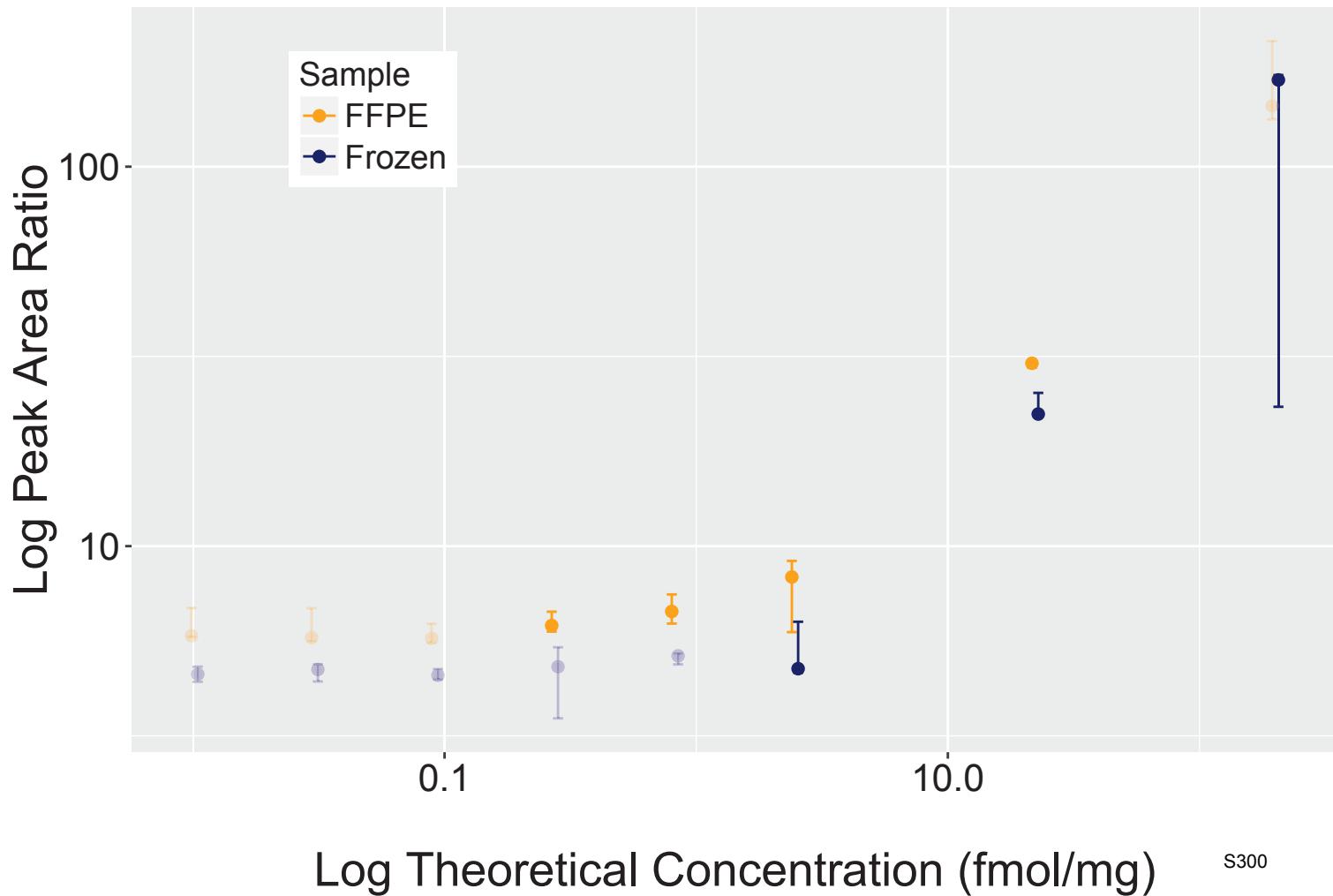
S²⁹⁸

Analyte: GOT2.IAAAILNTPDLR

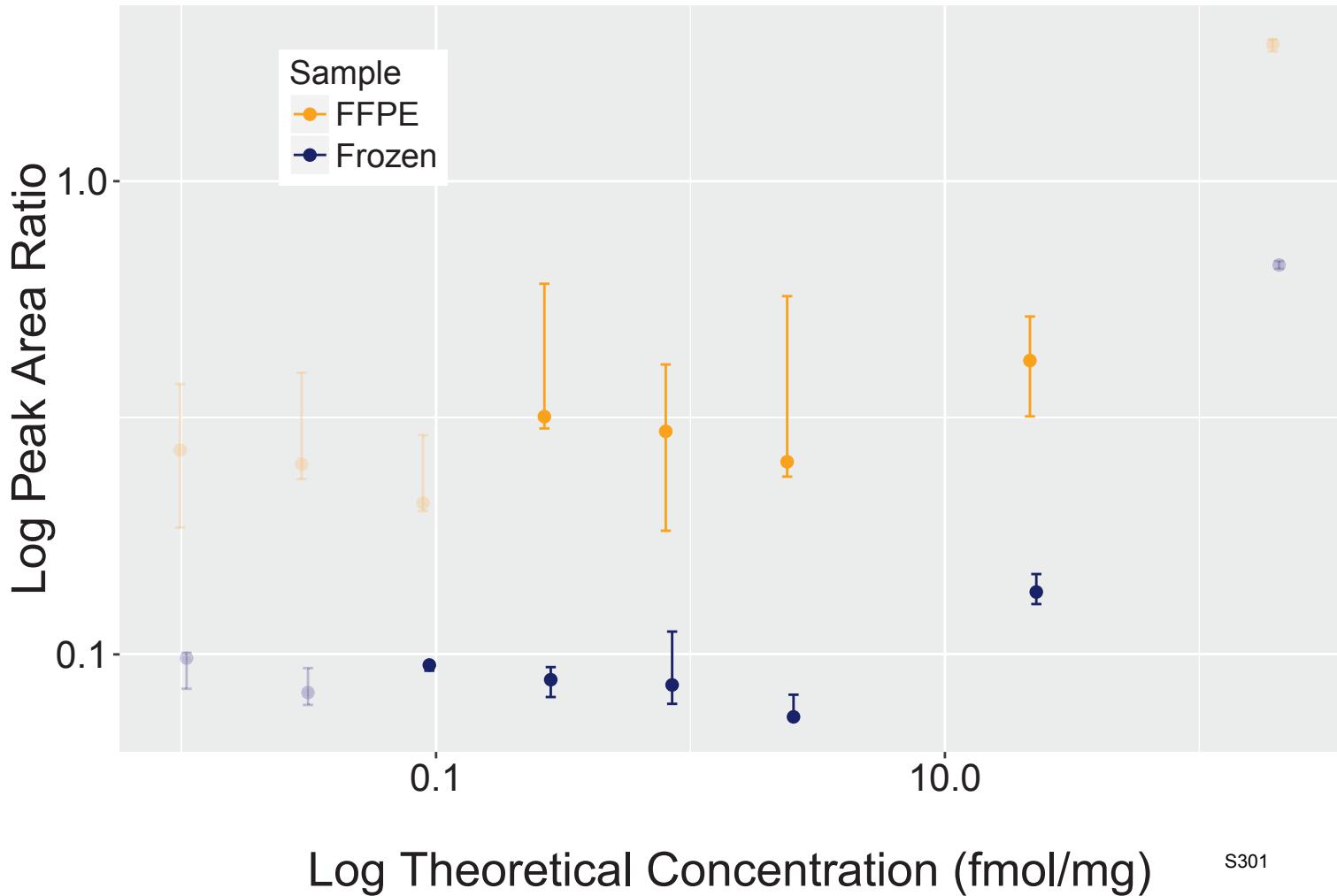


S²⁹⁹

Analyte: NAGK.IAEGAQQQGDPLSR

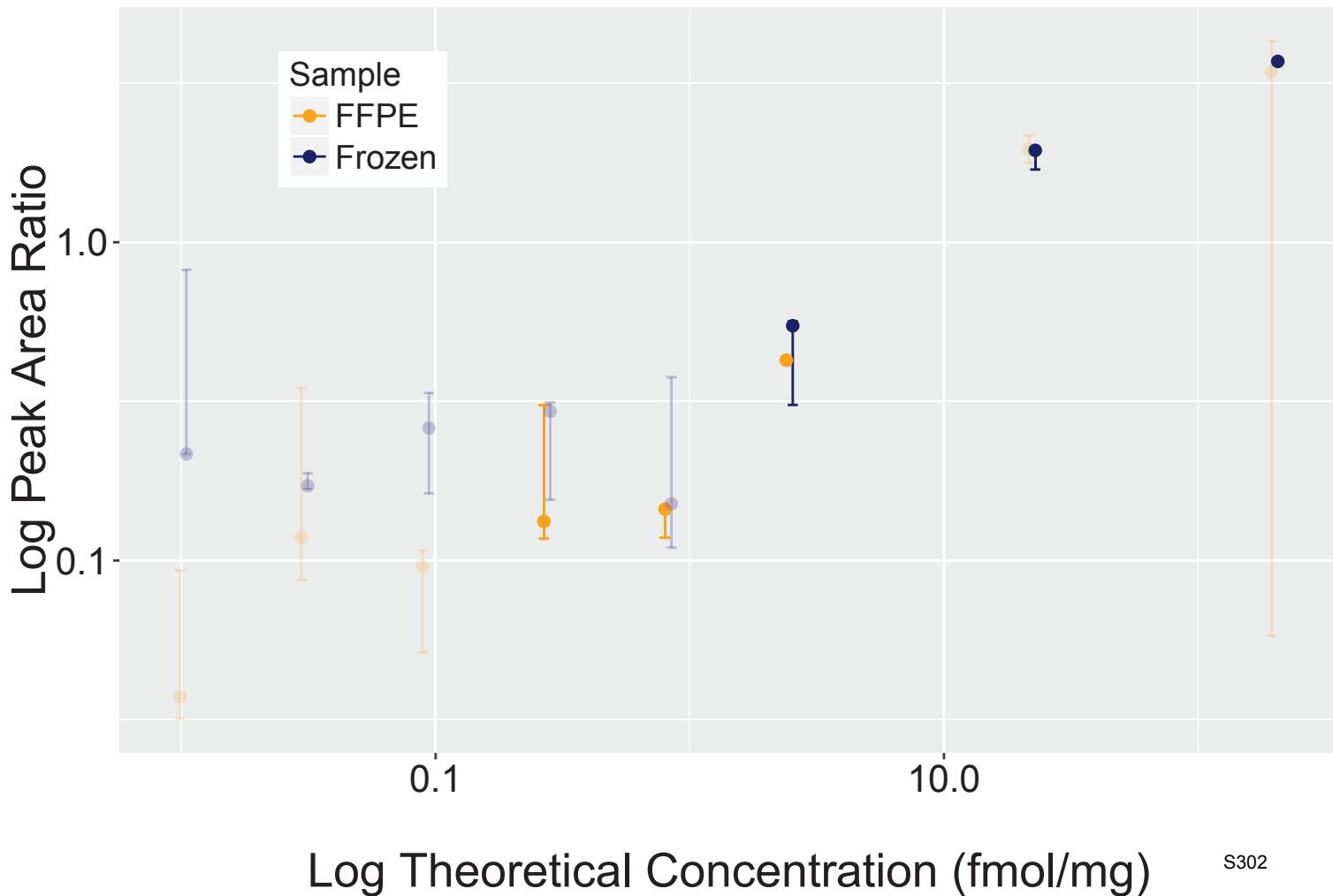


Analyte: CCT7.IALLNVELELK

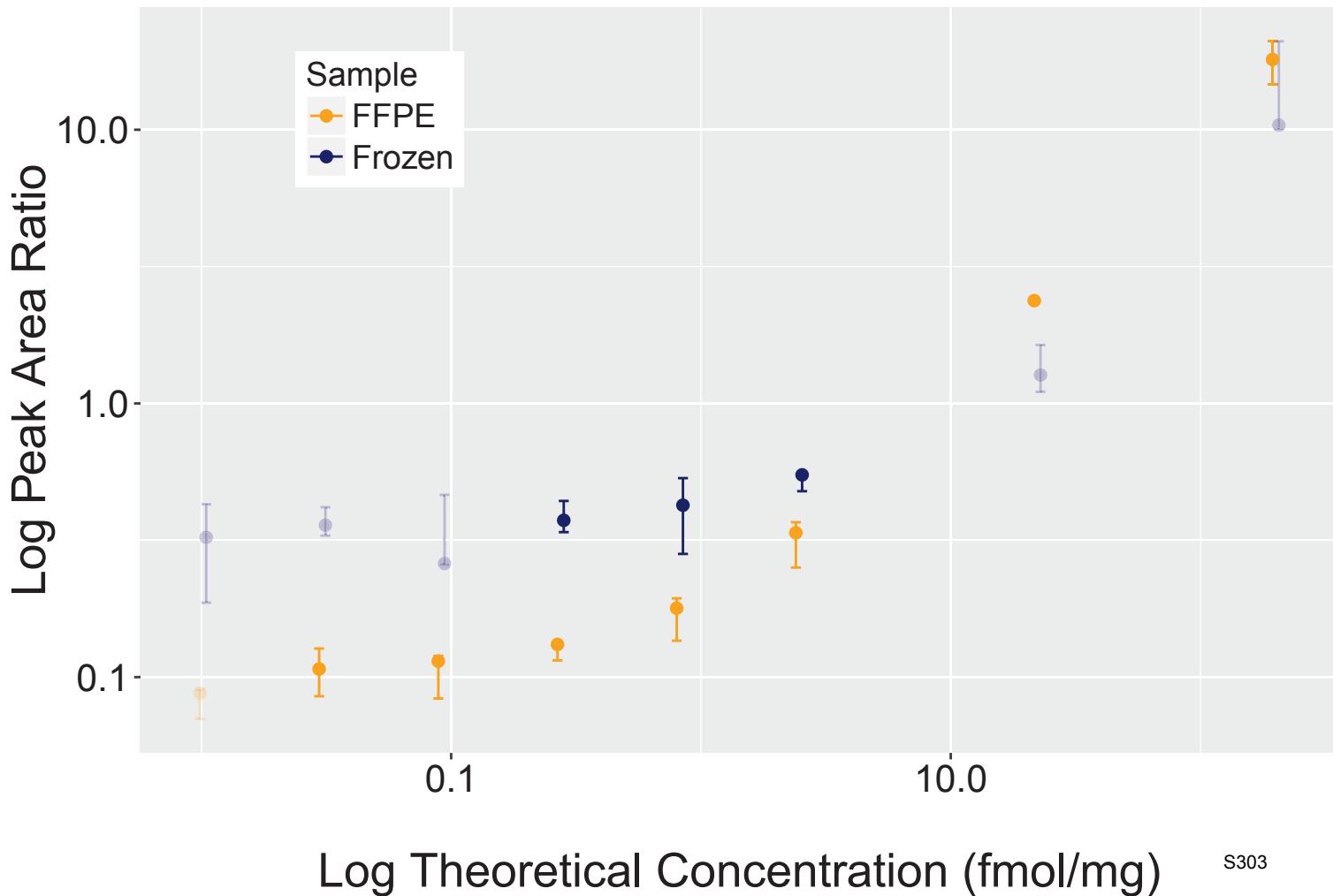


S301

Analyte: PGM1.IALYETPTGWK

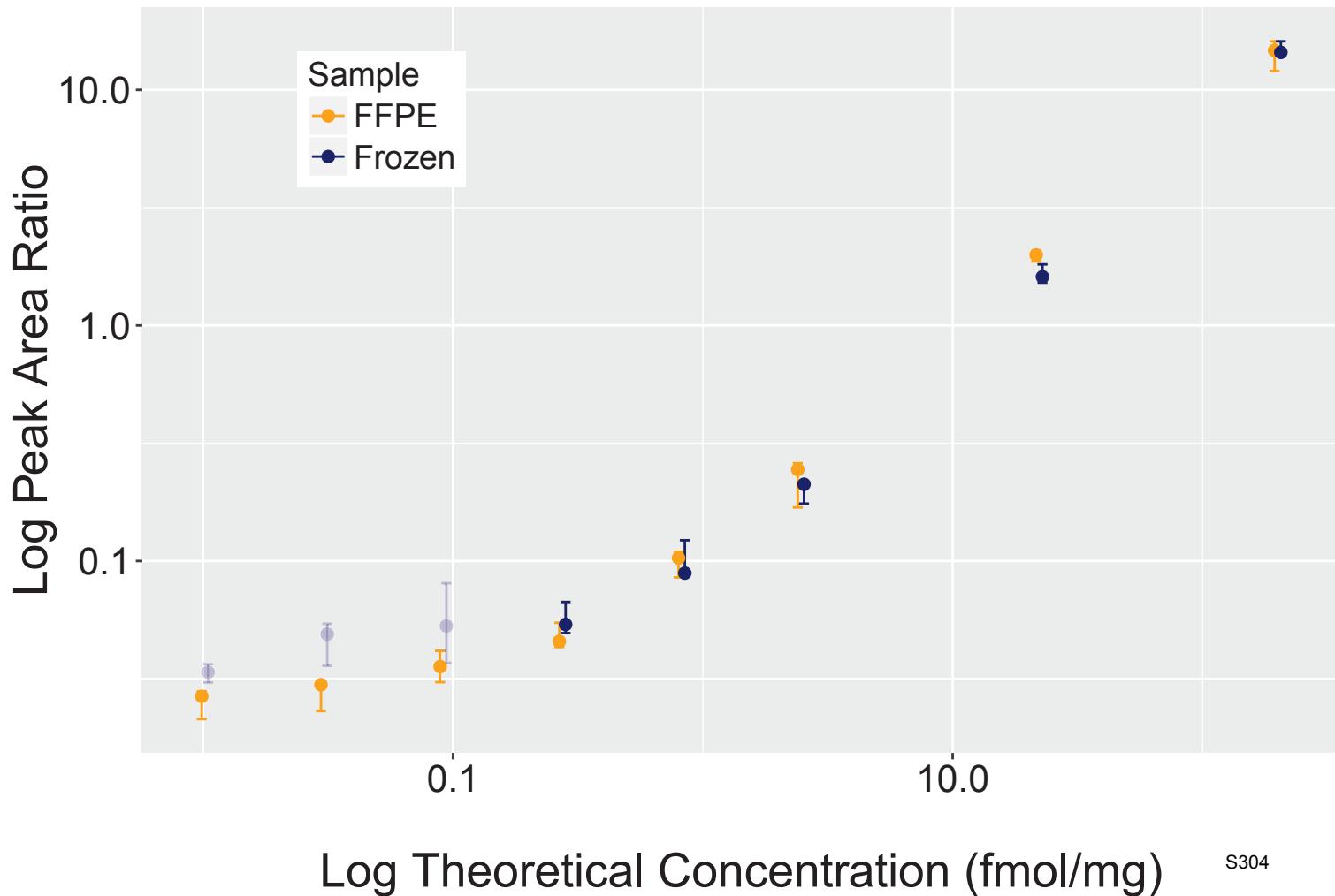


Analyte: FLNA.IANLQTDLSDGLR



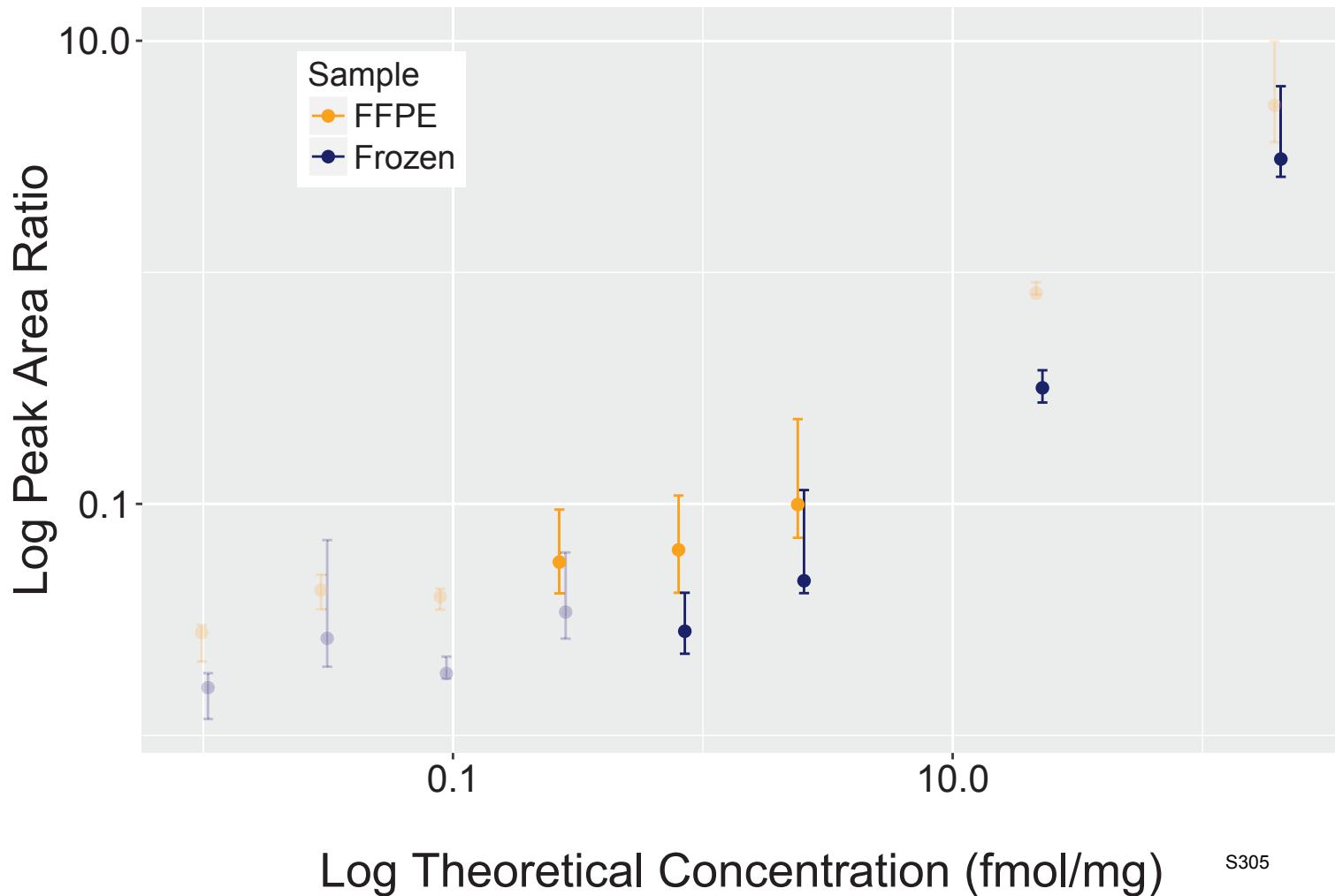
S303

Analyte: EEF1D.IASLEVENQSLR

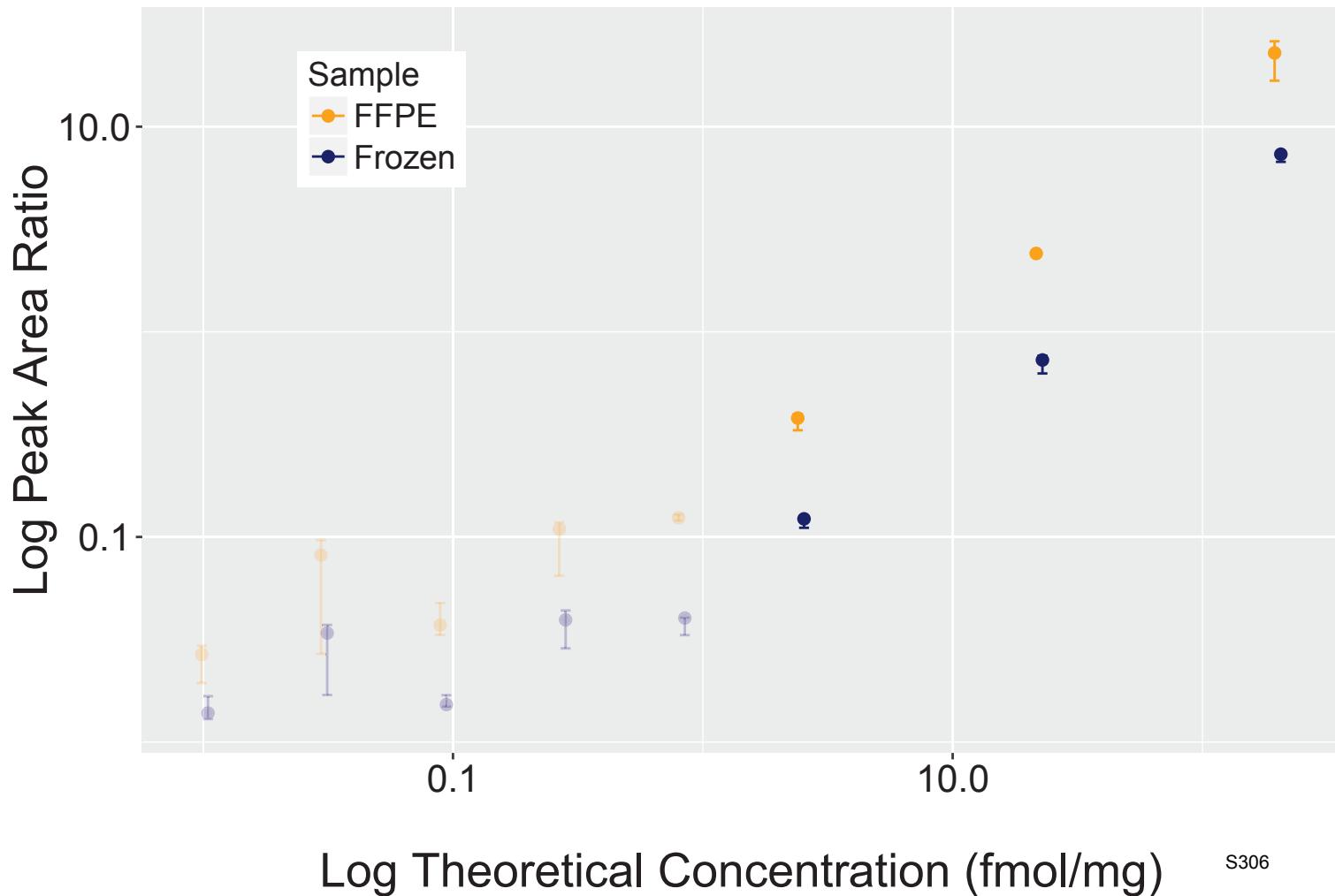


S304

Analyte: PLIN3.IATSLDGFDVAVSVQQQR

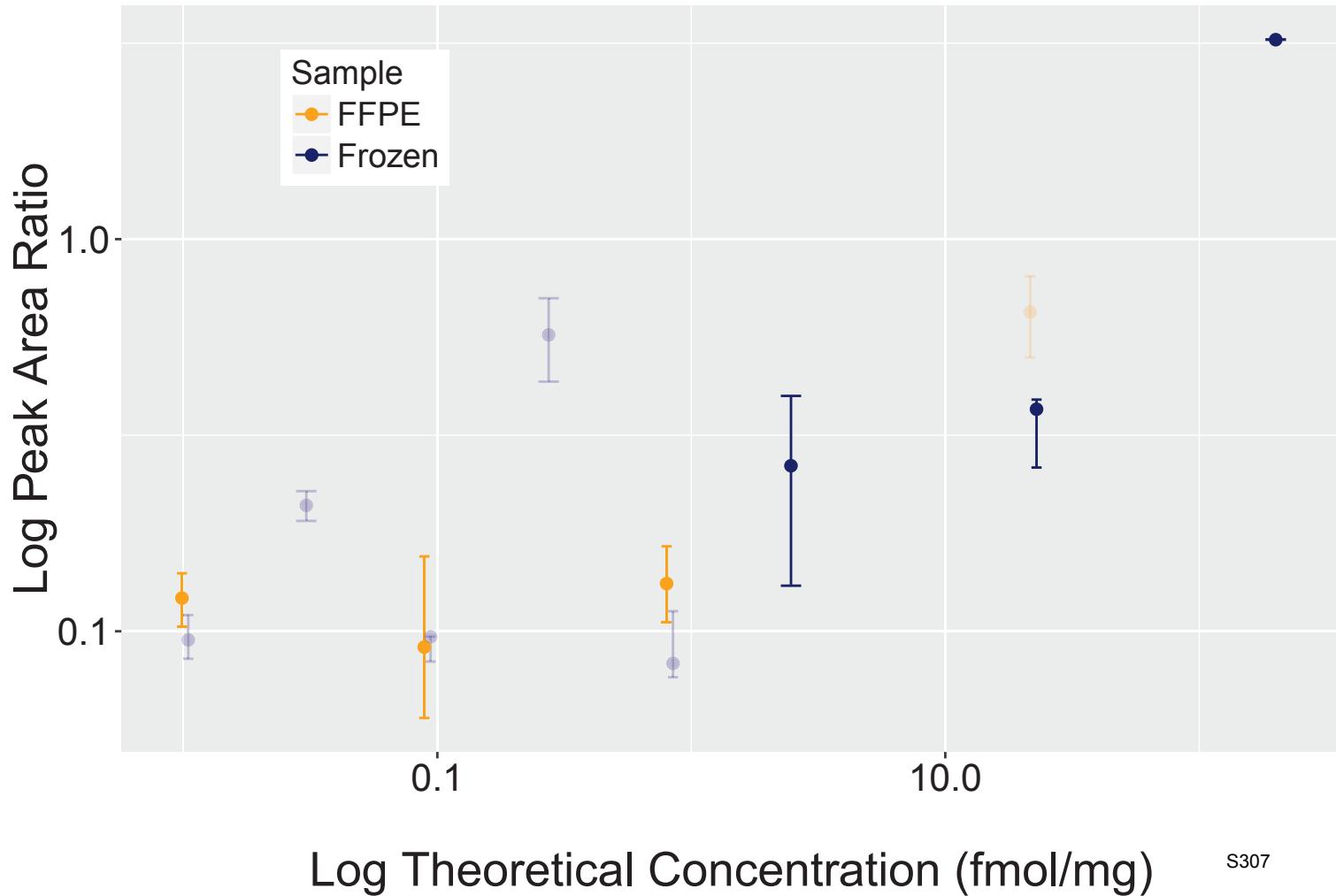


Analyte: CRABP2.IAVAAASKPAVEIK

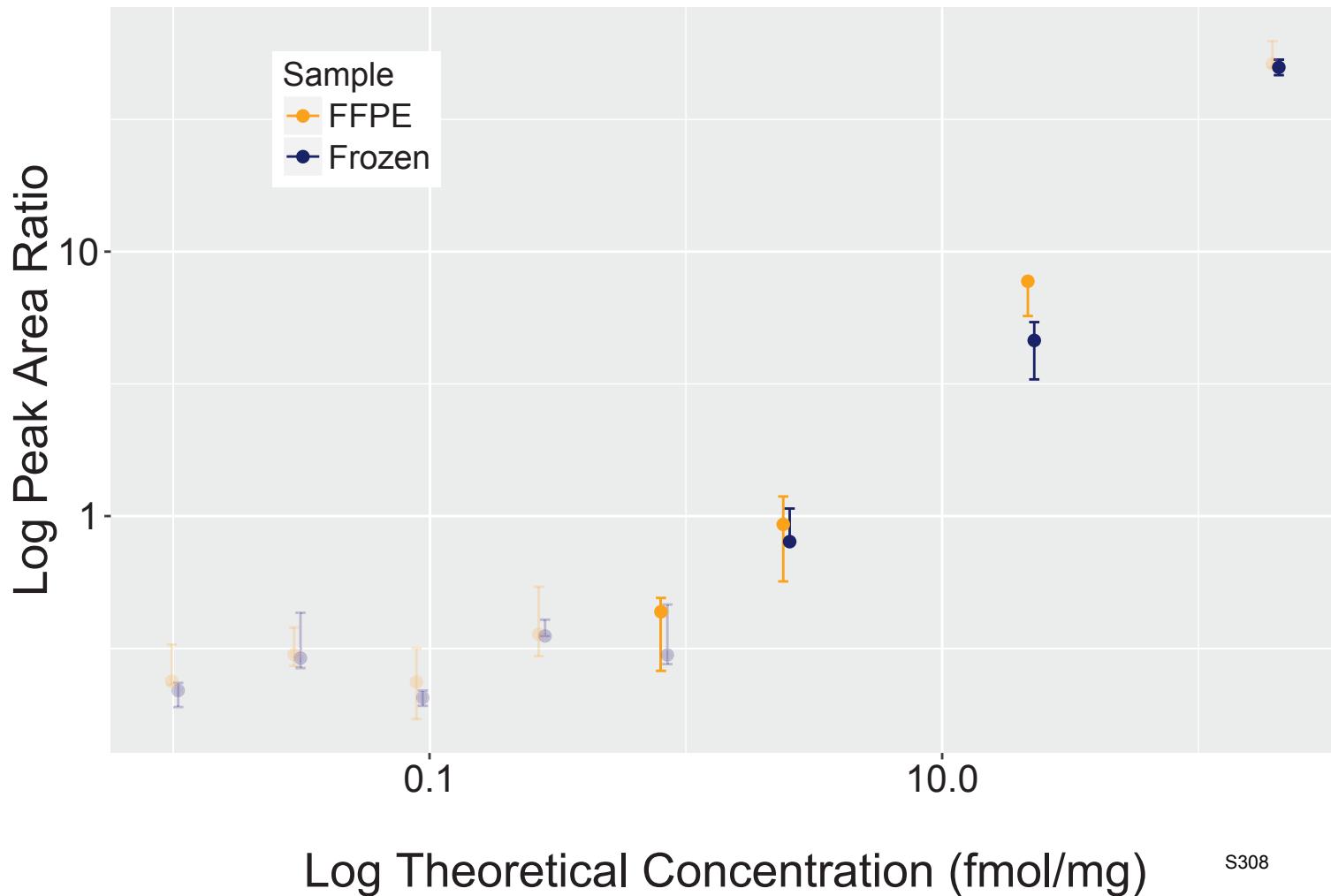


S306

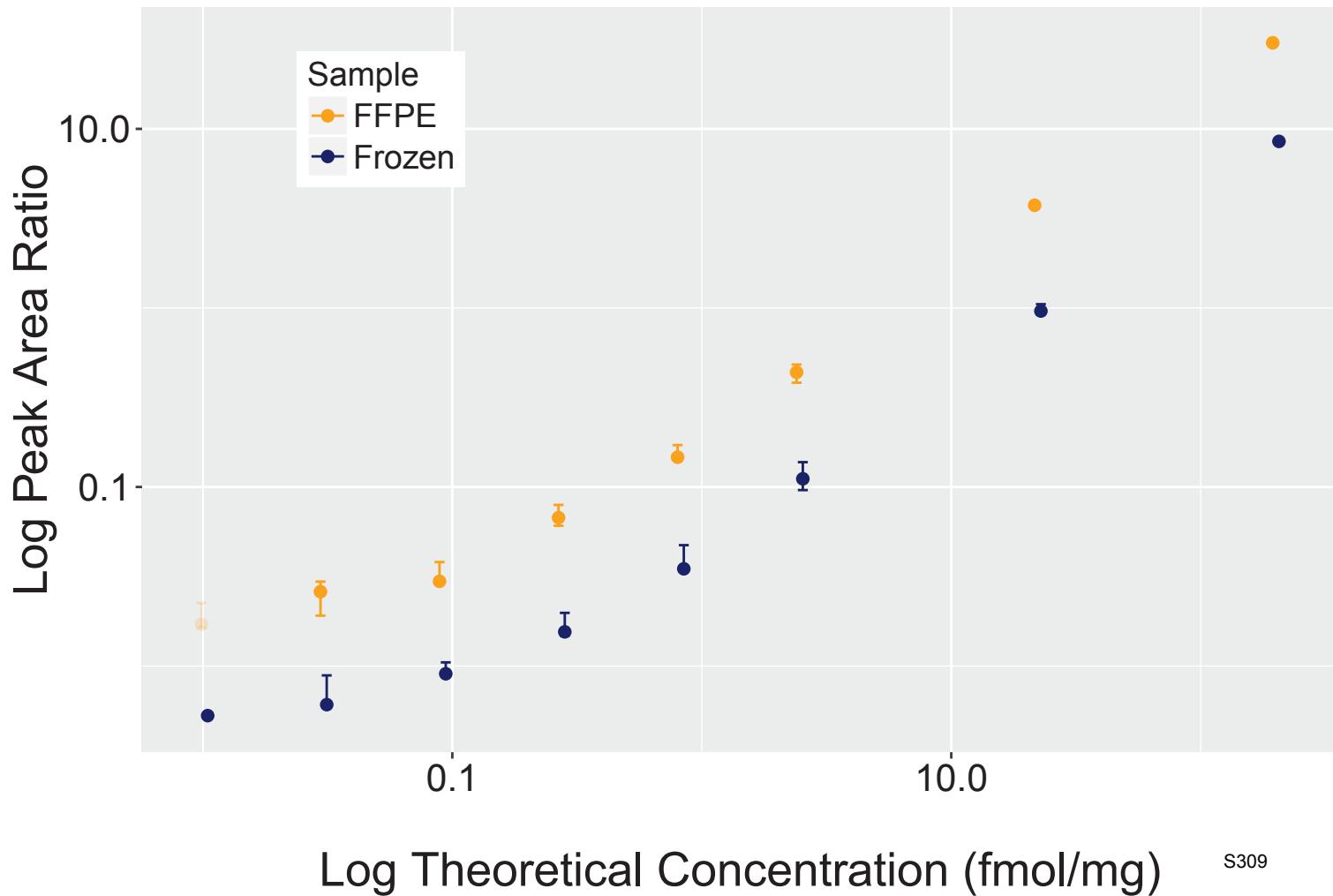
Analyte: DPYSL2.IAVGSDADLVIWDPDSVK



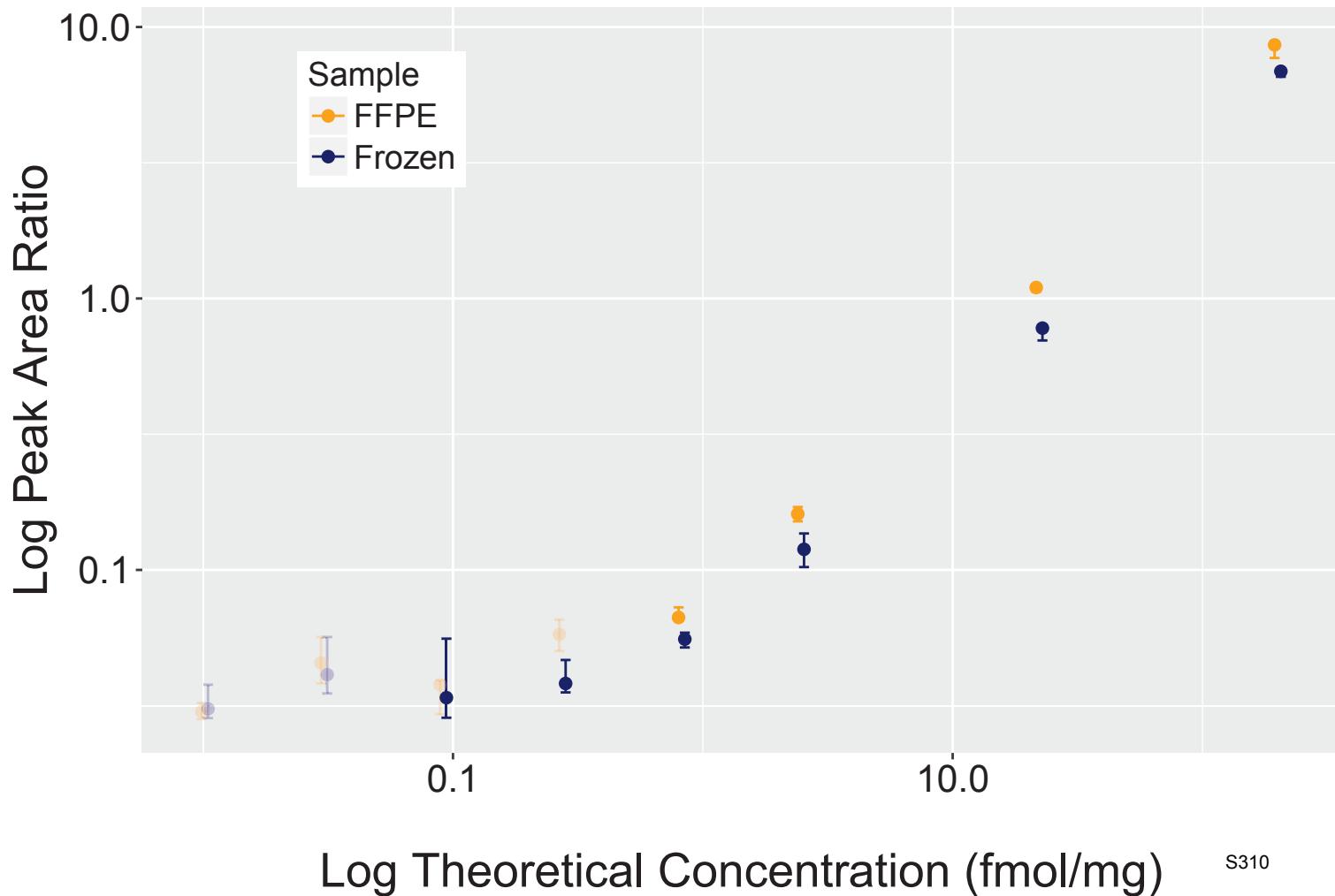
Analyte: MAT2A.IC[+57]DQISDAVLDAHLQQDPDAK



Analyte: CTSB.IC[+57]EPGYSPTYK

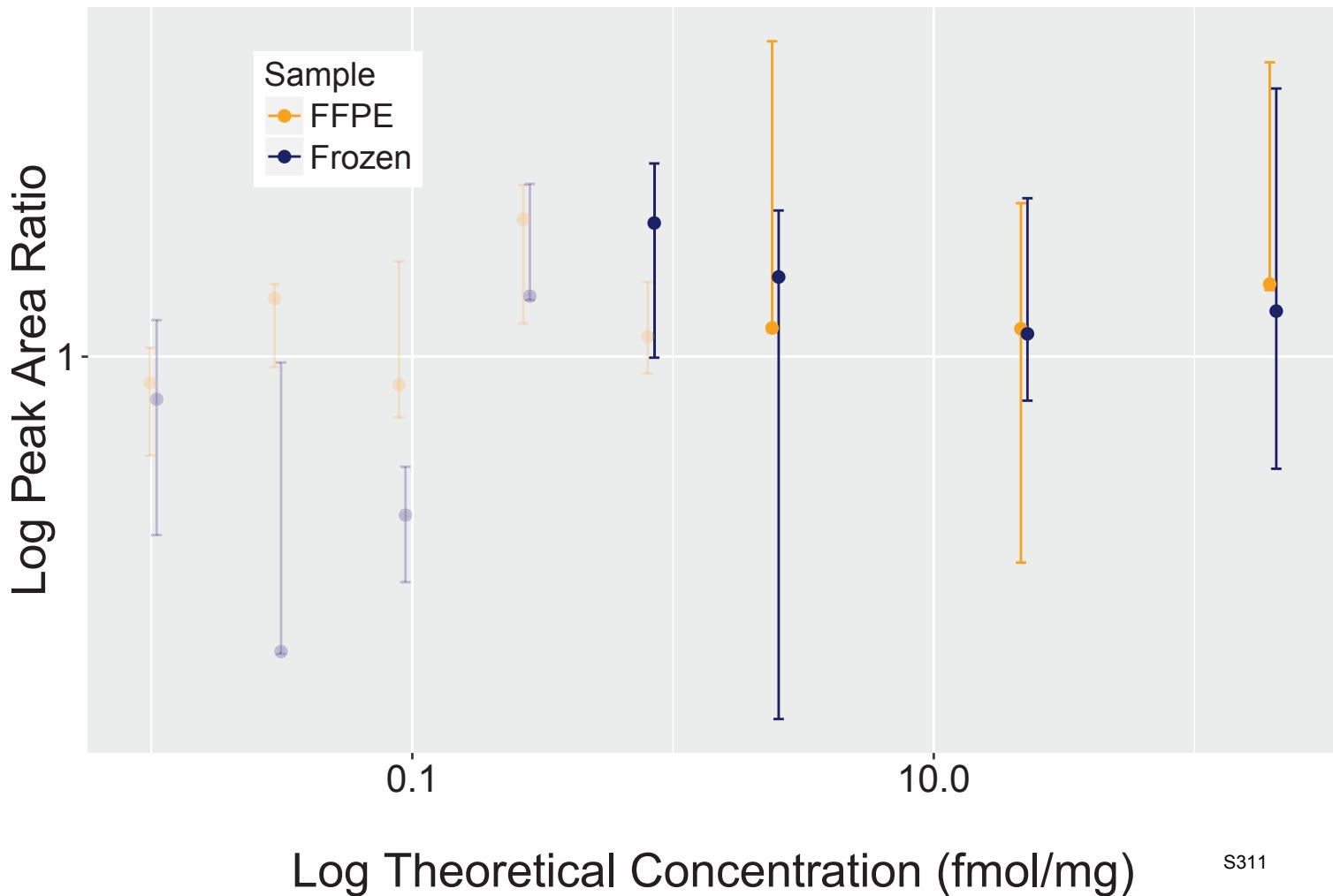


Analyte: PDIA4.IDATSASVLASR



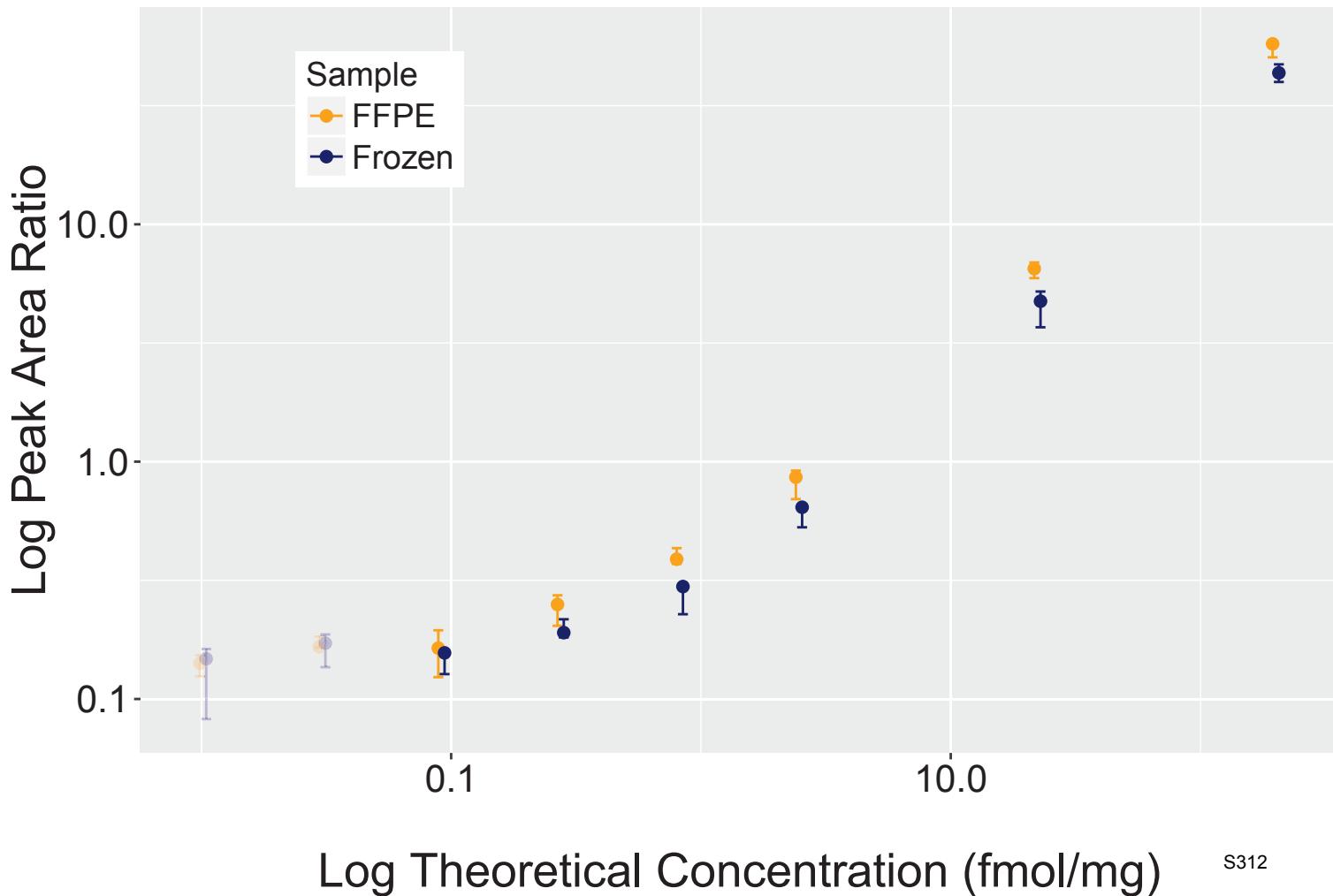
S310

Analyte: CALR.IDDPTDSKPEDWDKPEHIPDPDAK



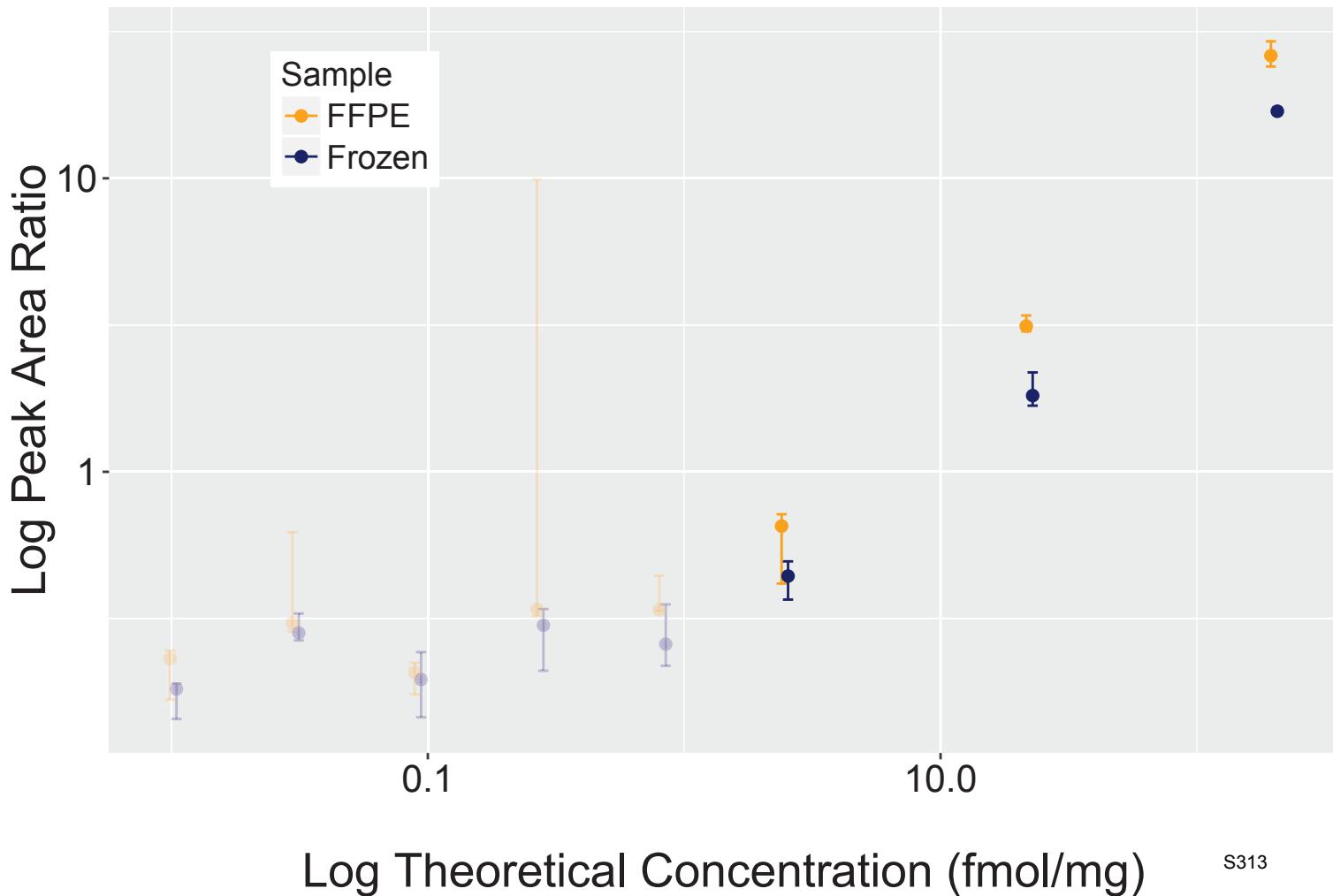
S311

Analyte: RCN1.IDNDGDGFVTTEELK



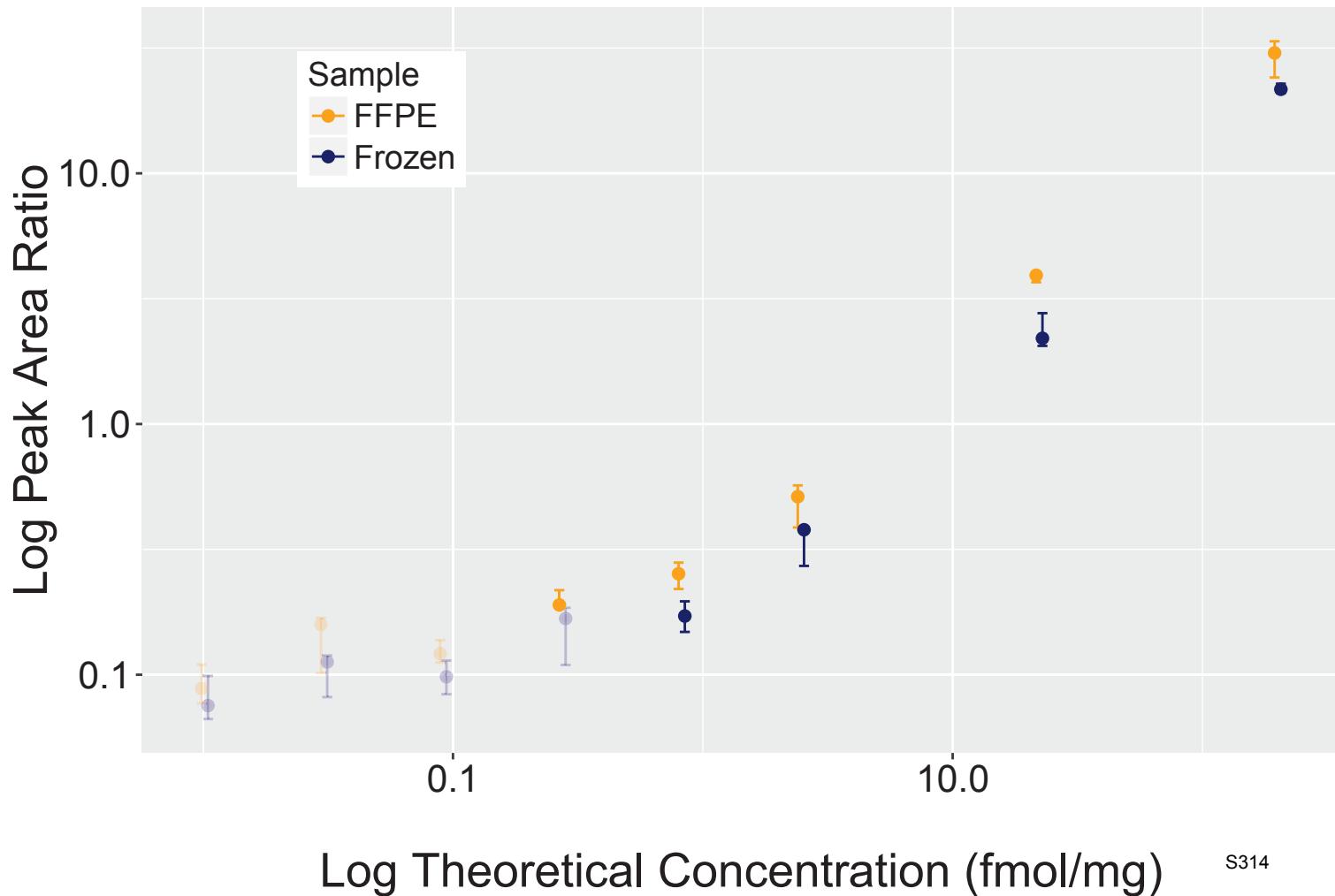
S312

Analyte: PSME2.IEDGNDFGVAIQEK

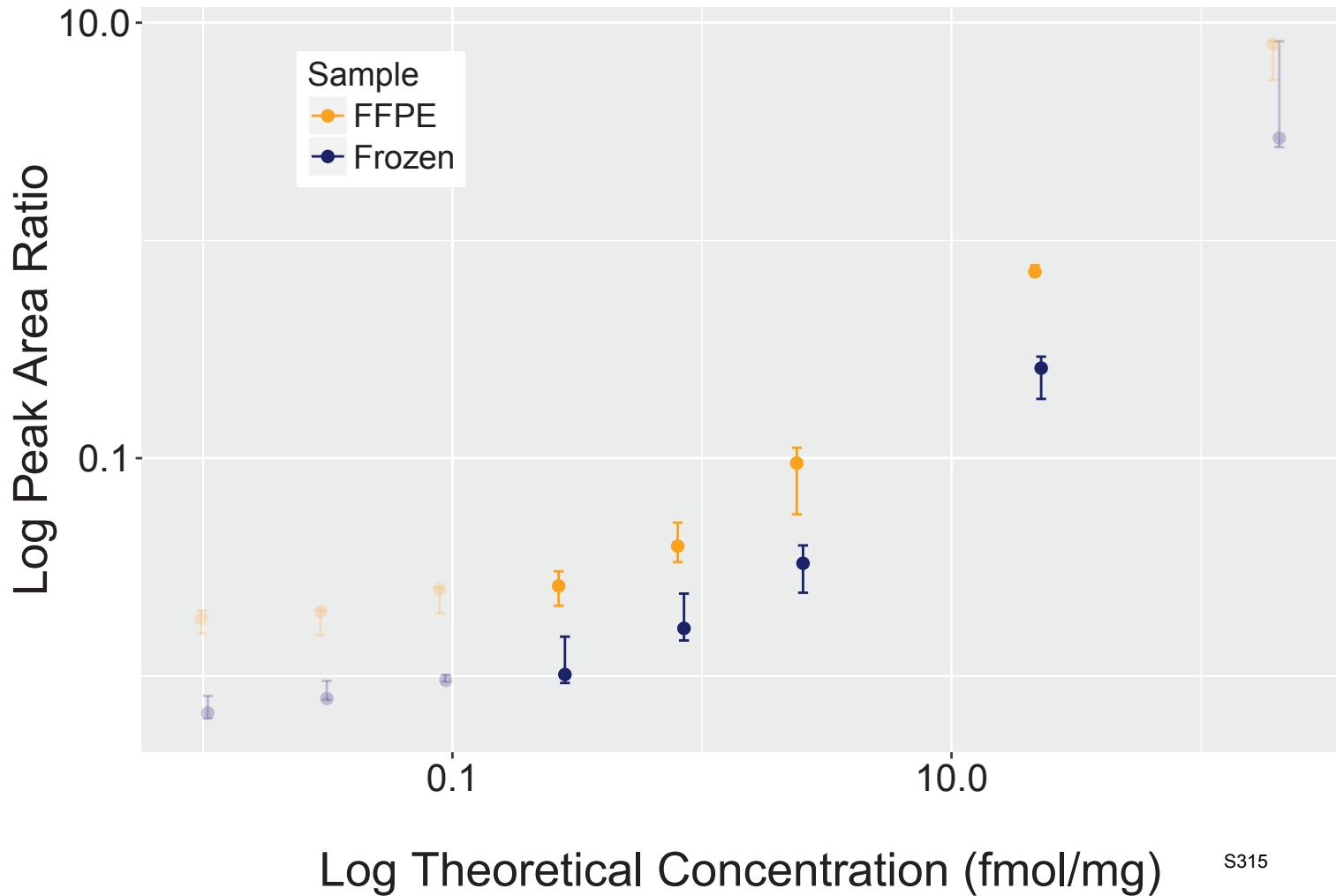


S313

Analyte: PSME1.IEDGNNFGVAVQEK

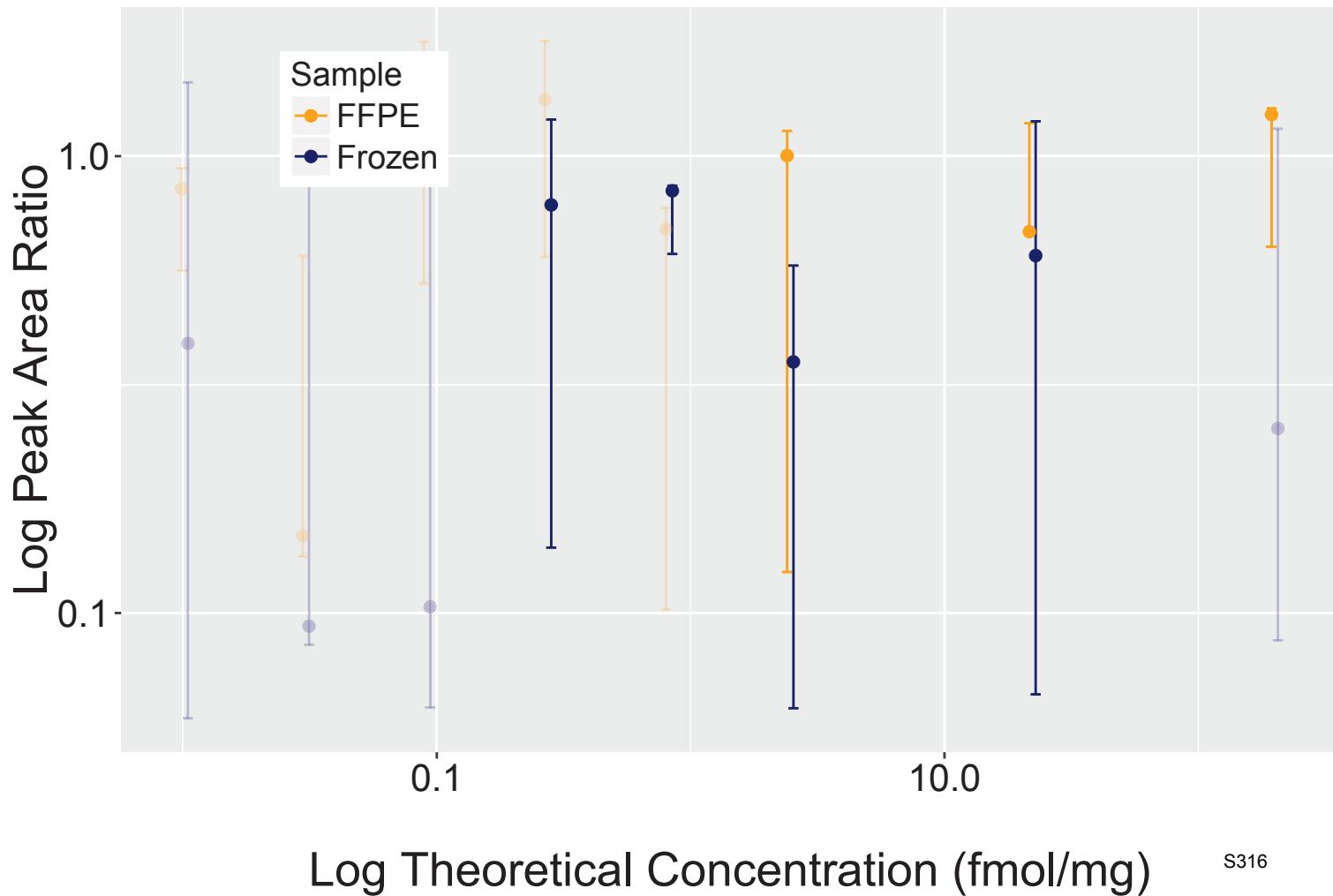


Analyte: MDH2.IFGVTTLDIVR



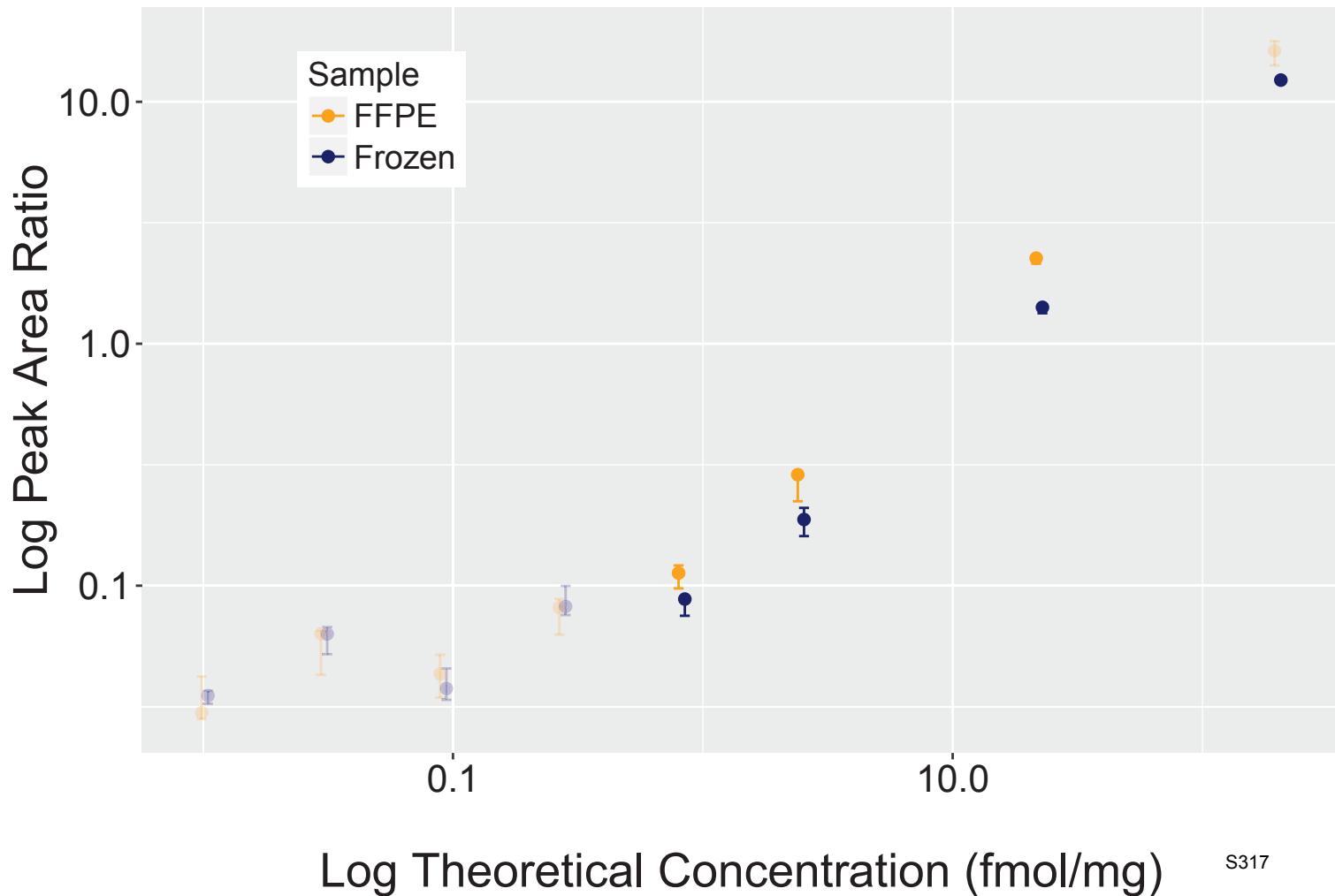
S315

Analyte: ADK.IFTLNLSAPFISQFYK

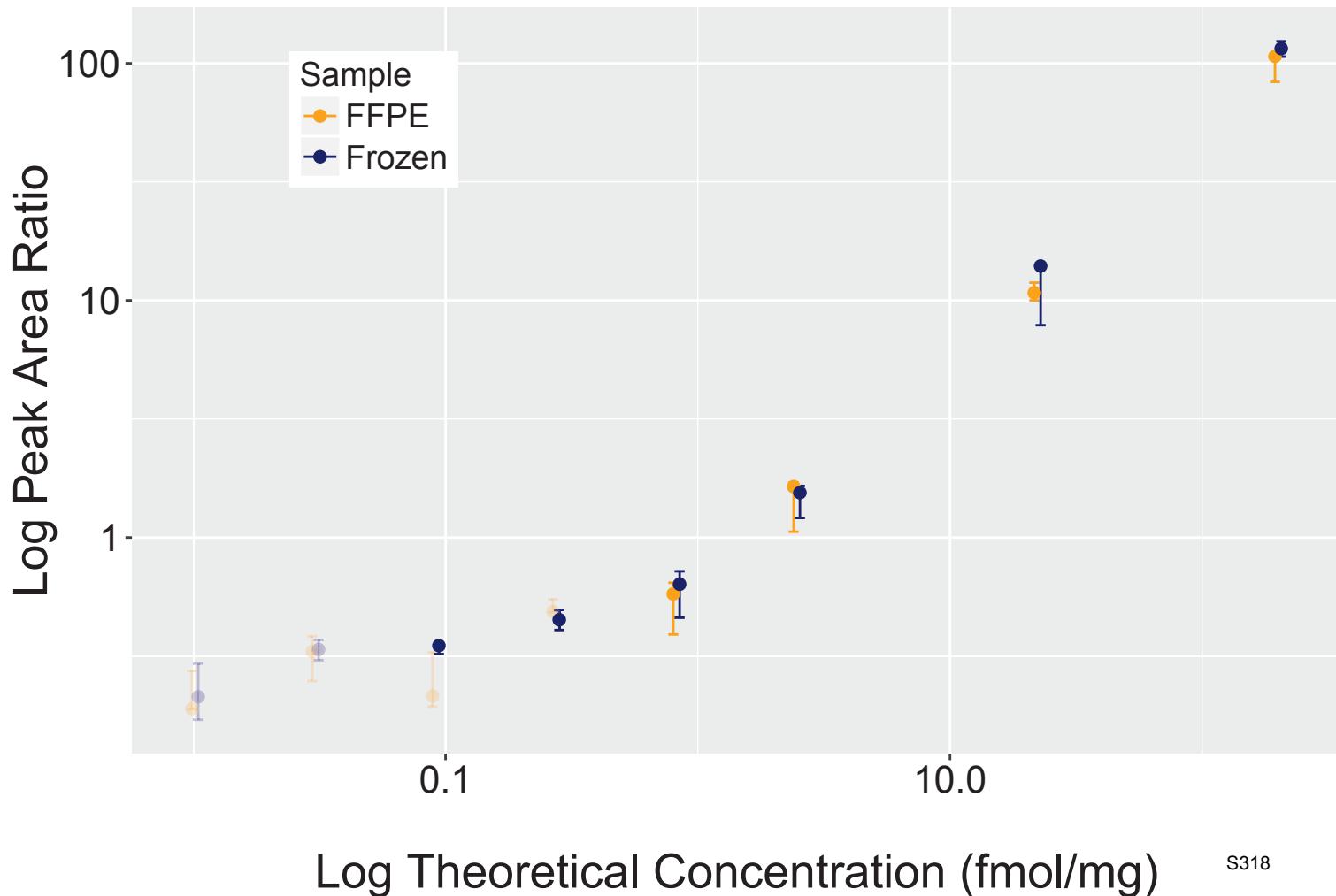


S316

Analyte: ALDH9A1.IGDPLLEDTR

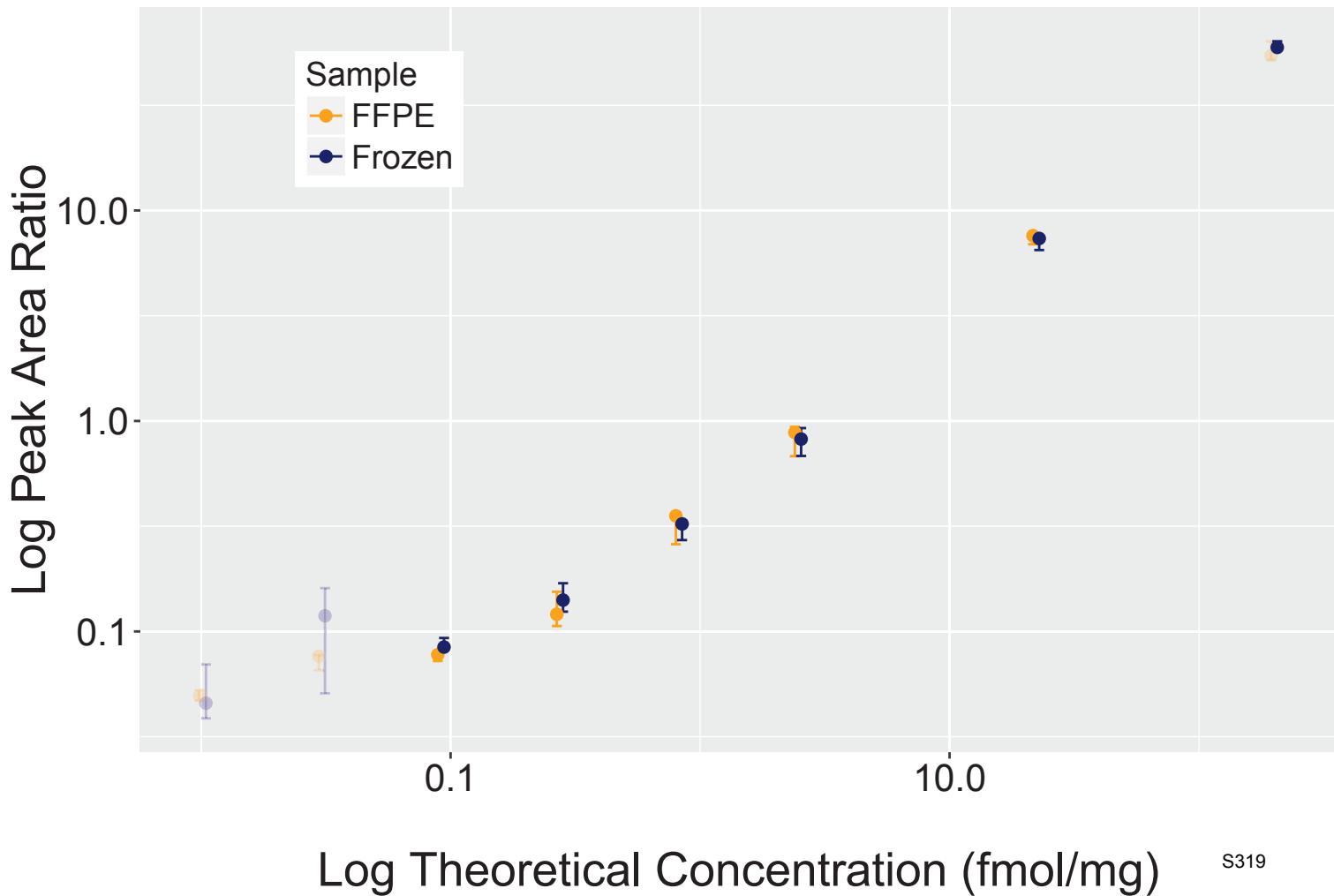


Analyte: ABCF1.IGFFNQQYAEQLR



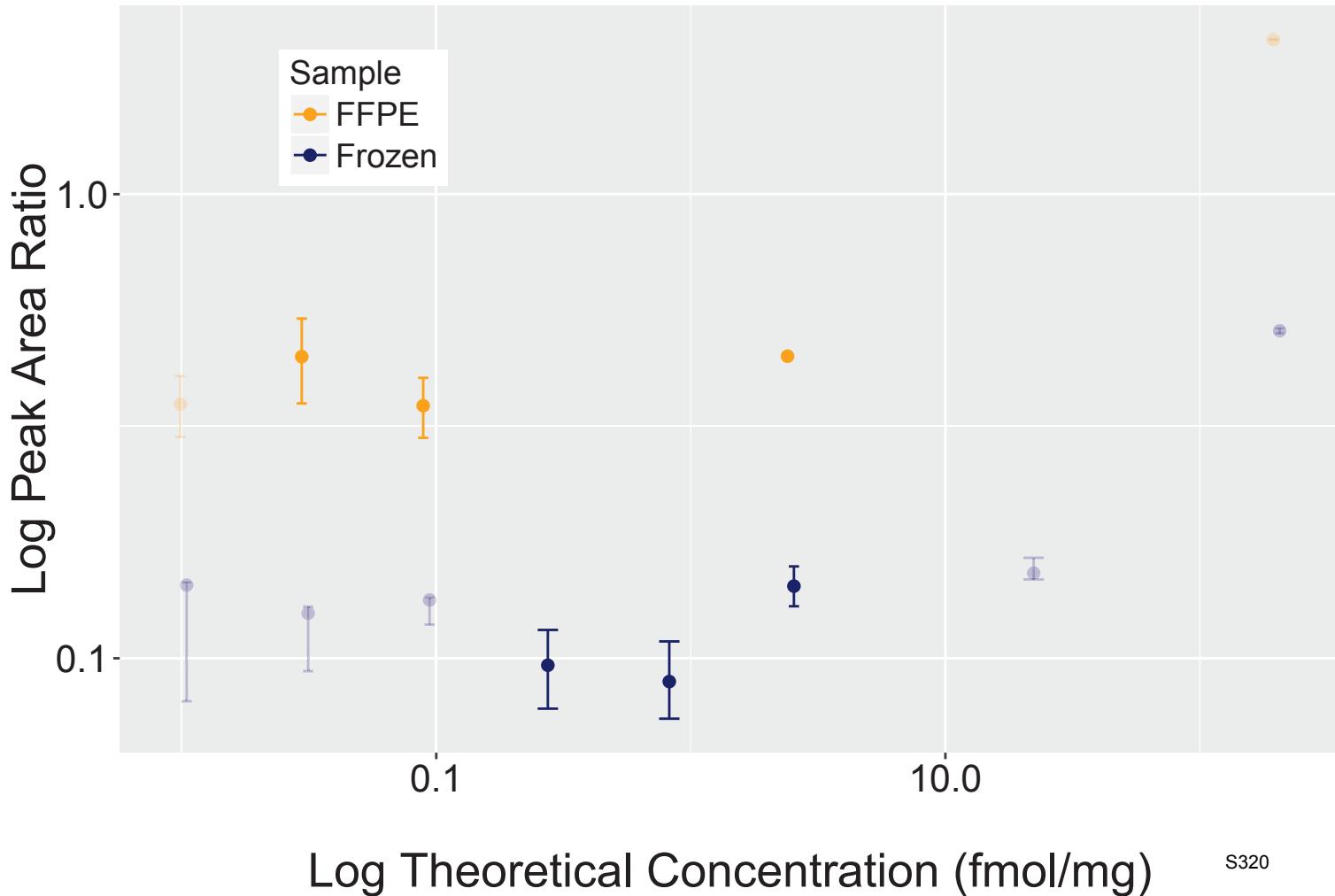
S318

Analyte: ACSL1.IGFFQGDIR



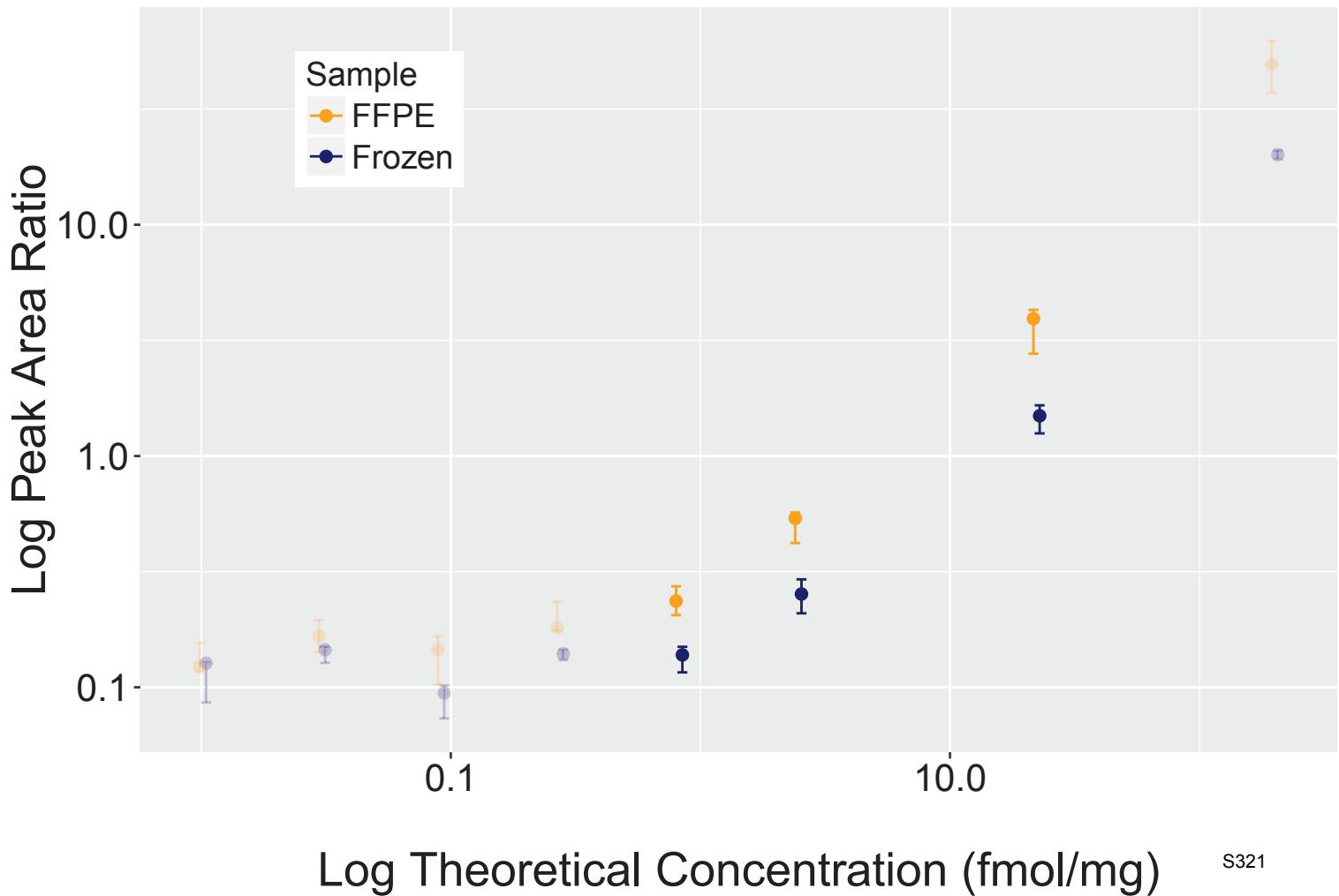
S319

Analyte: DNAJA2.IGLVEALC[+57]GFQFTFK



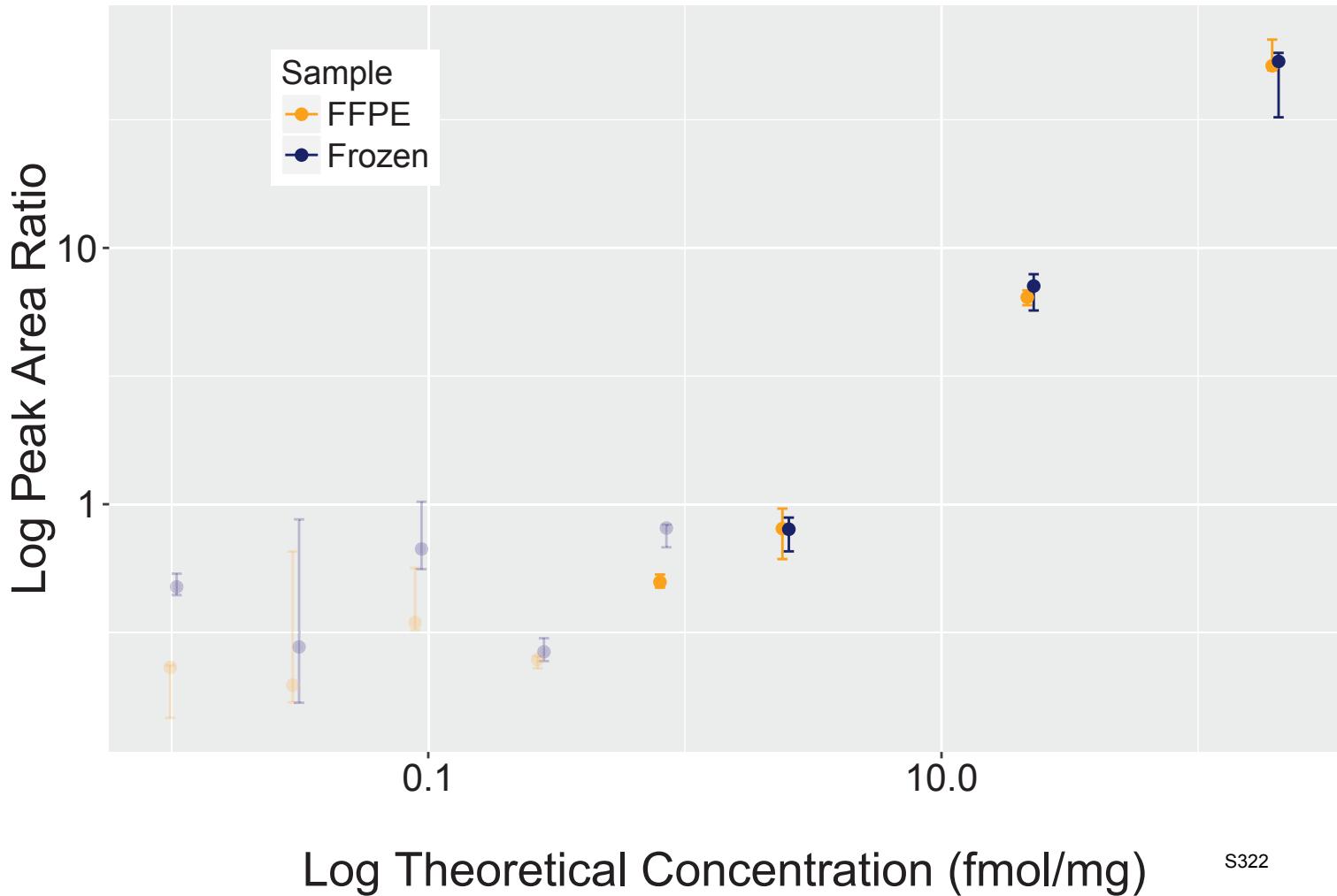
S320

Analyte: PPP2R1A.IGPILDNSTLQSEVKPILEK

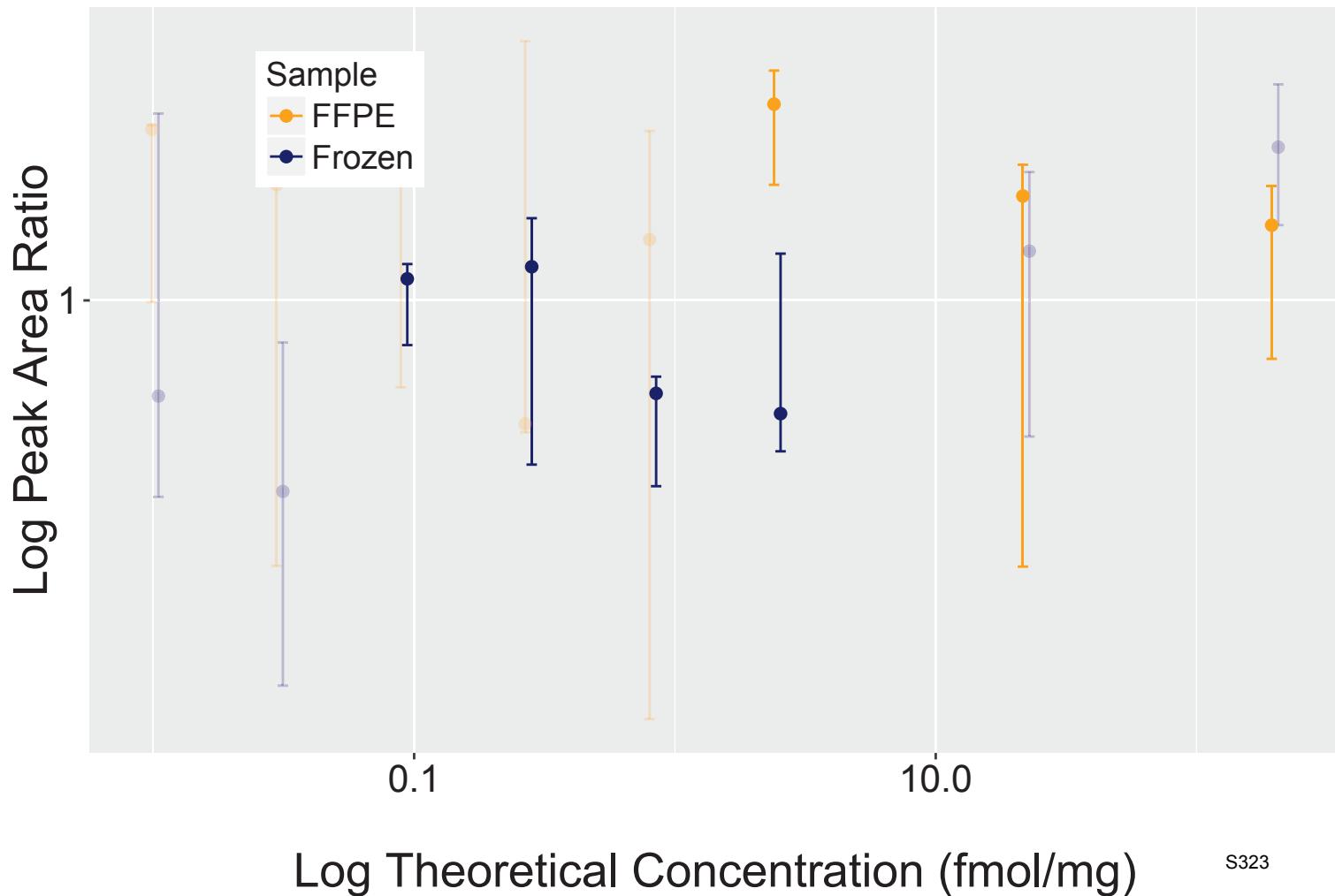


S321

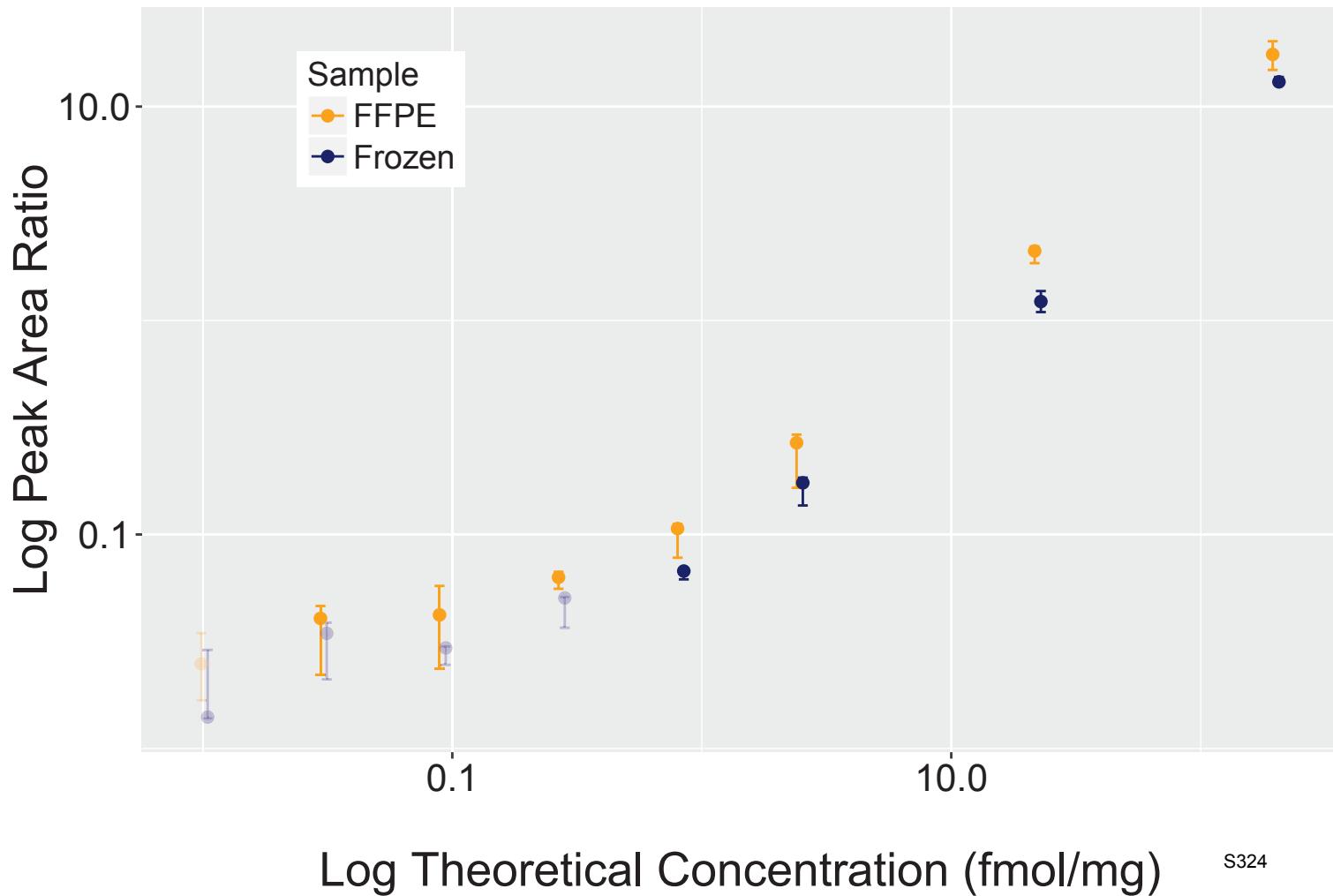
Analyte: QARS.IHTEPQLSAALEYVR



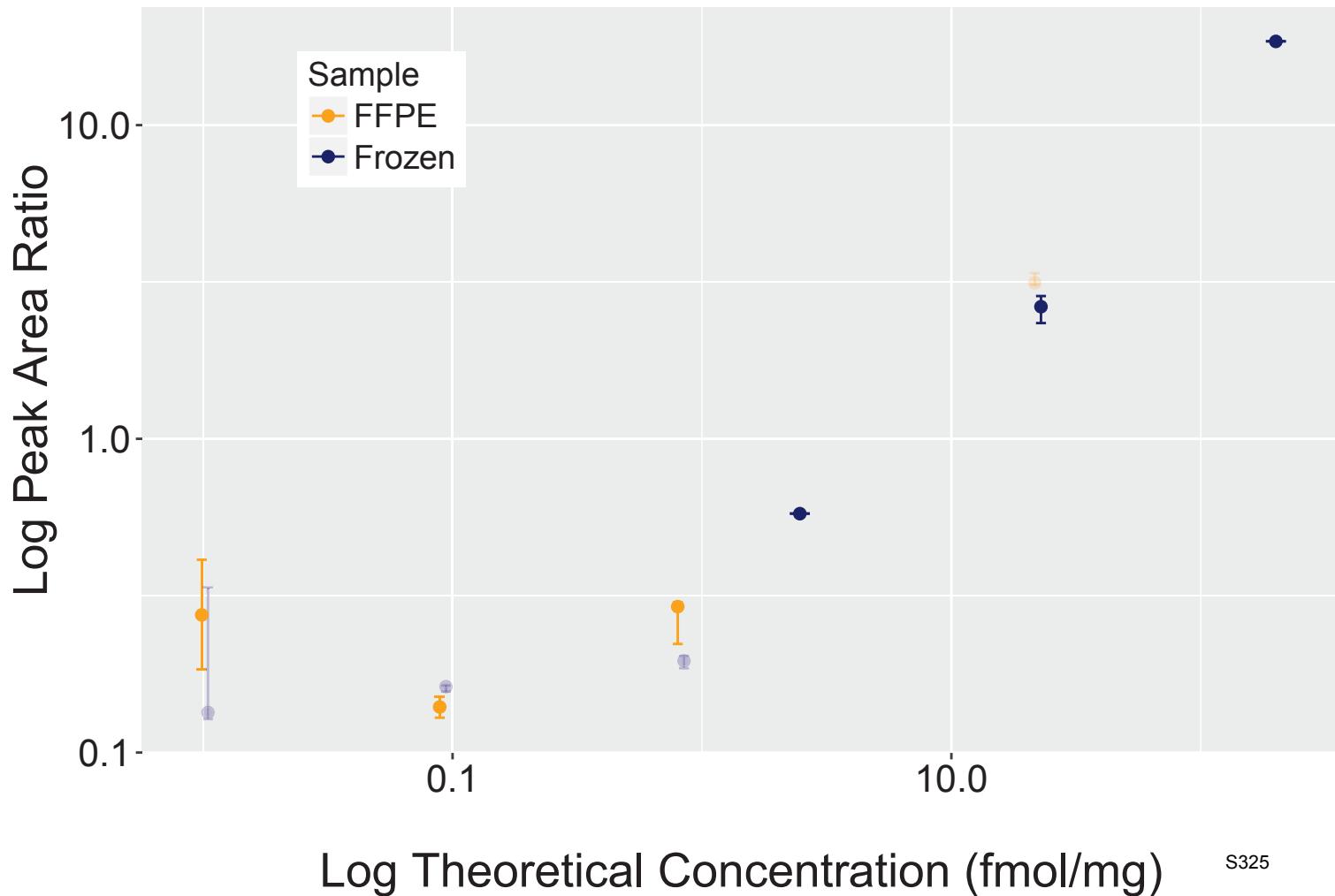
Analyte: RPS8.IIDVVYNASNNEELVR



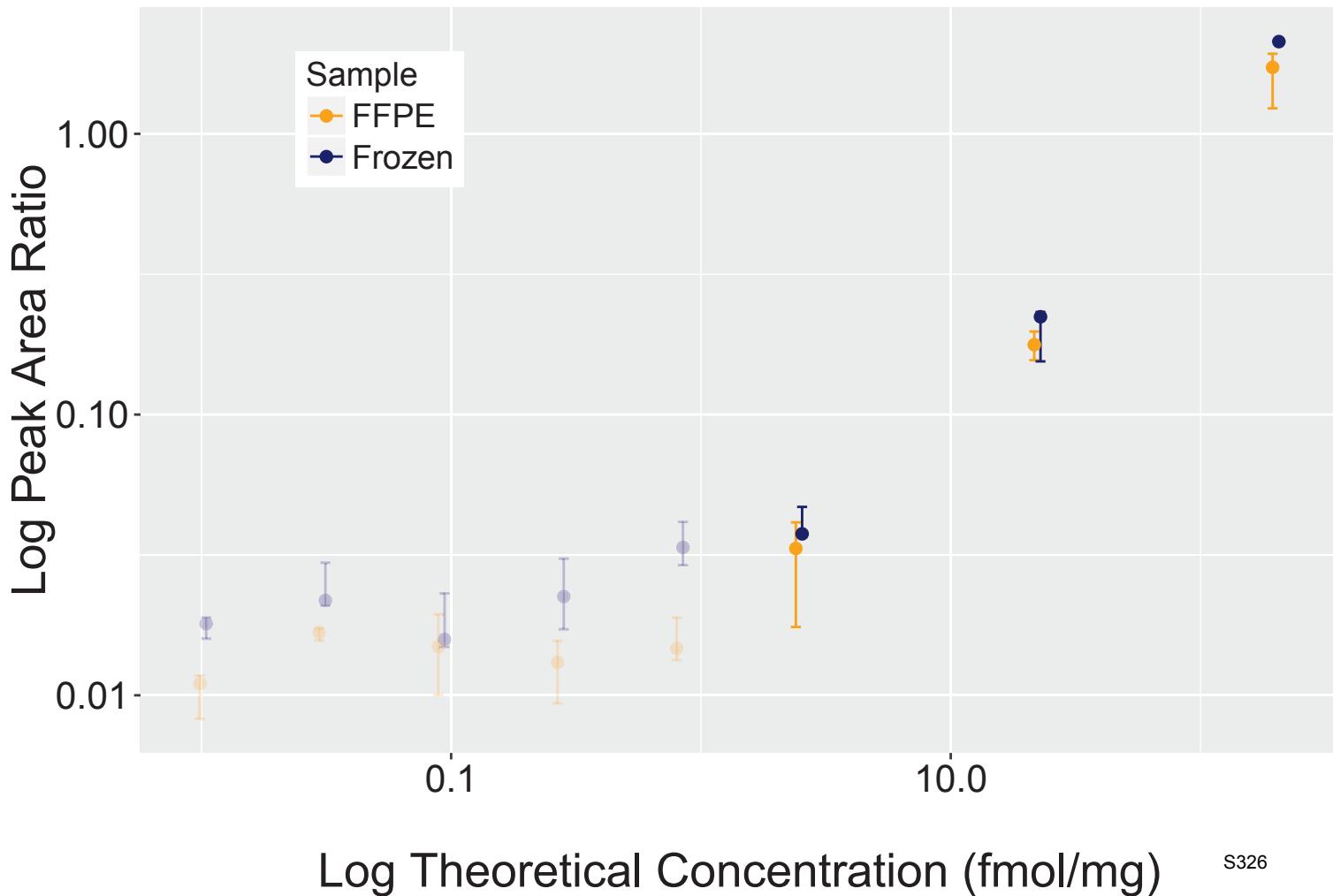
Analyte: PCBP1.IITLTGPTNAIFK



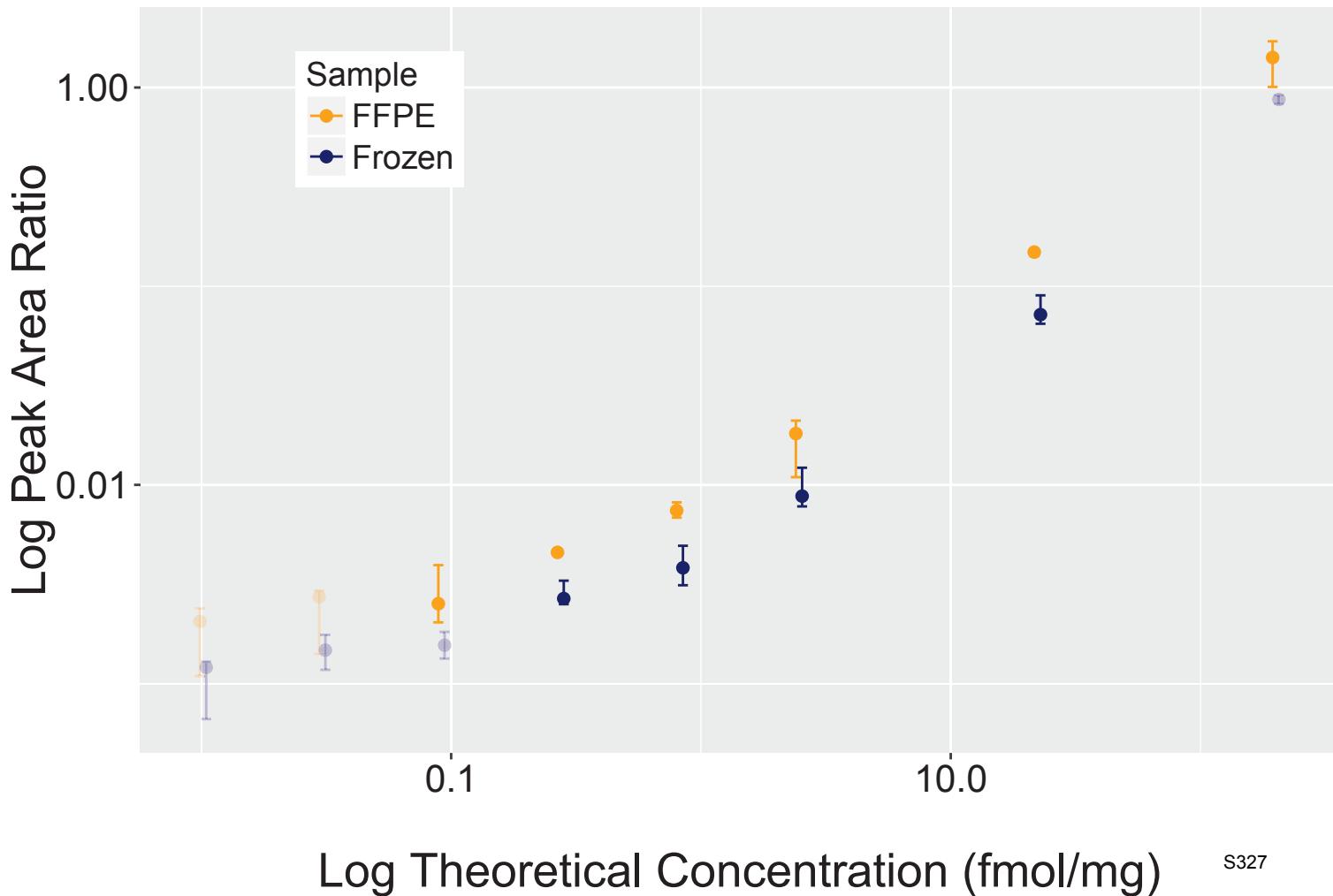
Analyte: MANF.ILDDWGETC[+57]K



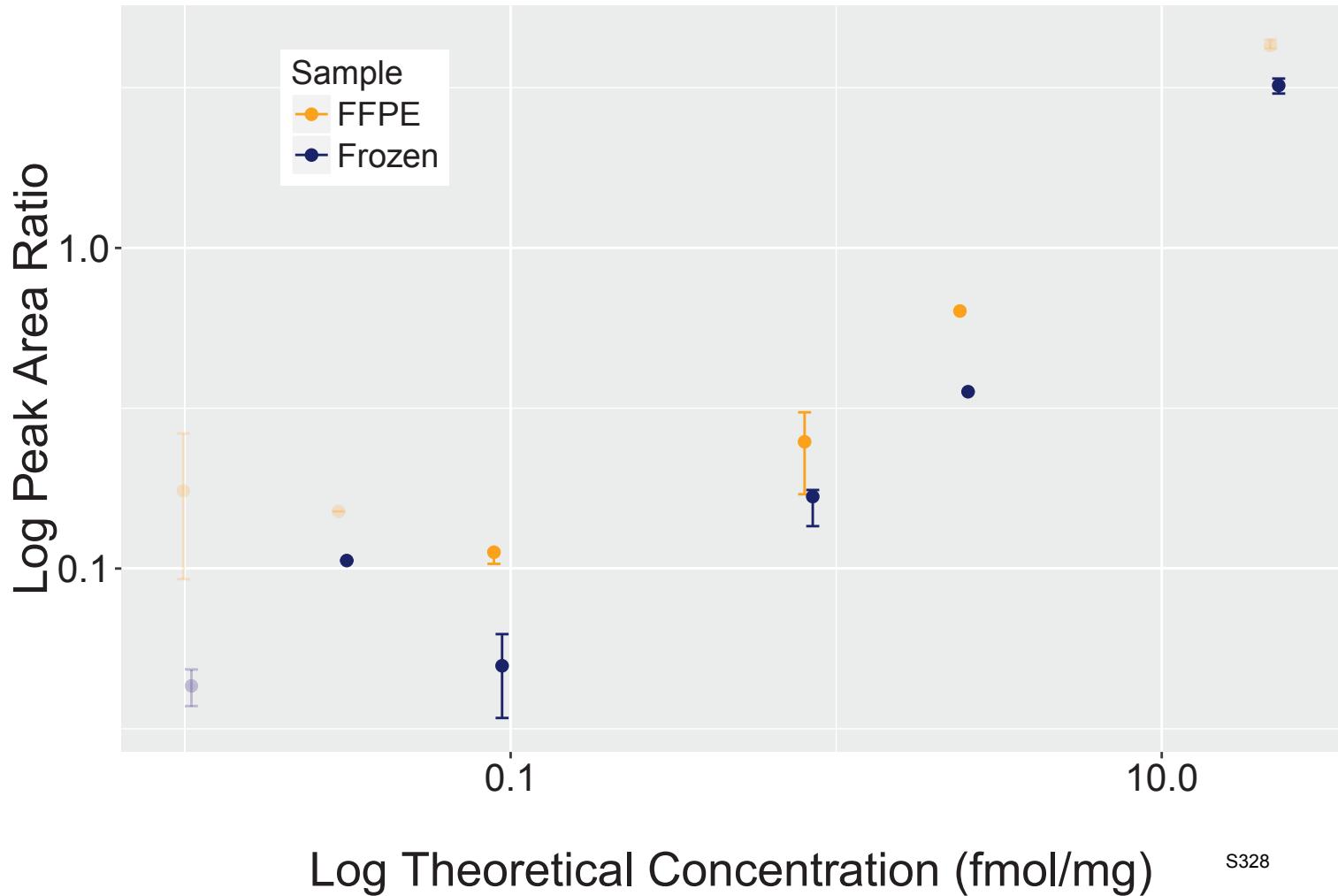
Analyte: ATP5A1.ILGADTSVDLEETGR



Analyte: VIM.ILLAELEQLK

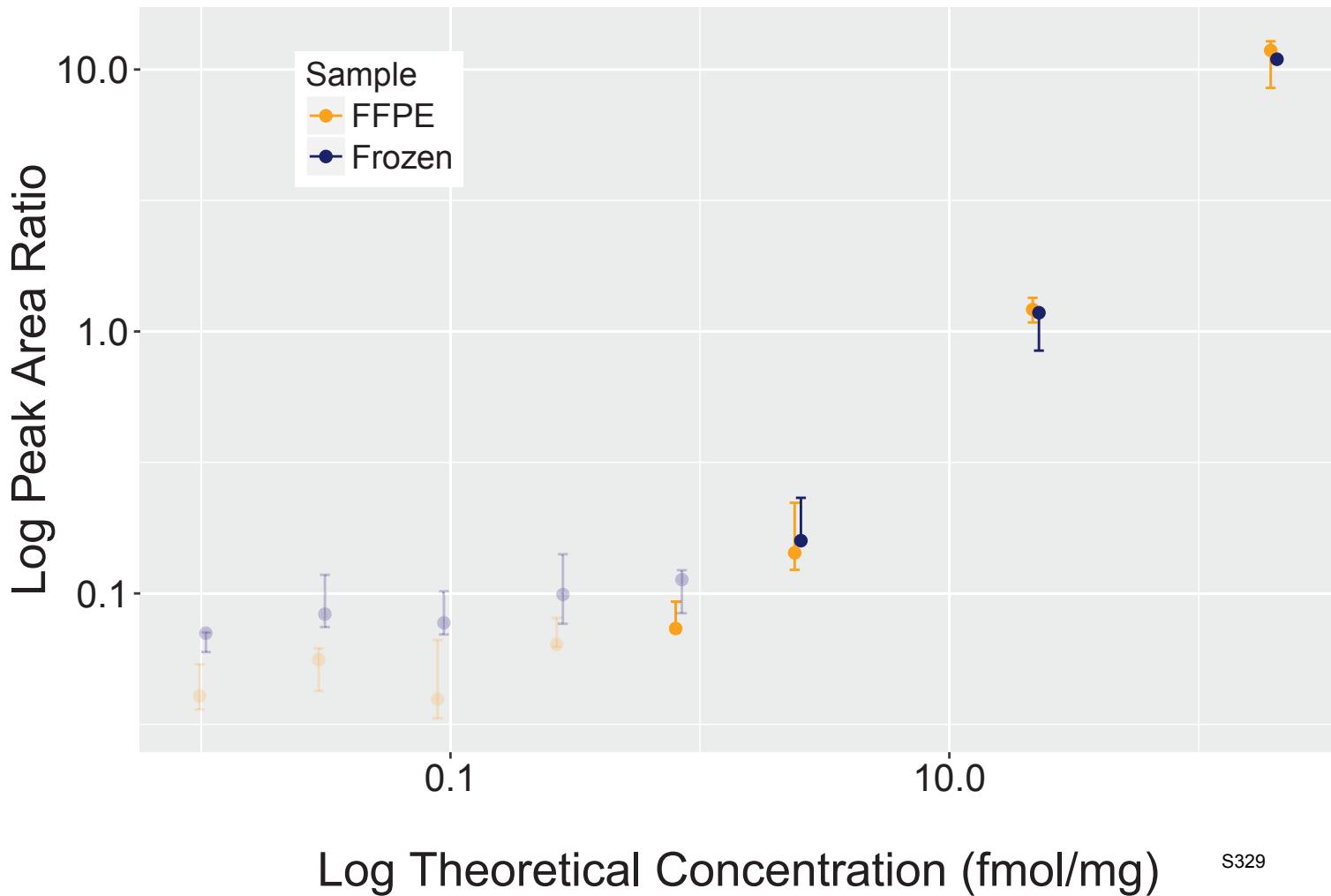


Analyte: CBR1.ILLNAC[+57]C[+57]PGWVR

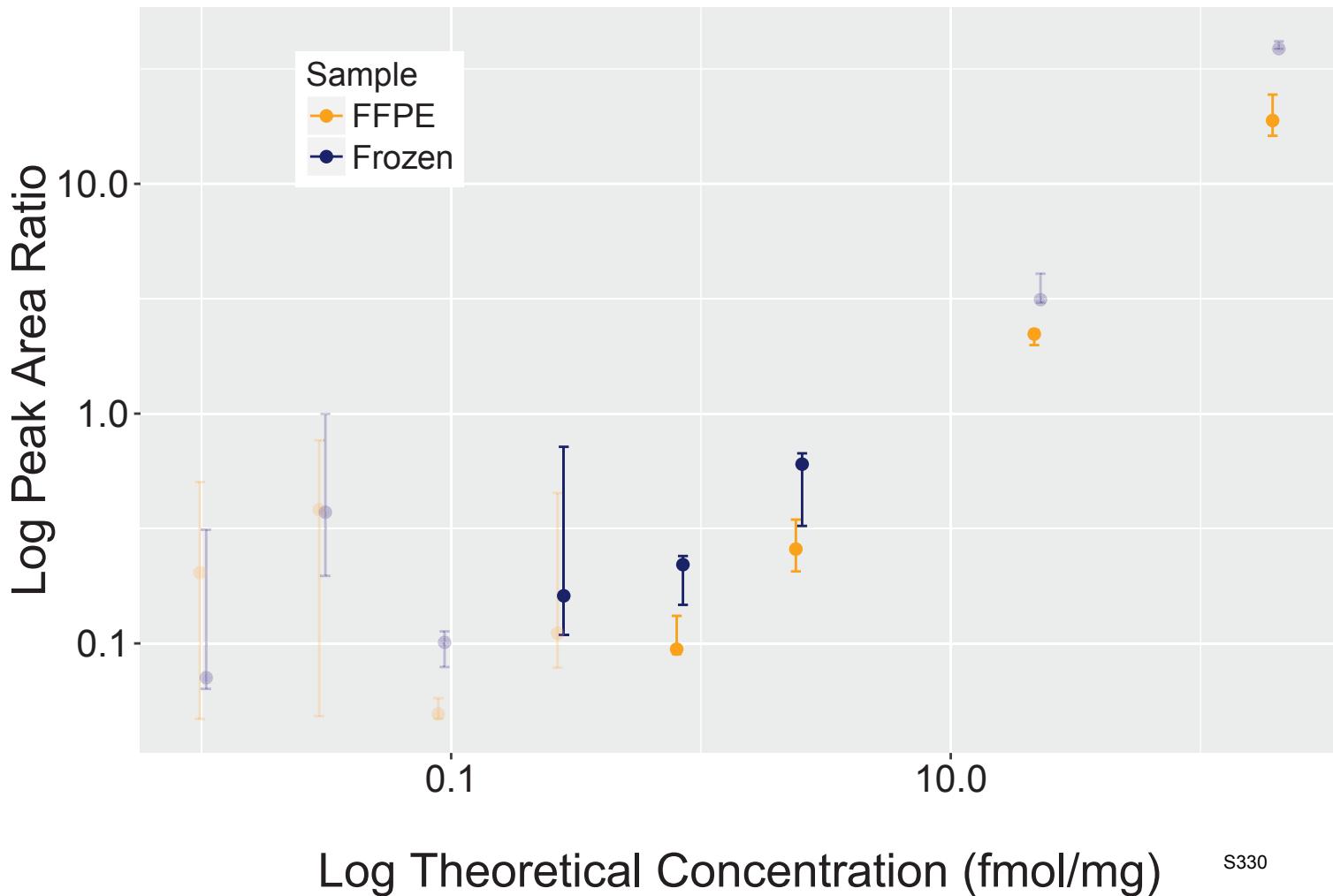


S328

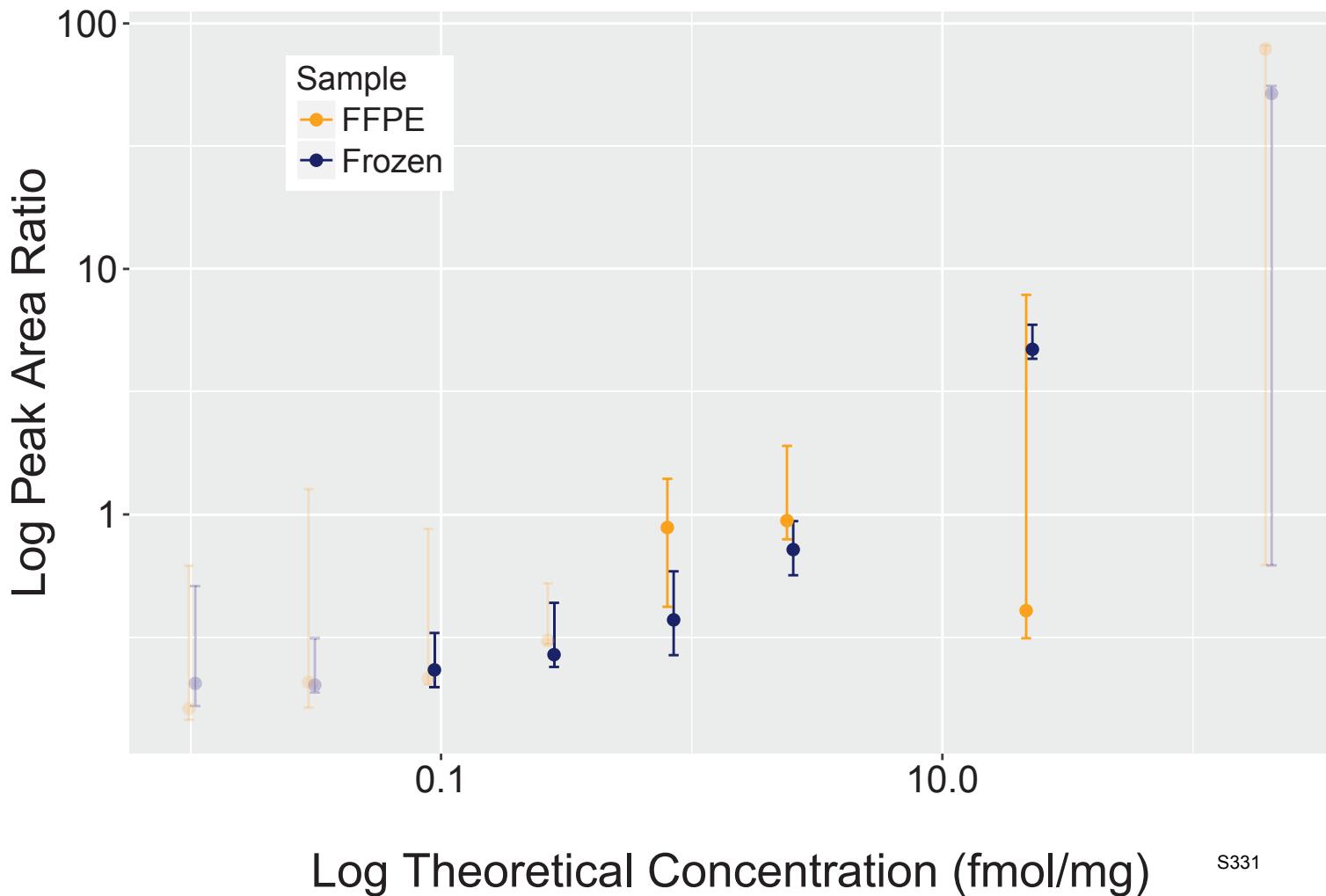
Analyte: ILF2.ILPTLEAVAALGNK



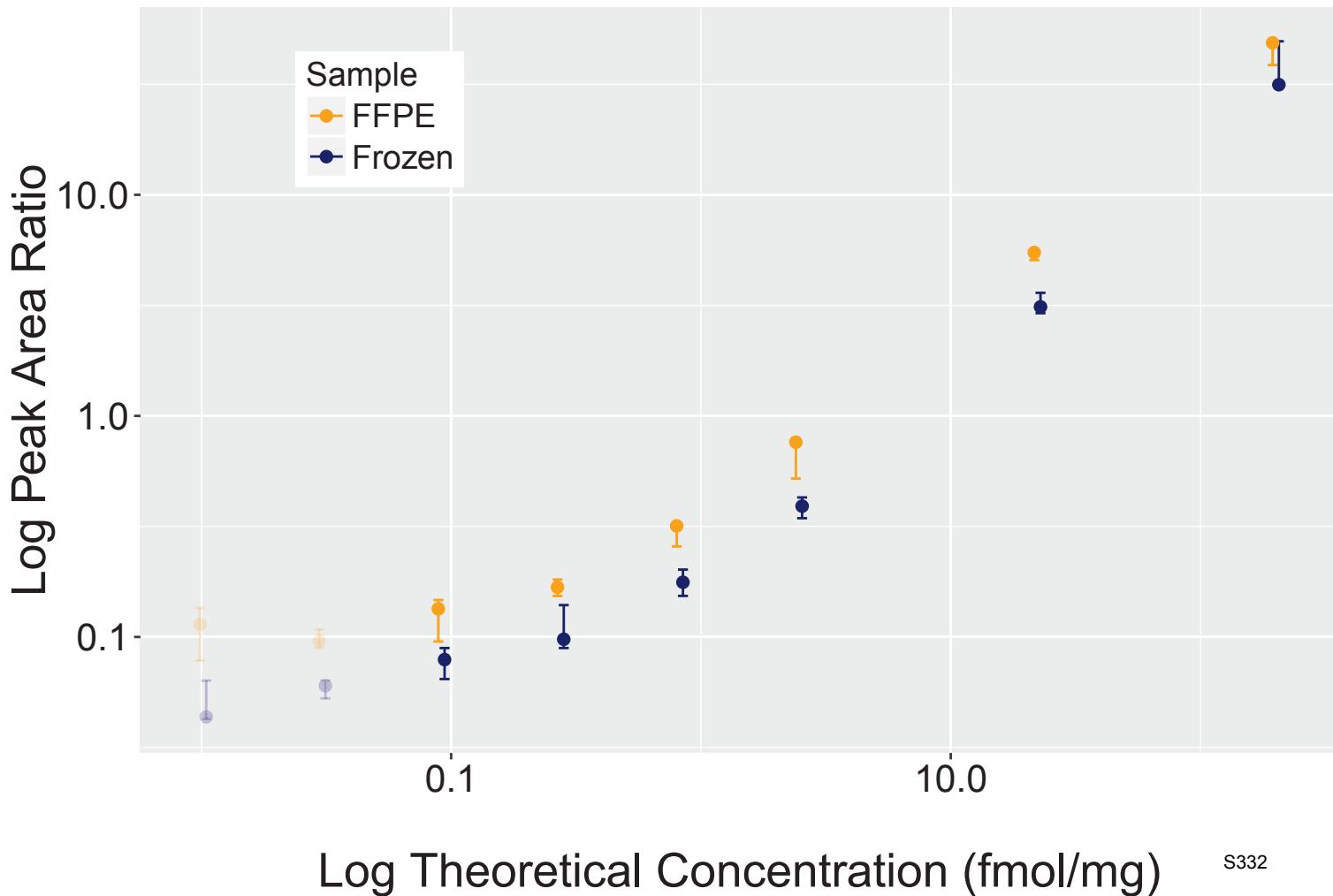
Analyte: RPL18.ILTFDQLALDSPK



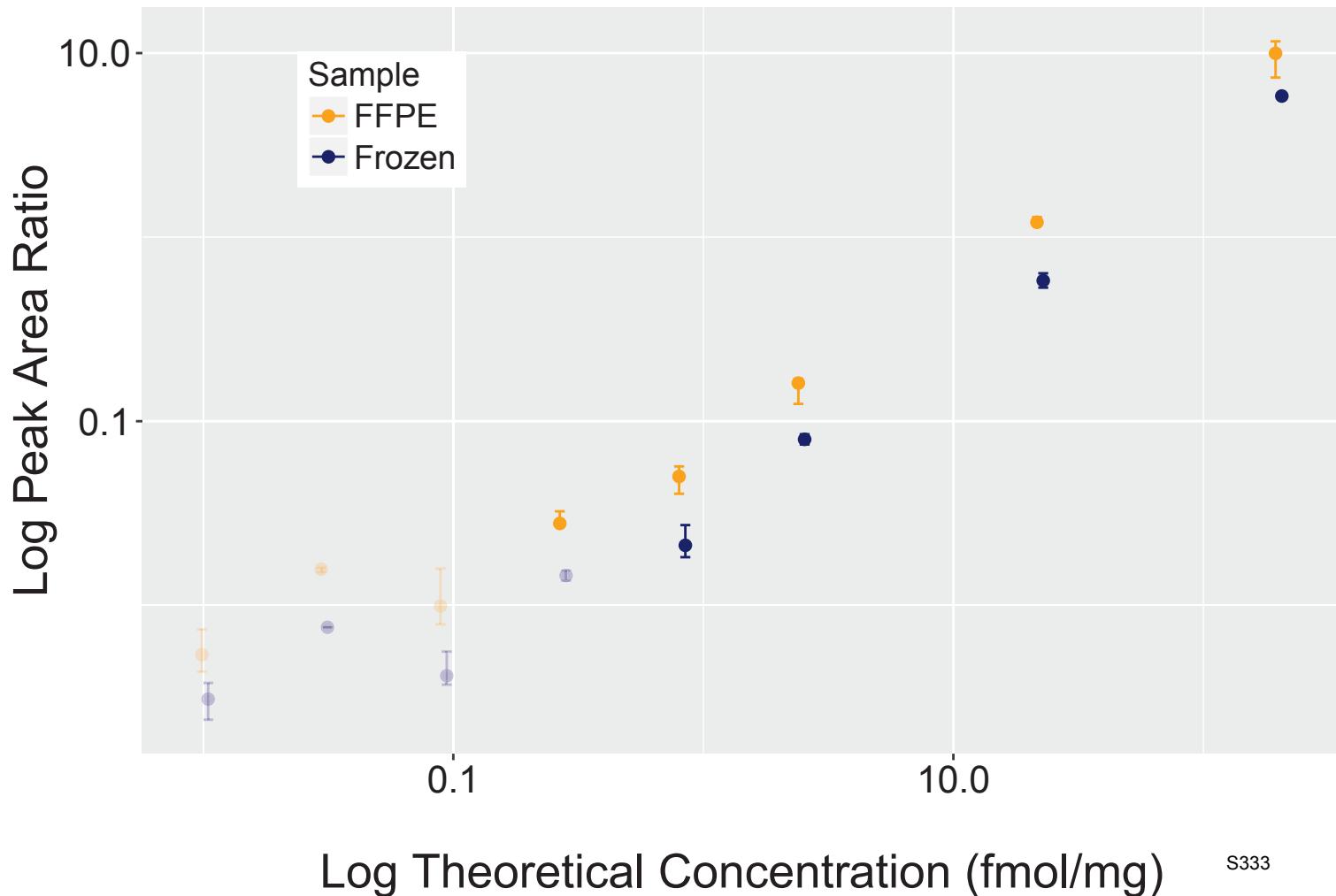
Analyte: SERPINB5.ILVVNAAYFVGK



Analyte: CCT3.IPGGIIEDSC[+57]VLR

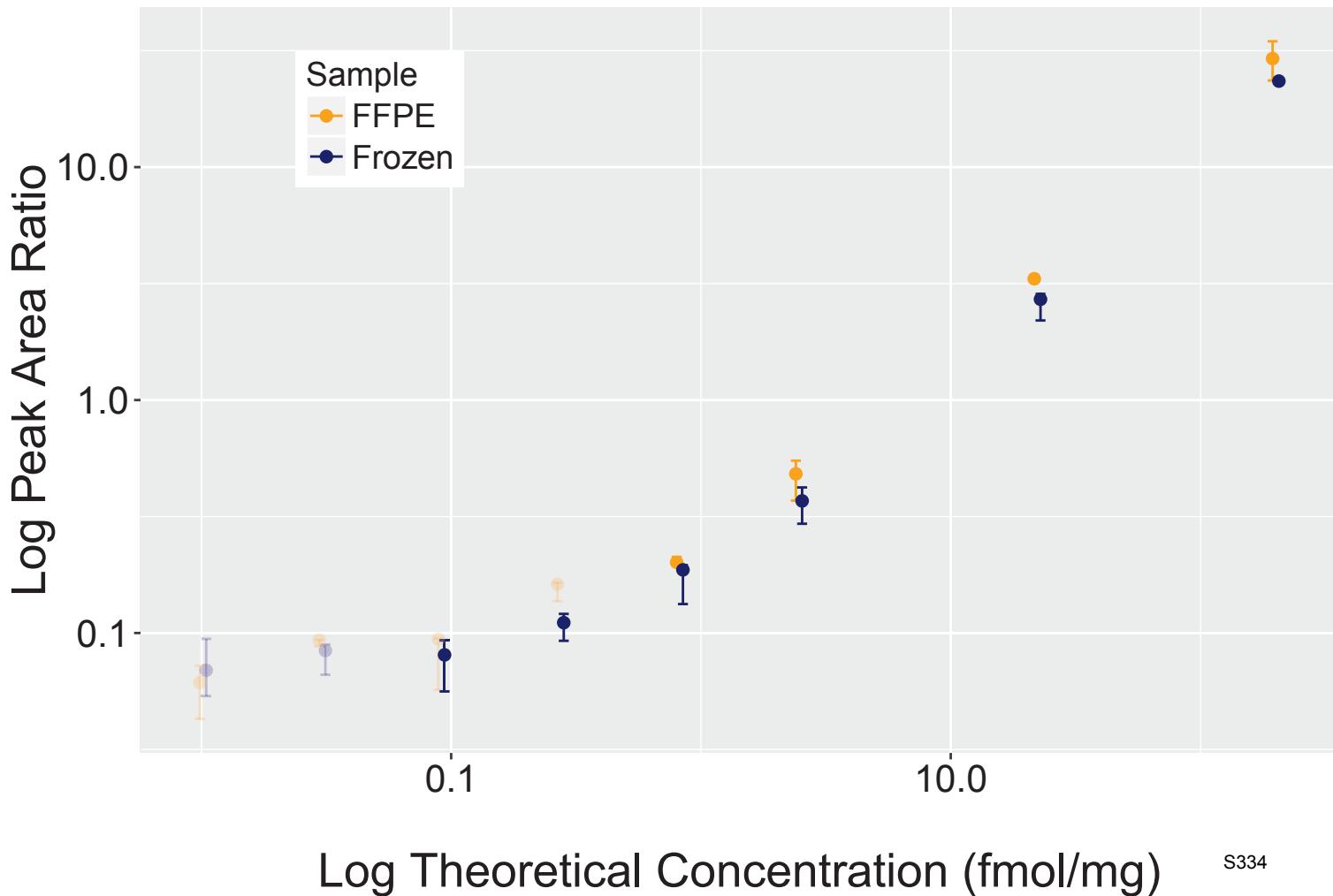


Analyte: TPM4.IQALQQQADEAEDR

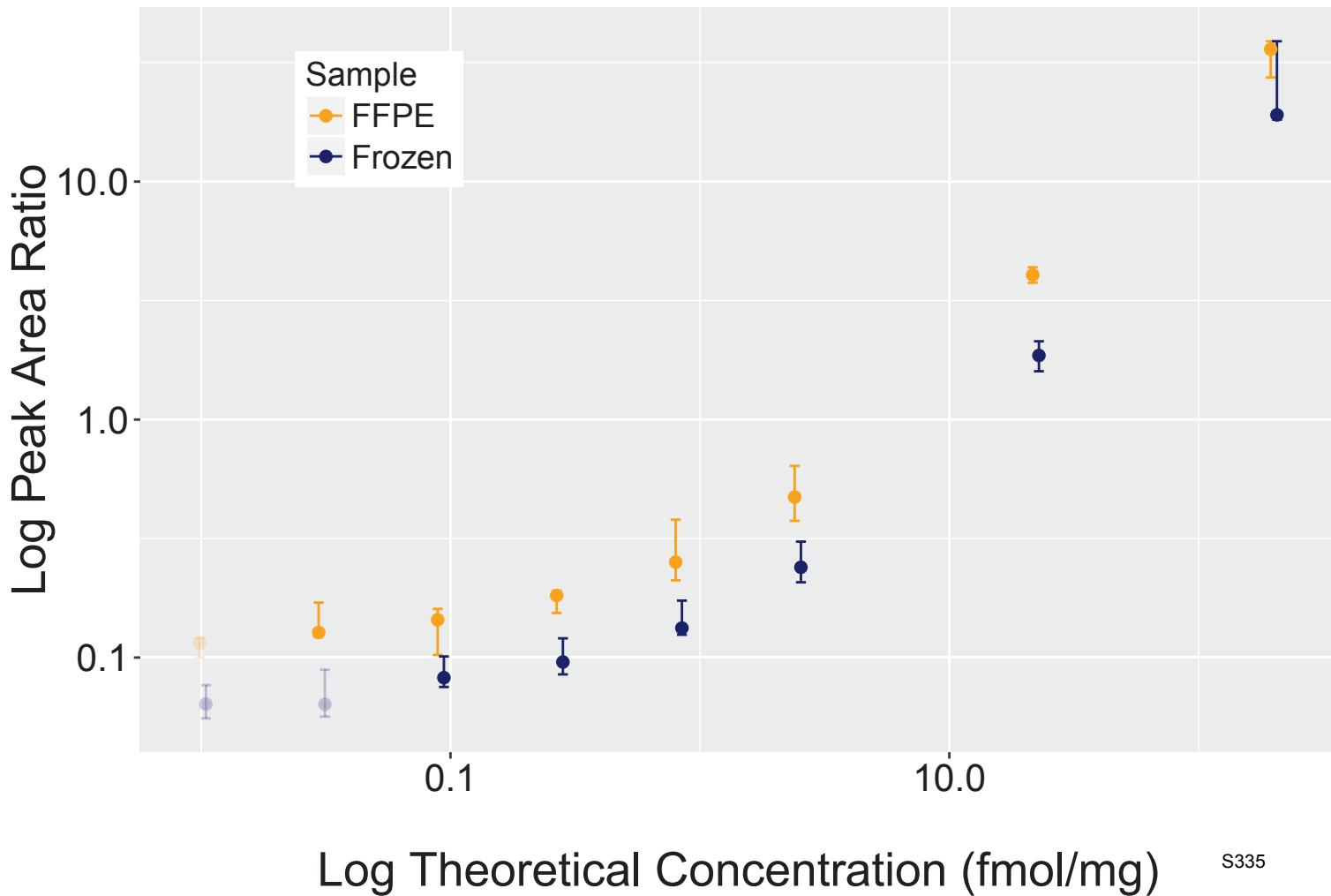


S333

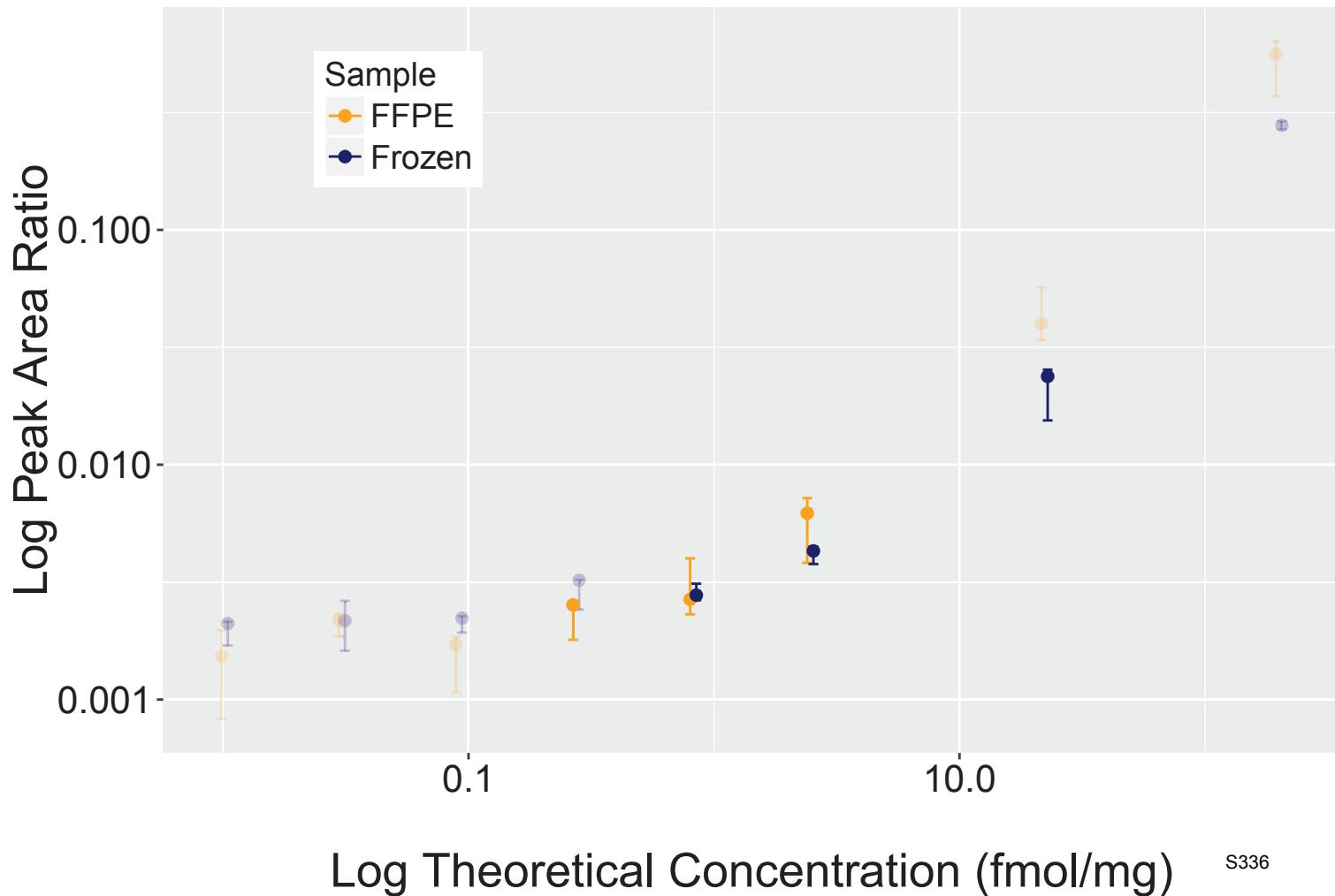
Analyte: OTUB1.IQQEIAVQNPLVSER



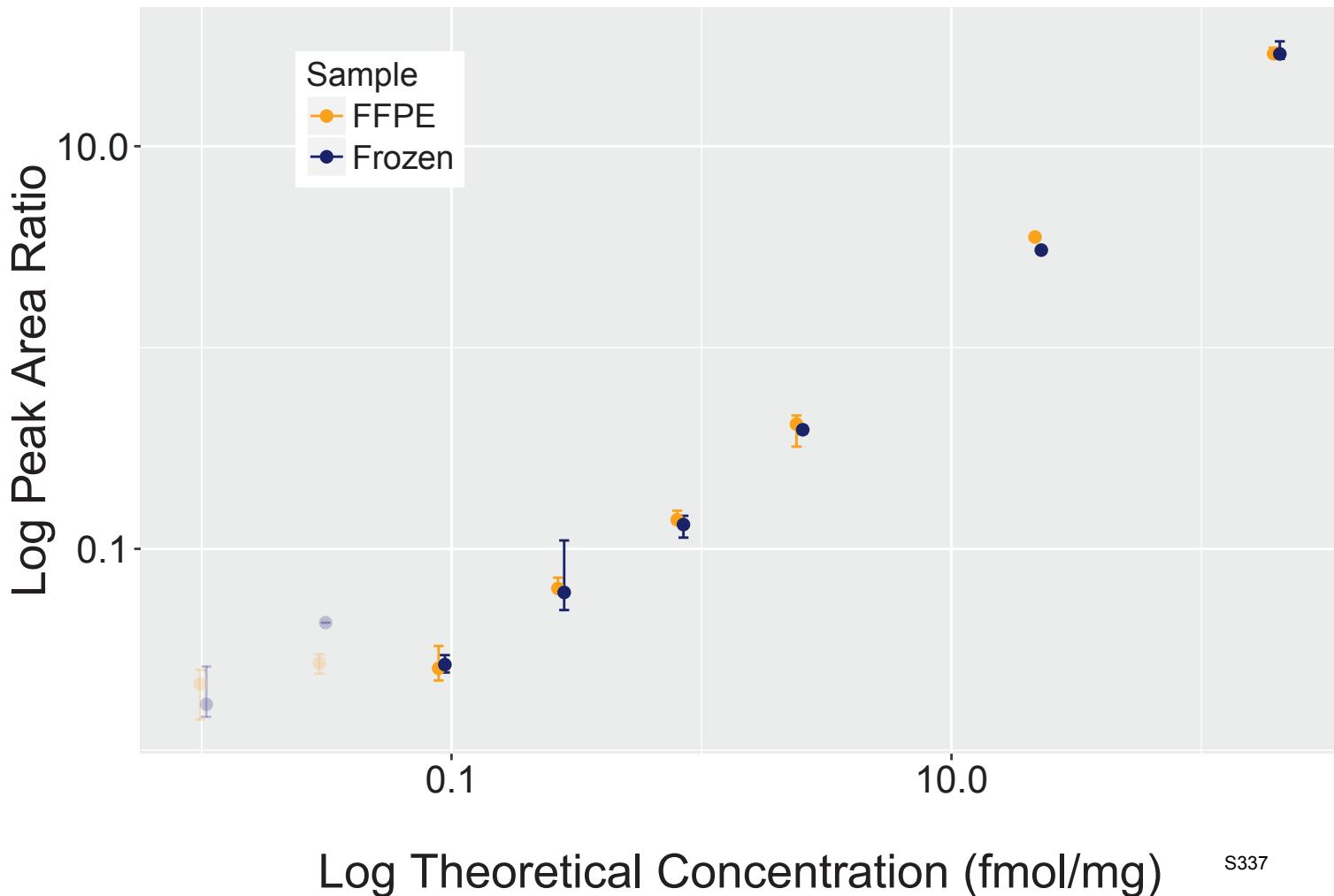
Analyte: AHNAK.ISAPNVDNFNLEGPK



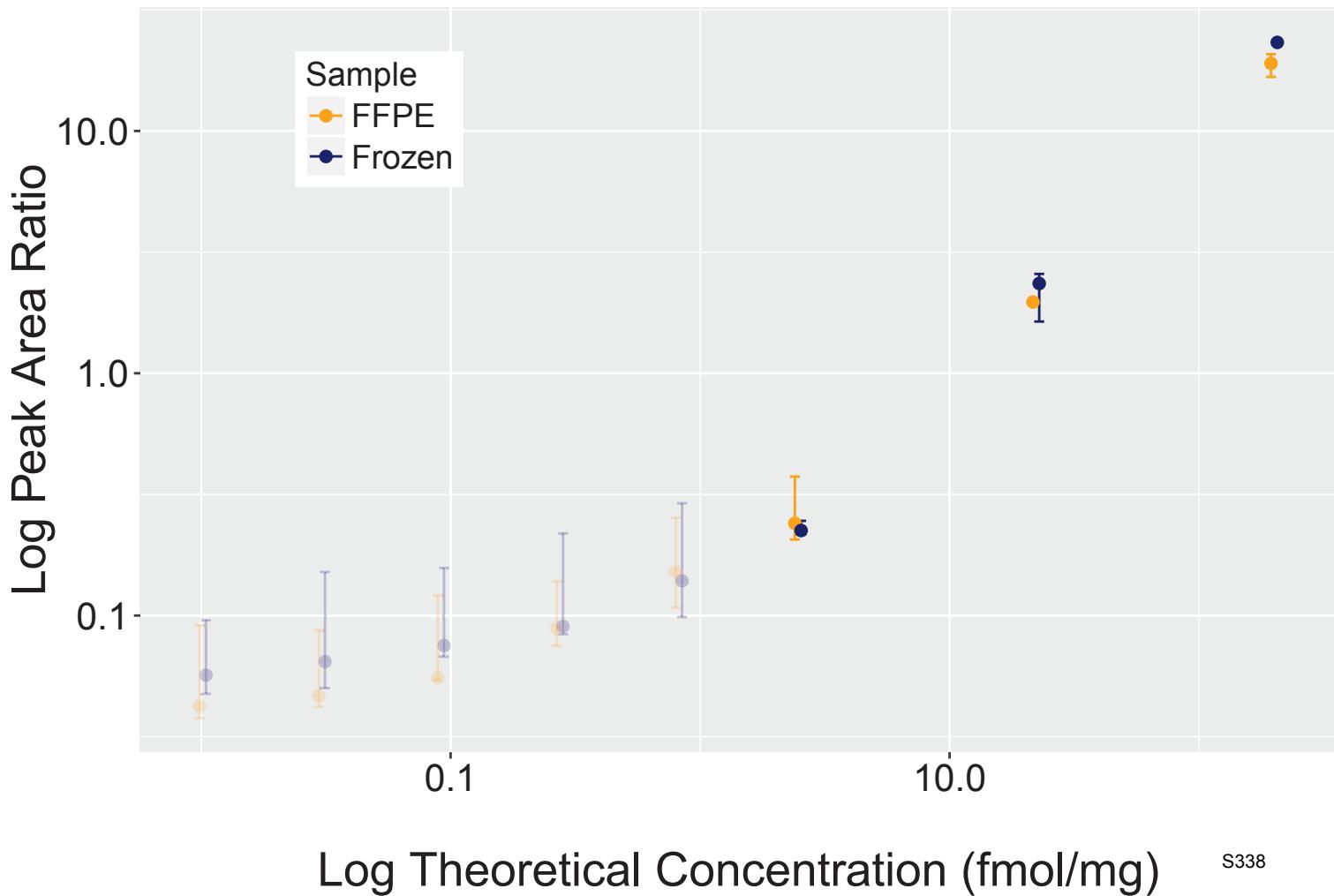
Analyte: VIM.ISLPLPNFSSLNLR



Analyte: ANXA4.ISQTYQQQYGR

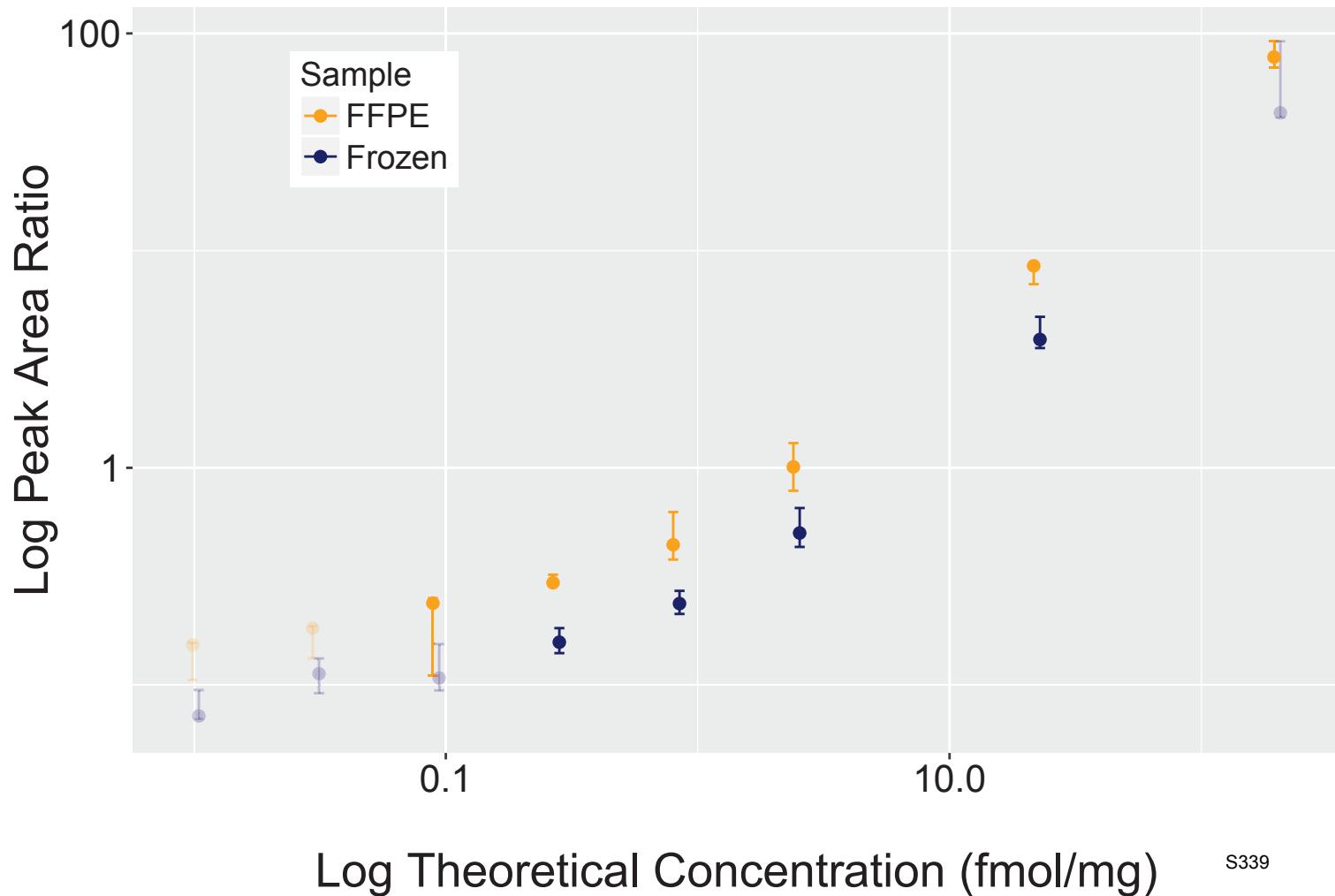


Analyte: IPO5.ITFLLQAIR

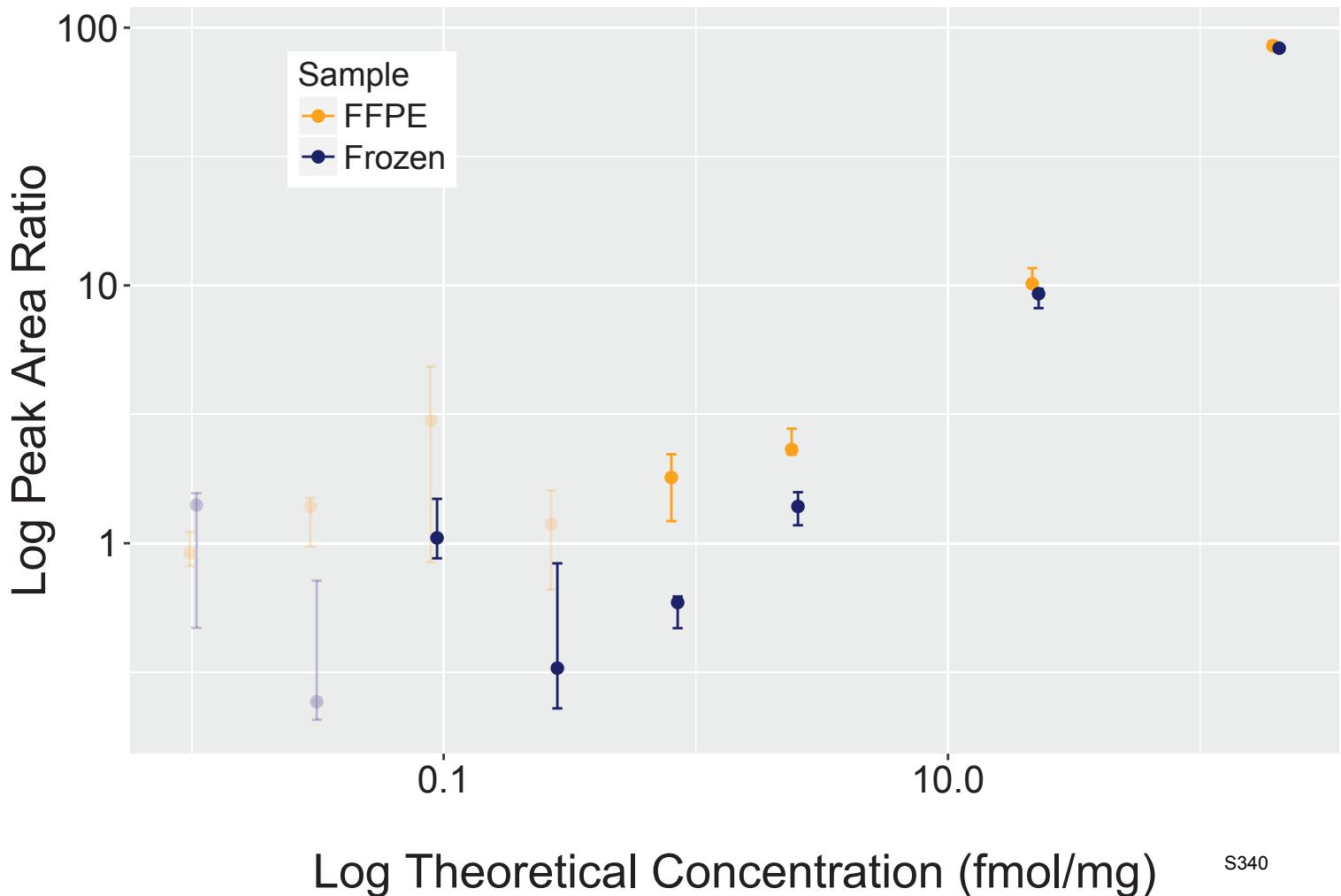


S³³⁸

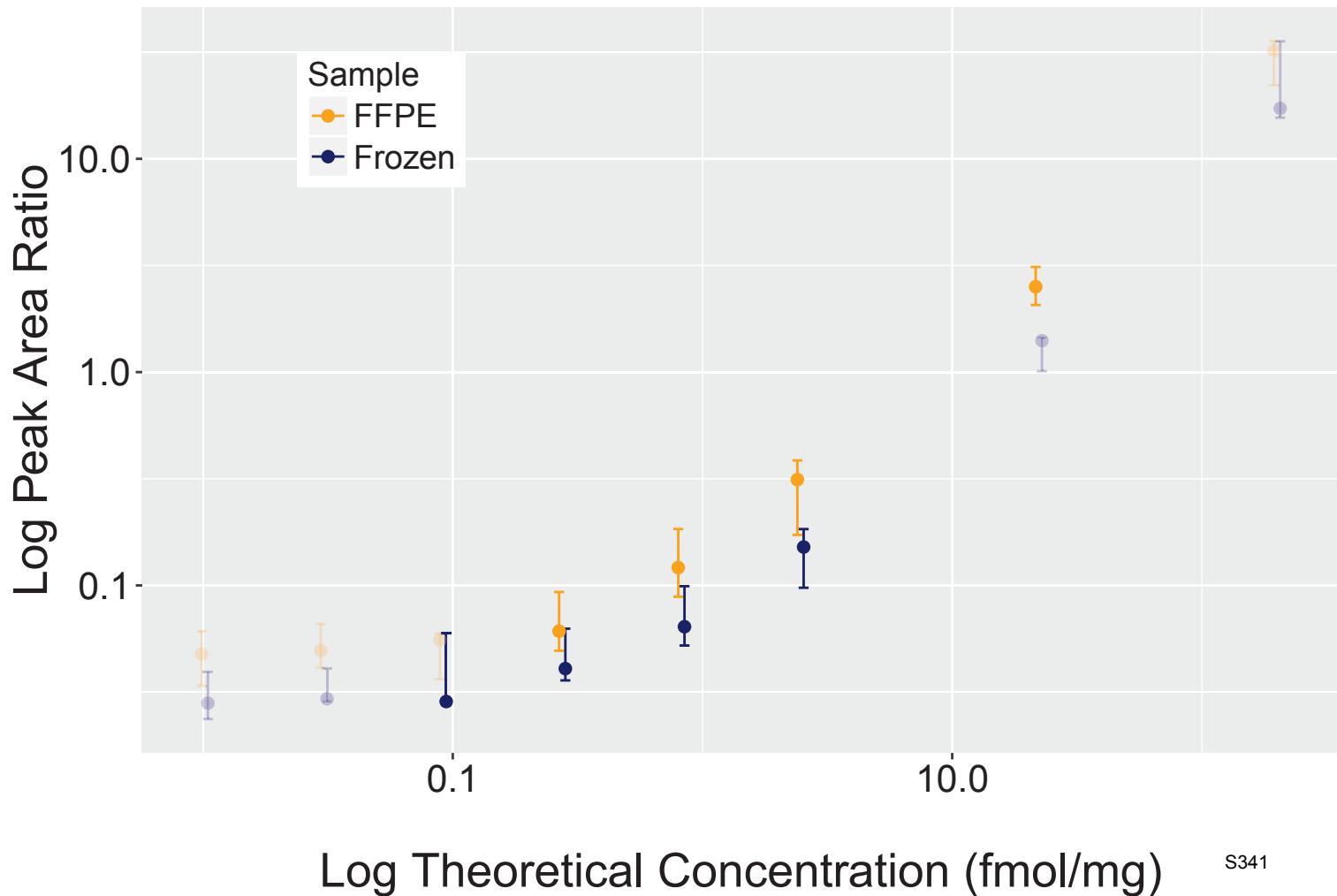
Analyte: PGK1.ITLPVDFVTADK



Analyte: PLOD2.IVGPEENLSQLEAR

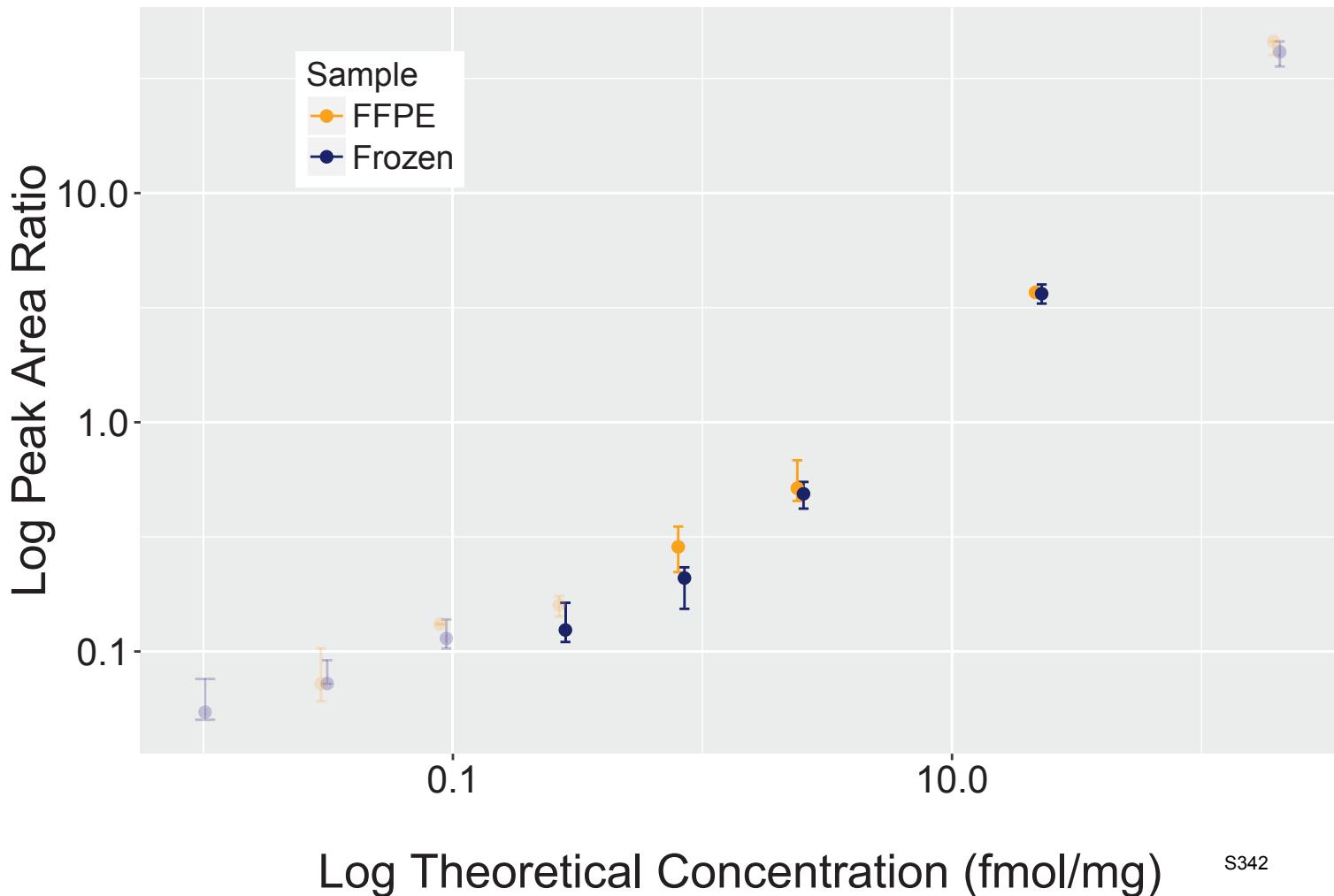


Analyte: USP5.IVILPDYLEIAR



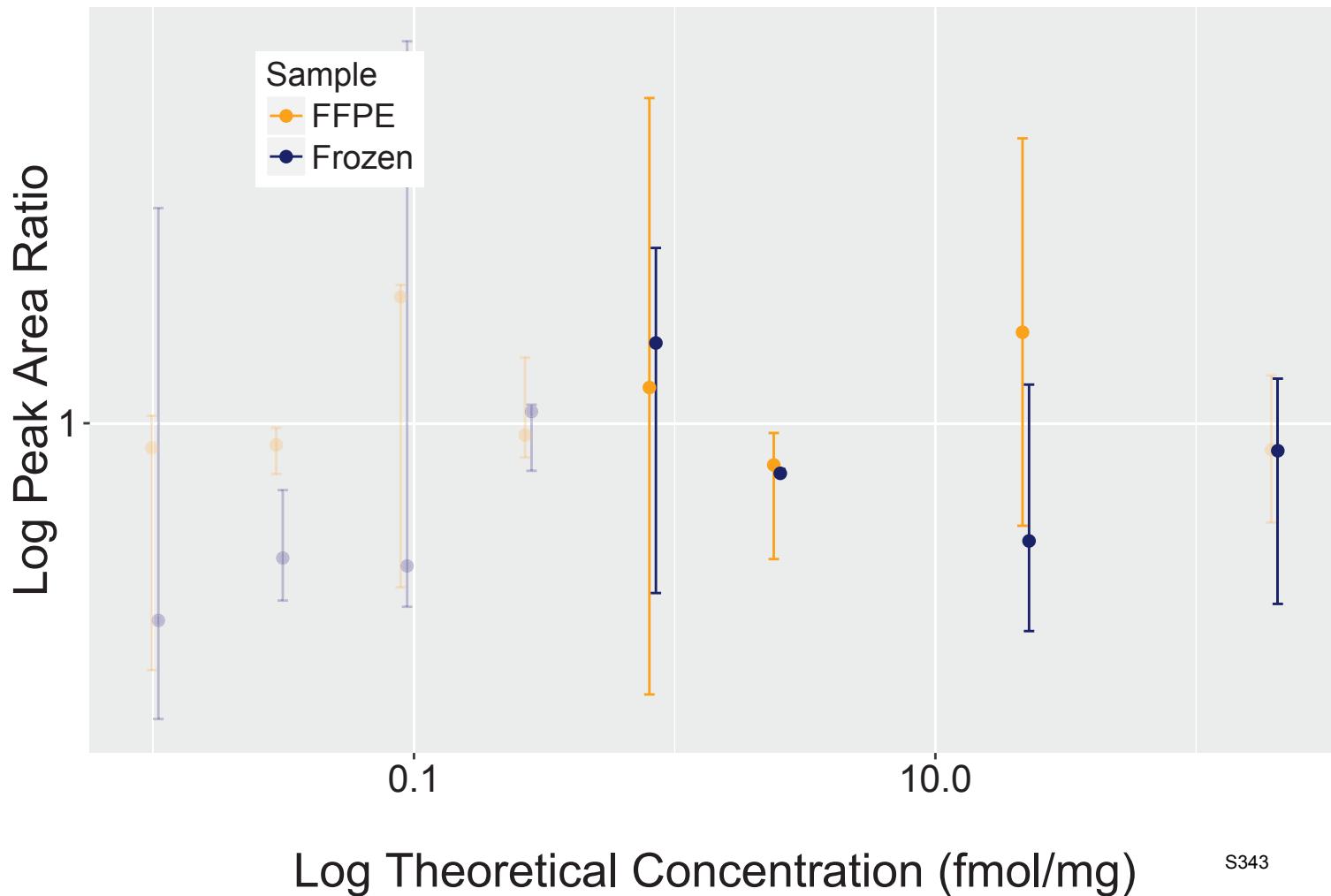
S341

Analyte: PRPF19.IWSVPNASC[+57]VQVVVR

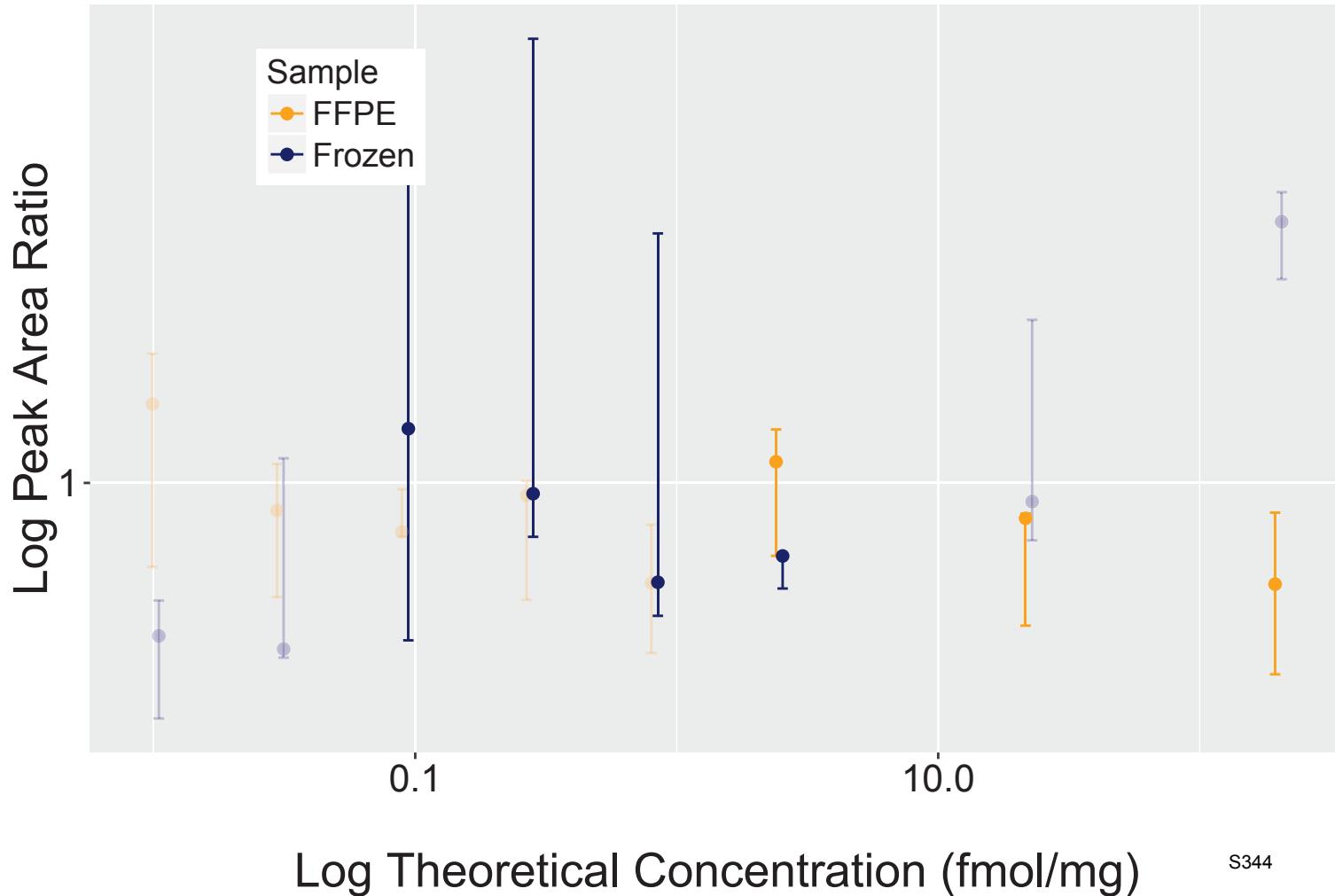


S³⁴²

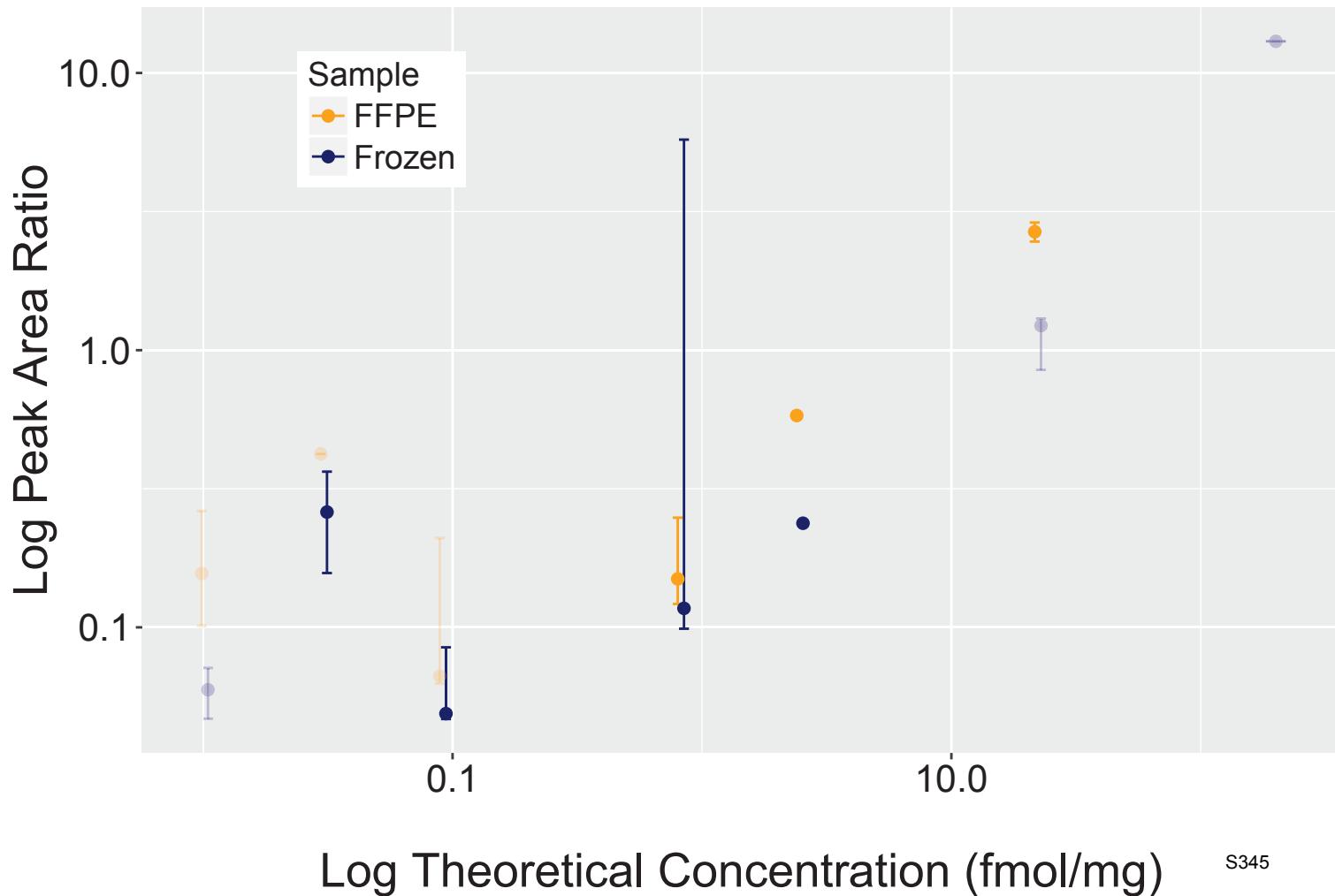
Analyte: CACYBP.IYITLTGVHQVPTENVQVHFTER



Analyte: UGGT1.IYSHDGTDSPPDADEVVIVLNNFK

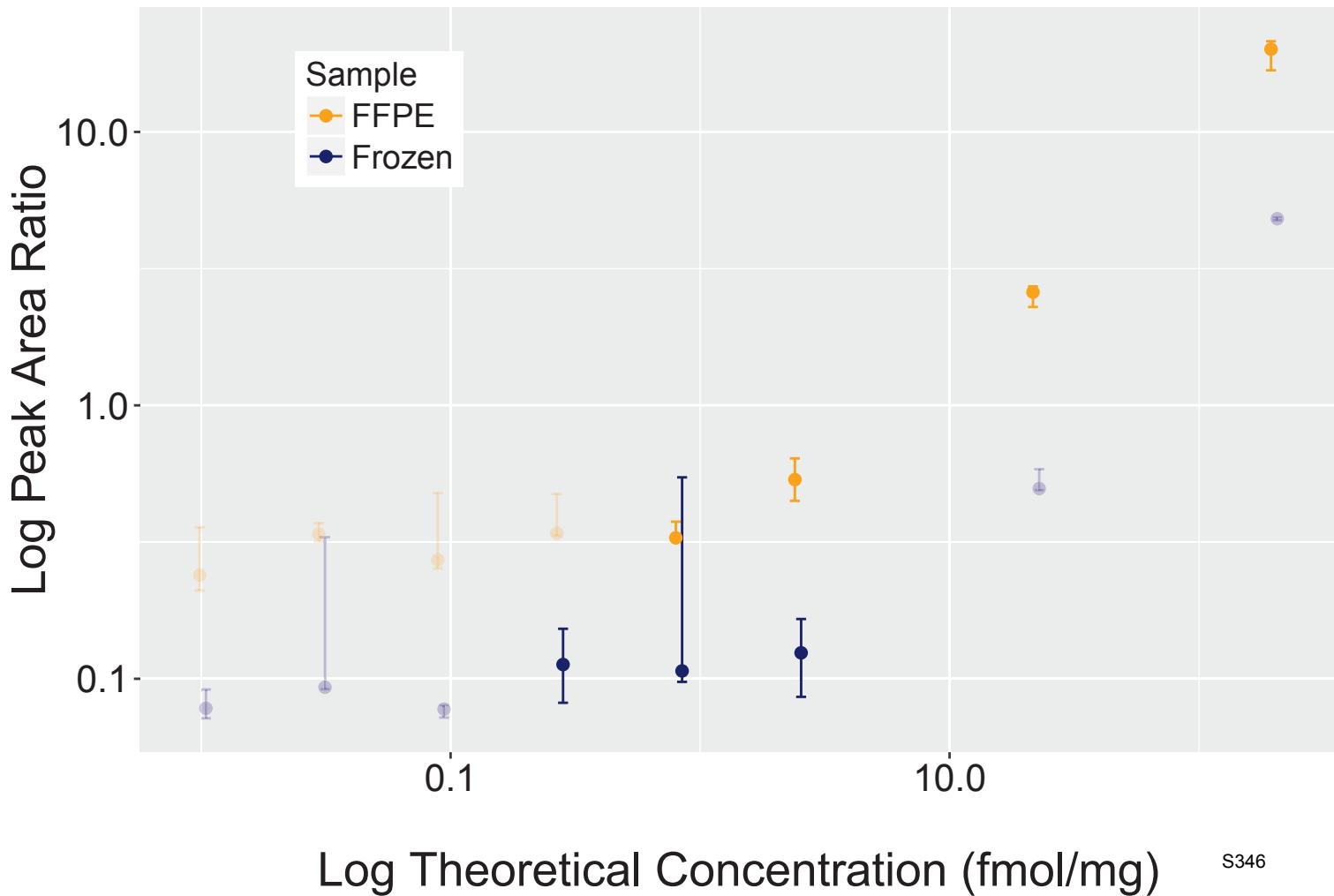


Analyte: ATP5H.LAALPENPPAIDWAYYK



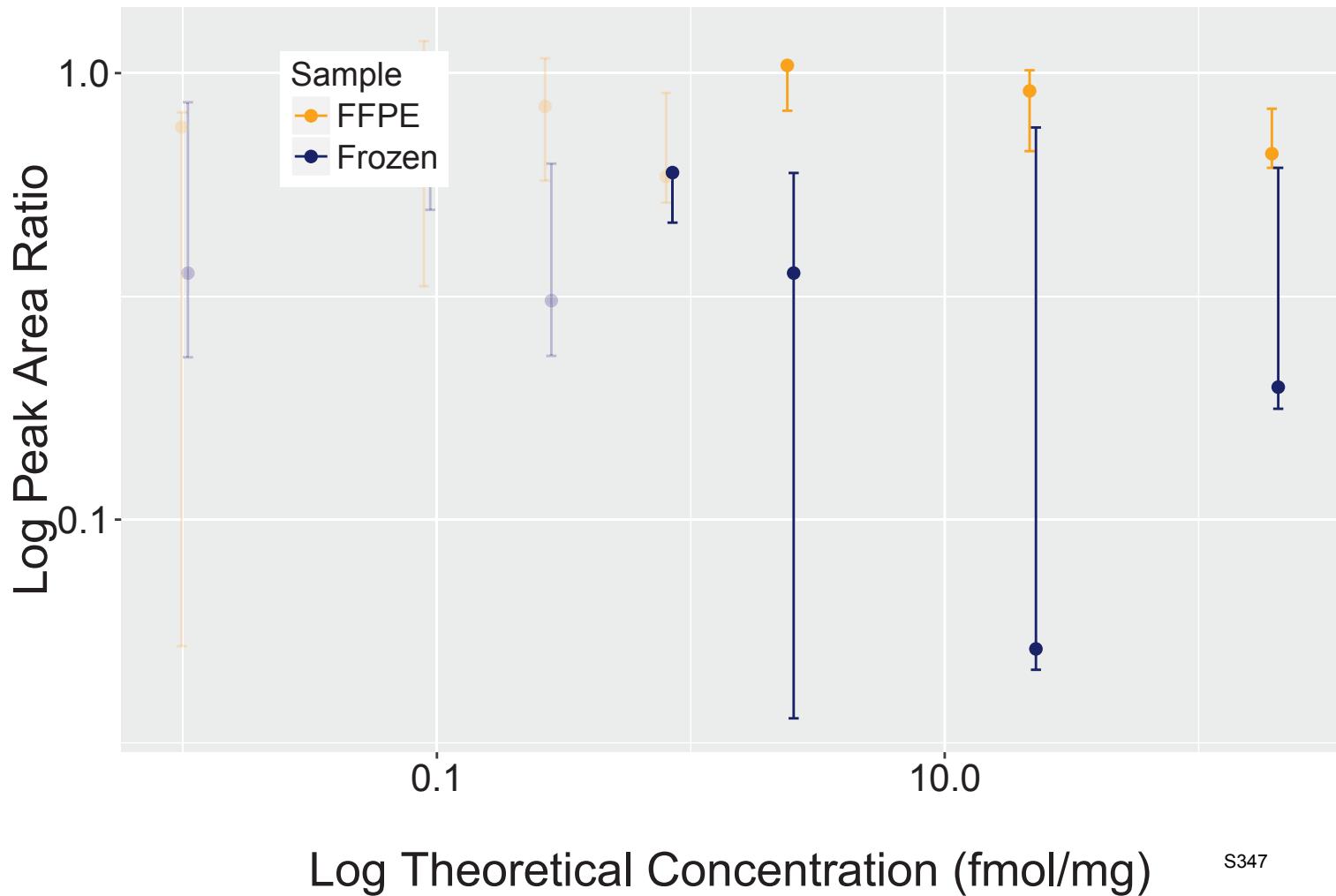
S345

Analyte: CLTC.LAELEEFINGPNNAHIQQVGDR

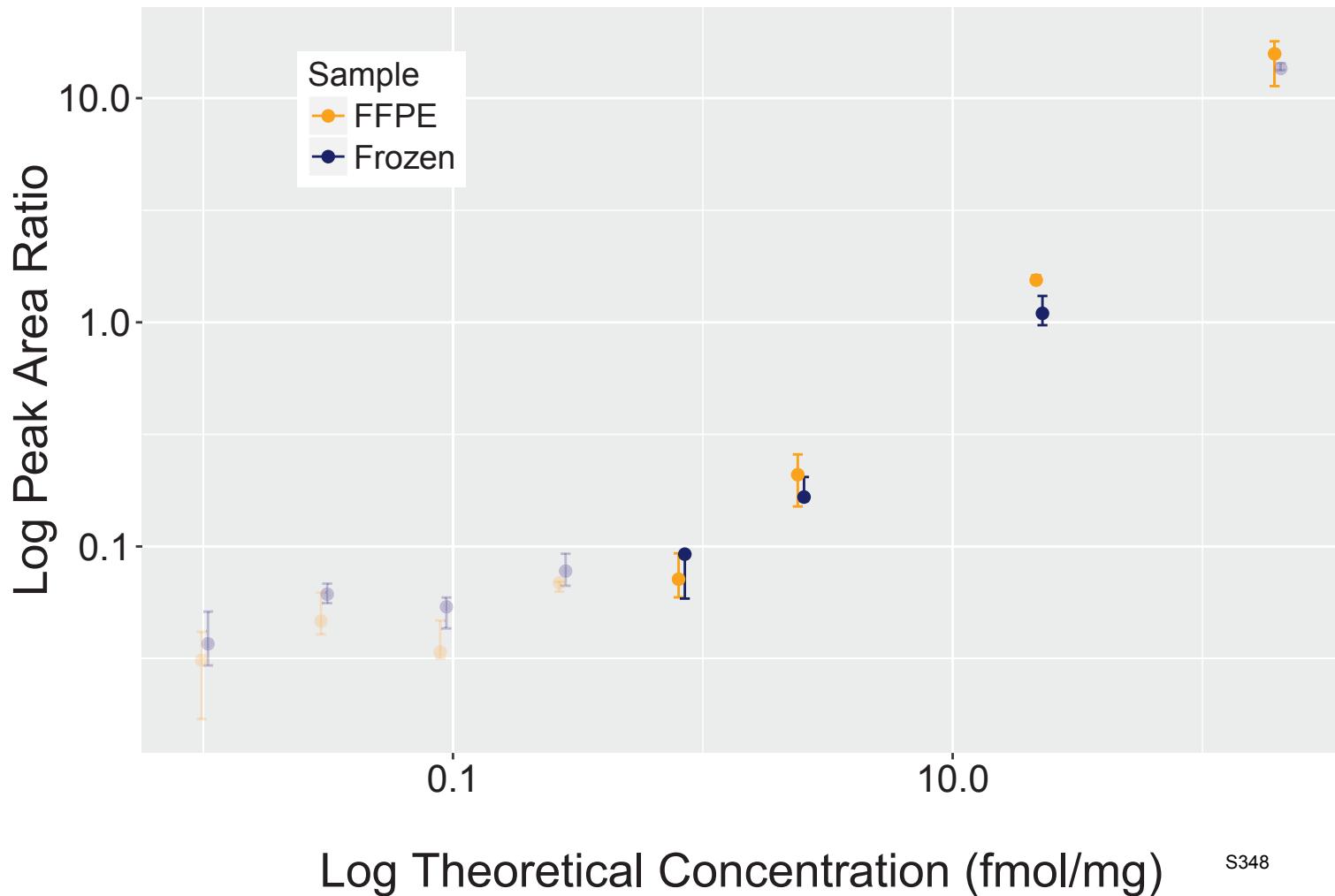


S346

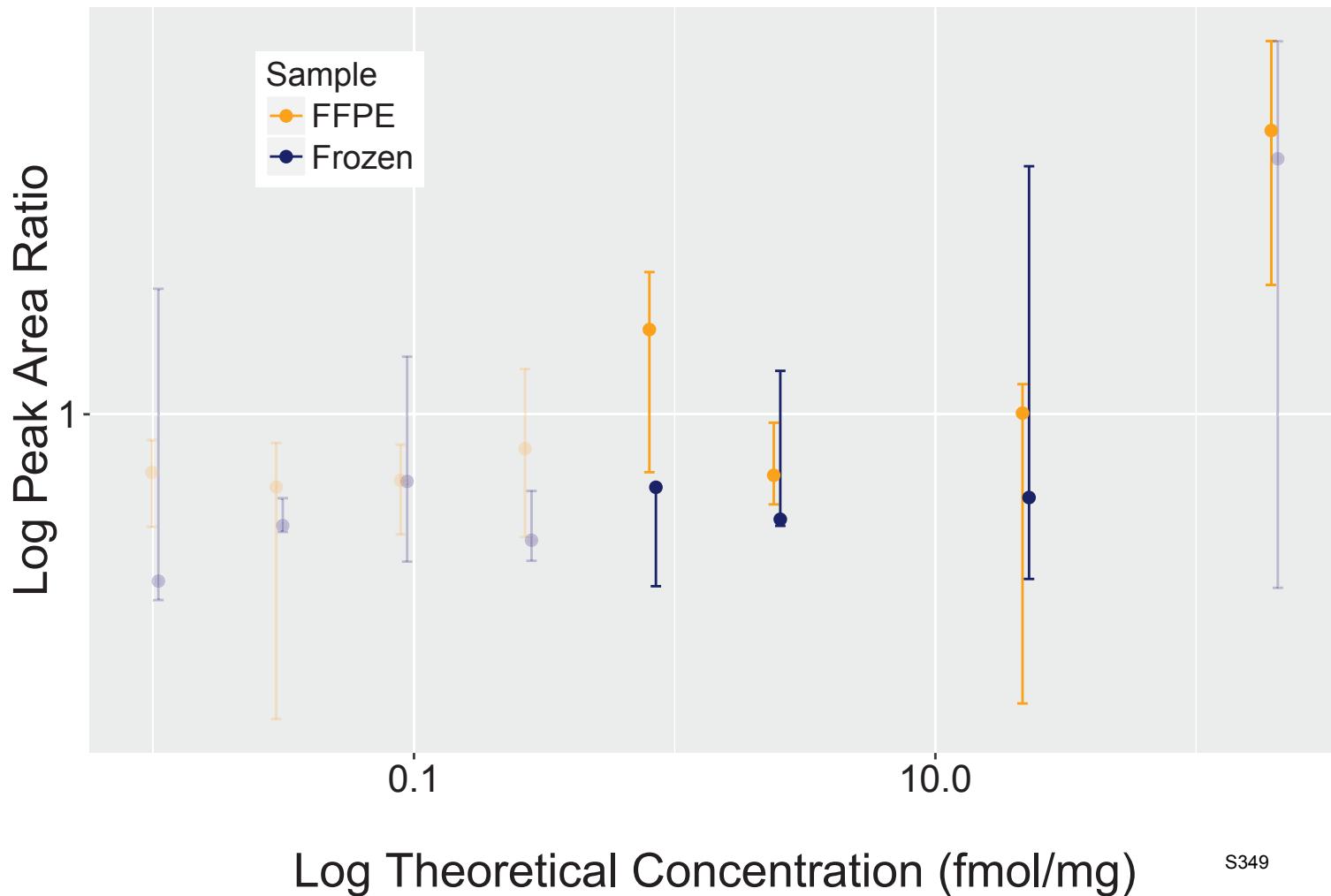
Analyte: AGR2.LAEQFVLLNLVYETTDK



Analyte: UBA1.LAGTQPLEVLEAVQR

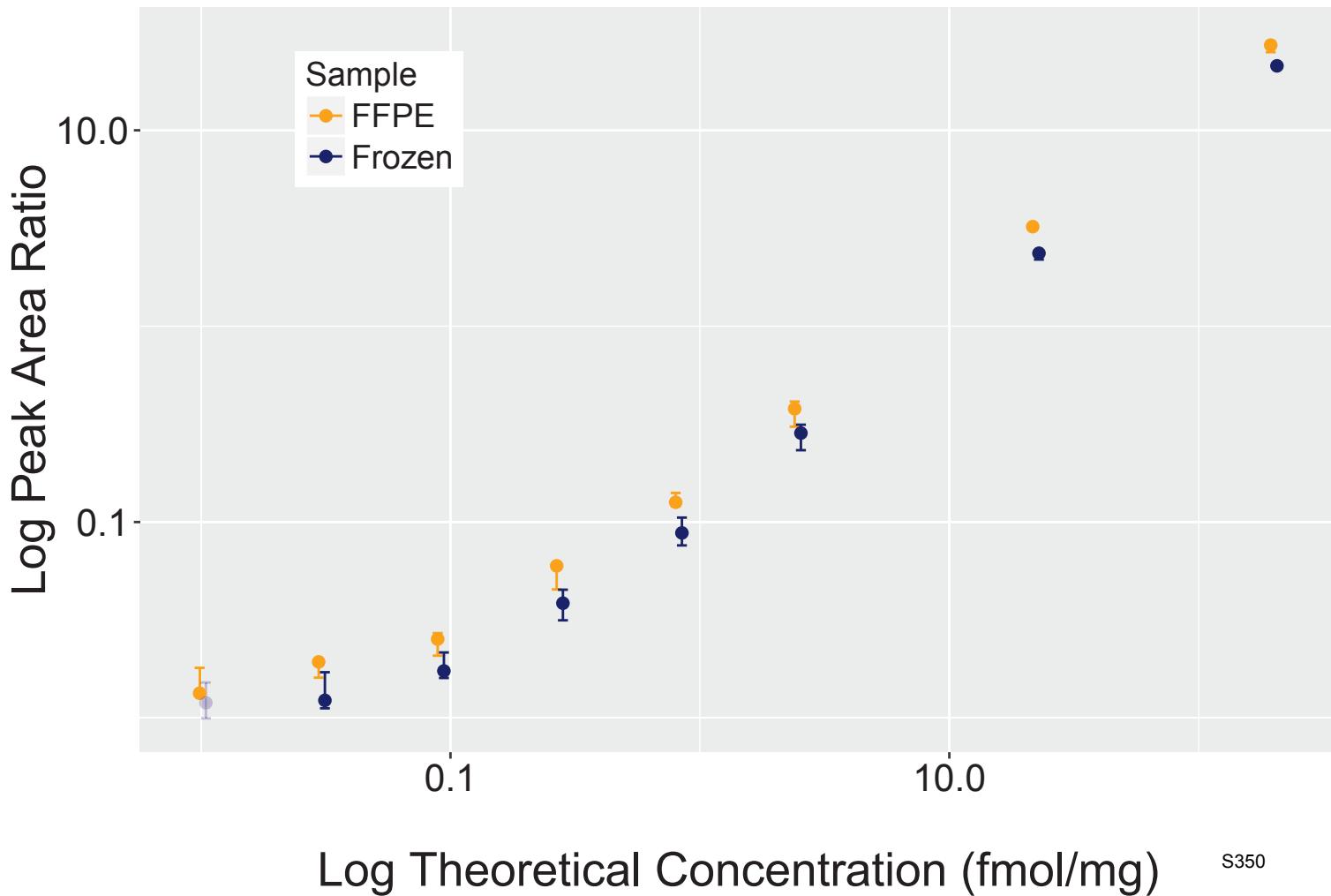


Analyte: NUP155.LAIHC[+57]AGYSDPILVQTLWQDIEK



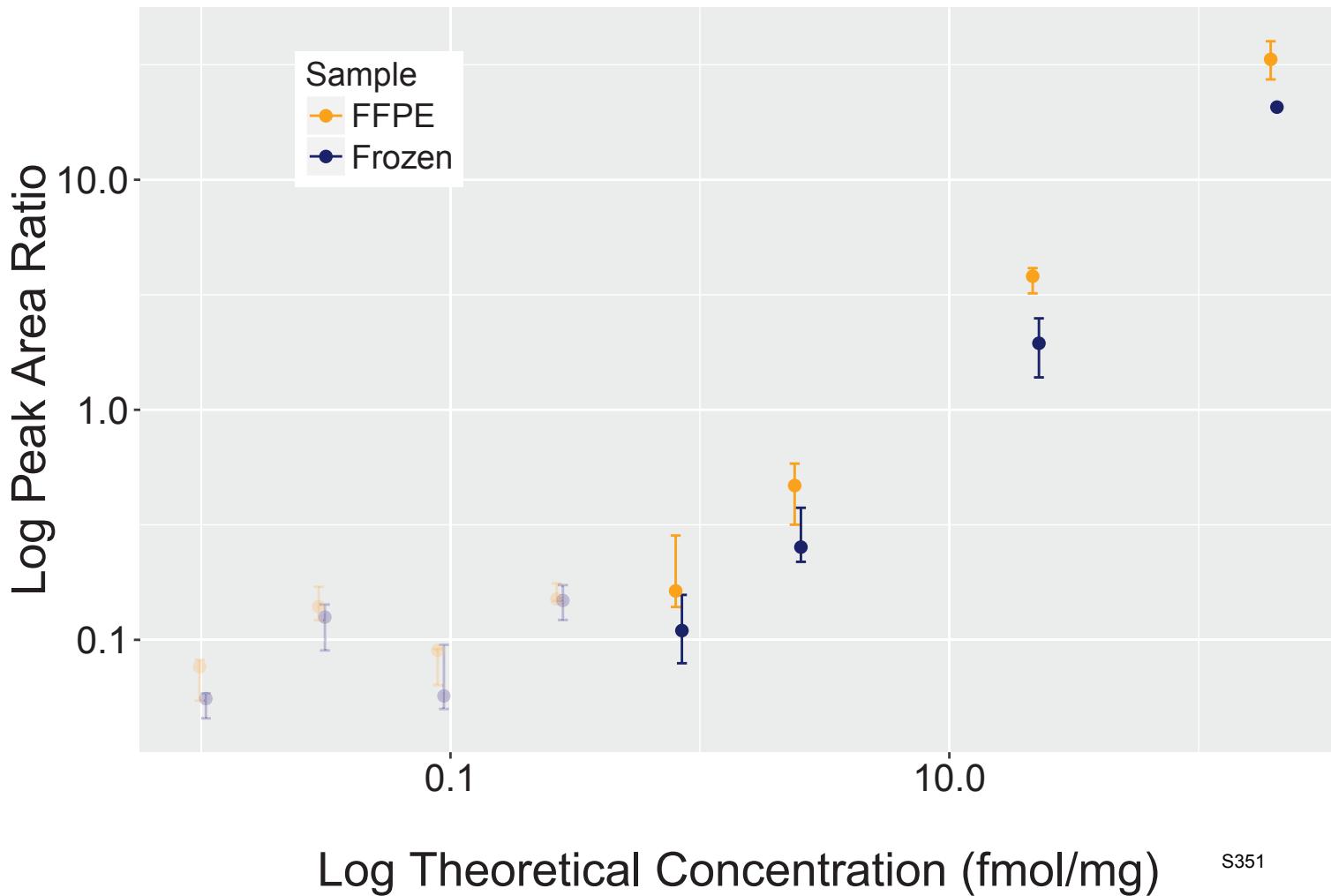
S349

Analyte: TLN1.LAQAAQSSVATITR



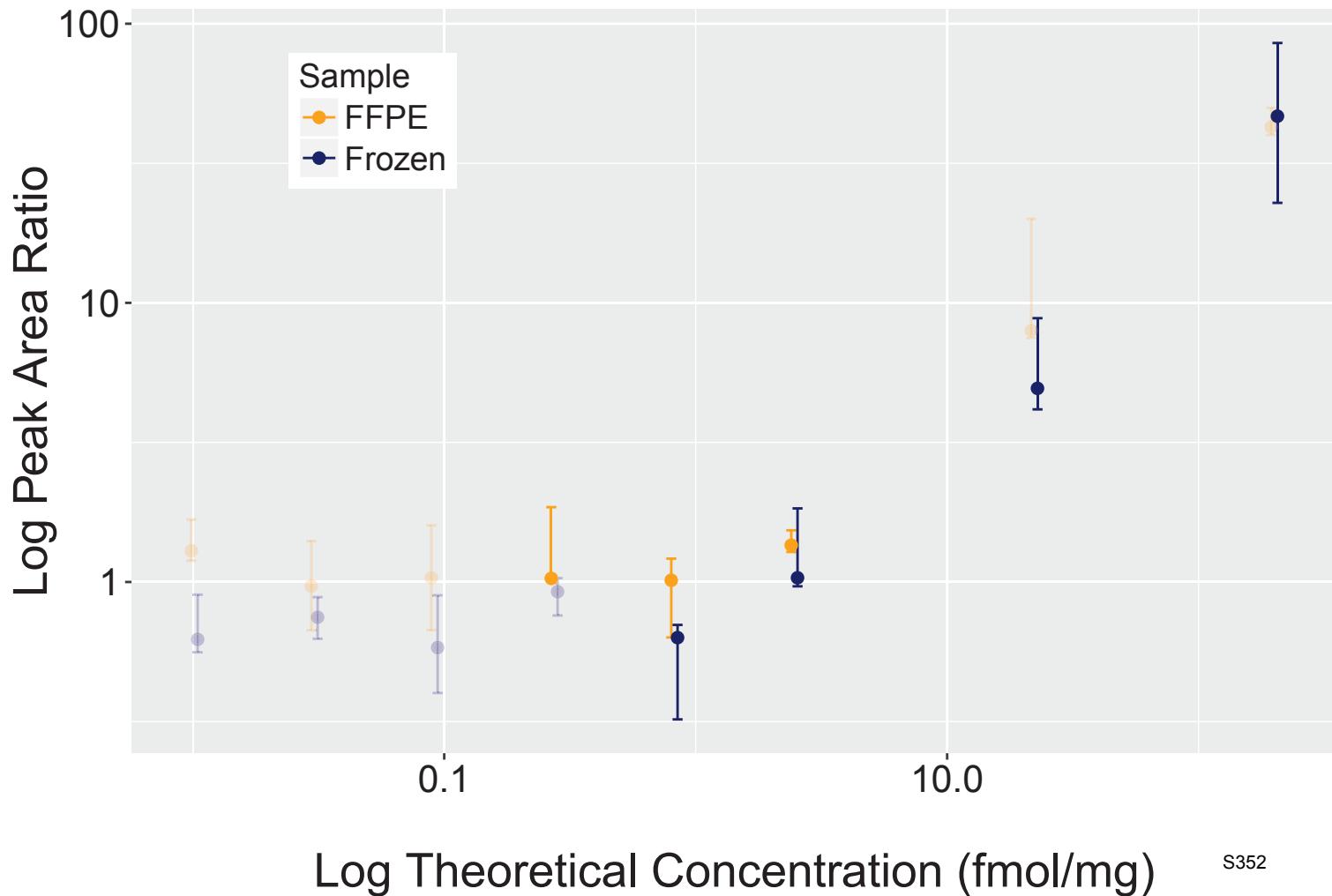
S350

Analyte: MVP.LAQDPFPLYPGEVLEK

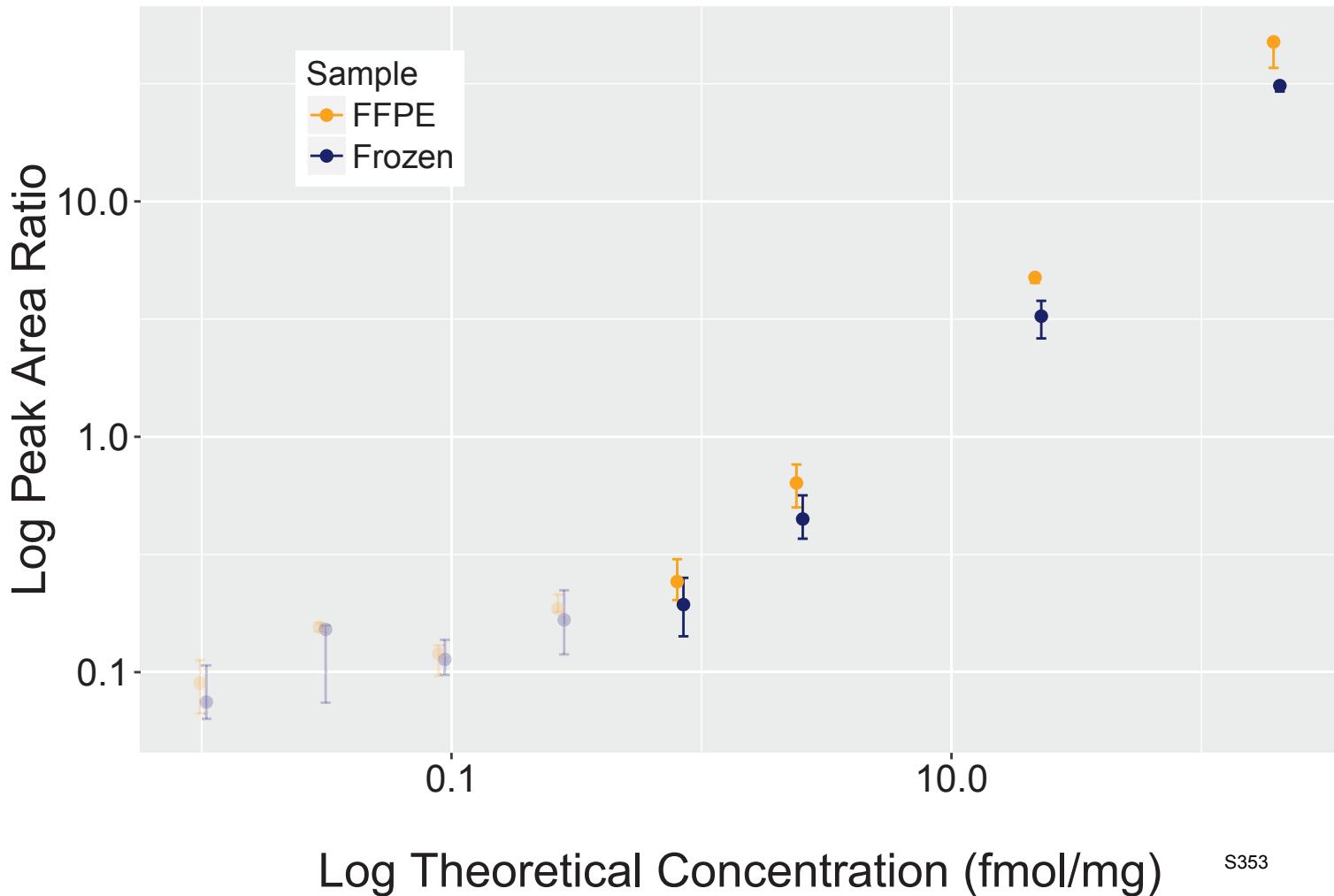


S351

Analyte: ESR1.LAQLLLILSHIR

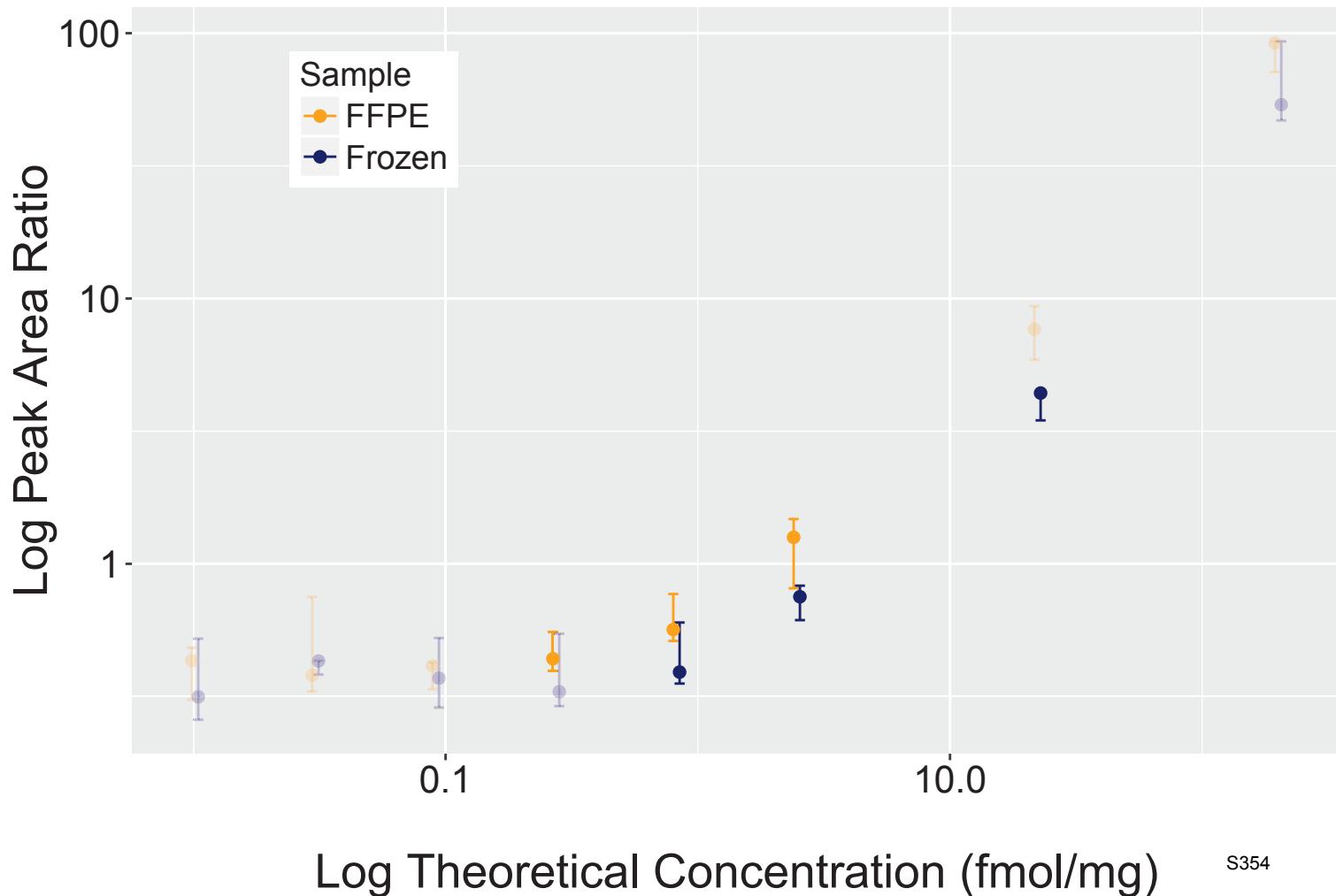


Analyte: DPP3.LASVLGSEPSLDSEVTSK

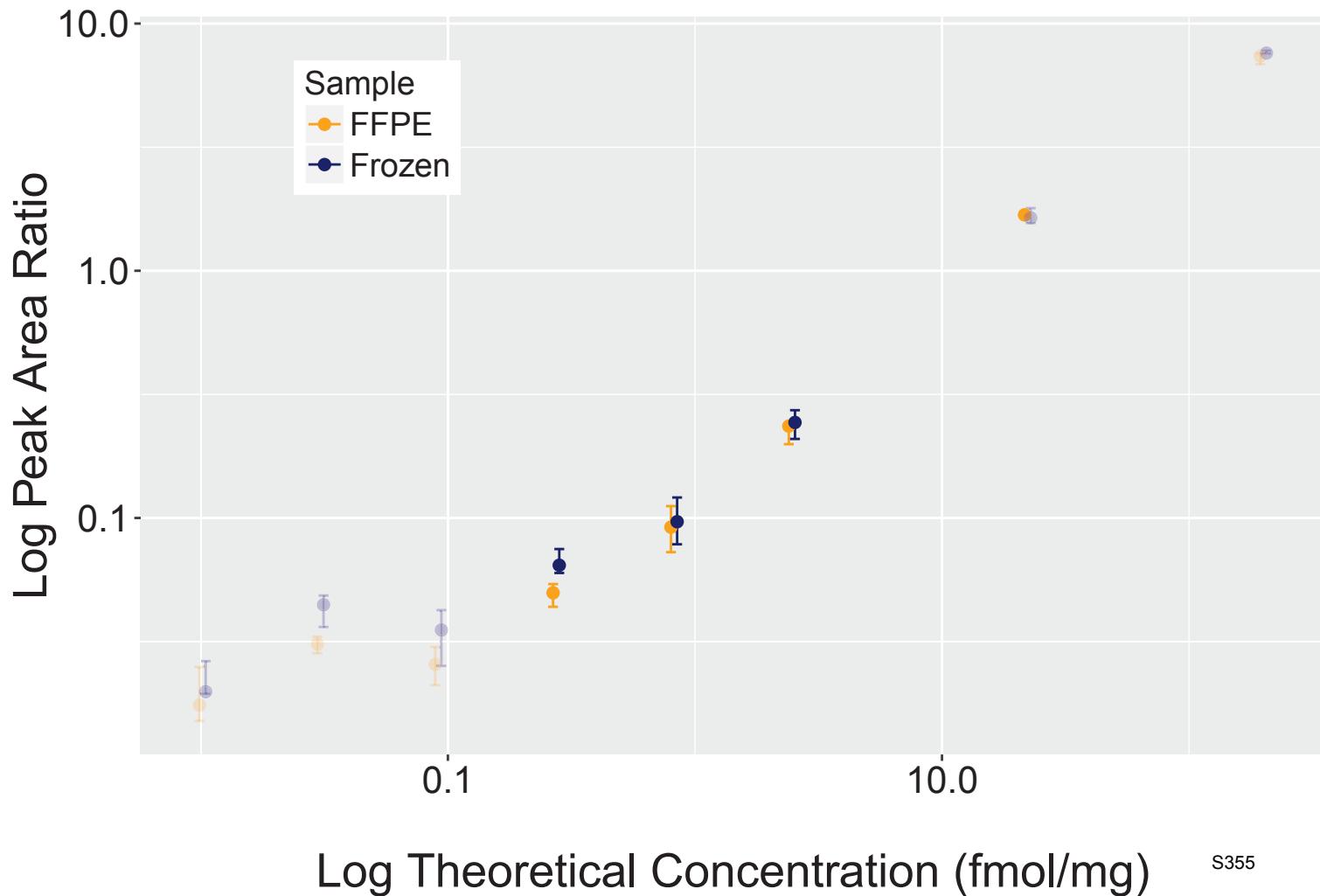


S353

Analyte: CKB.LAVEALSSLGDGLAGR

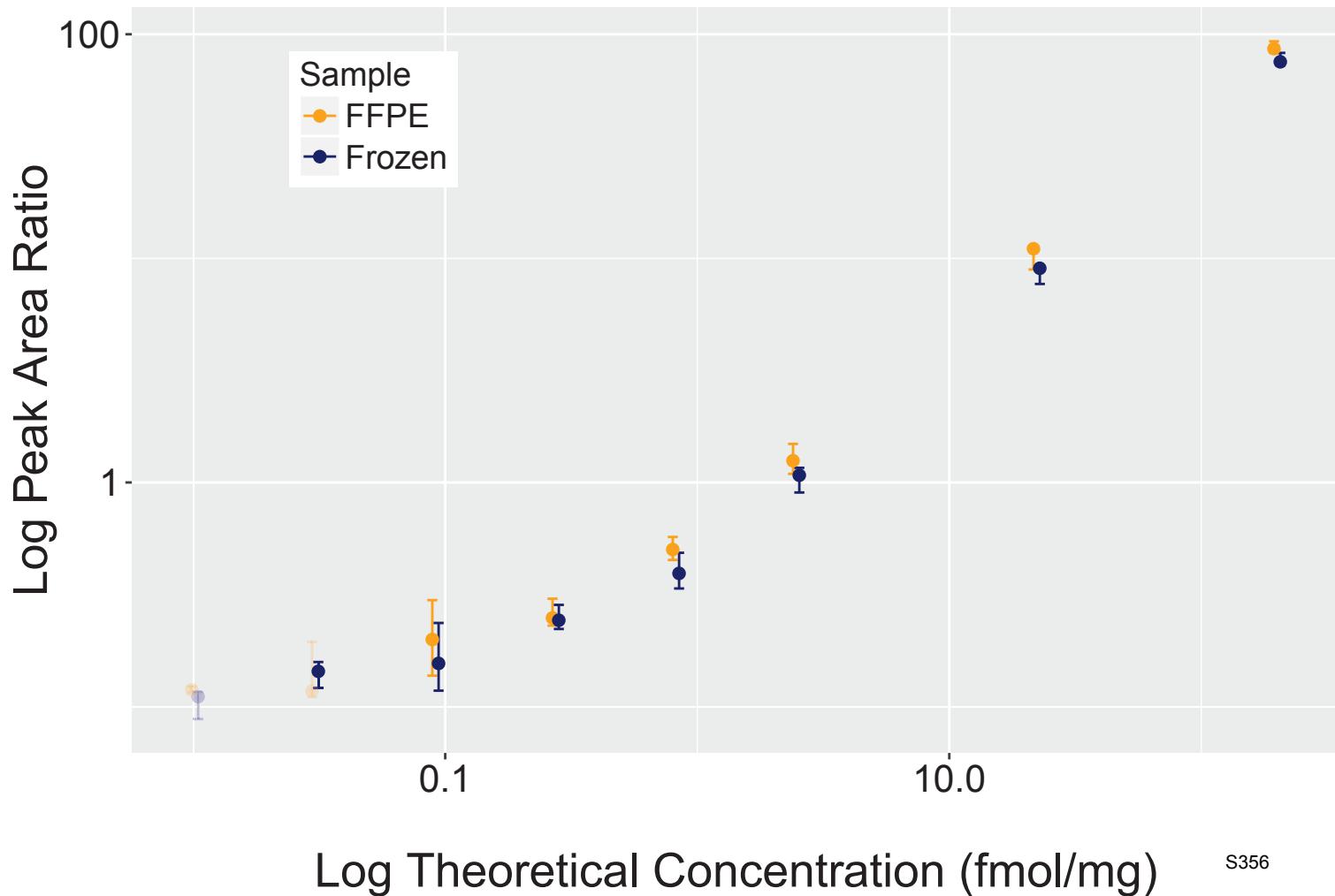


Analyte: GALK1.LAVLITNSNVR



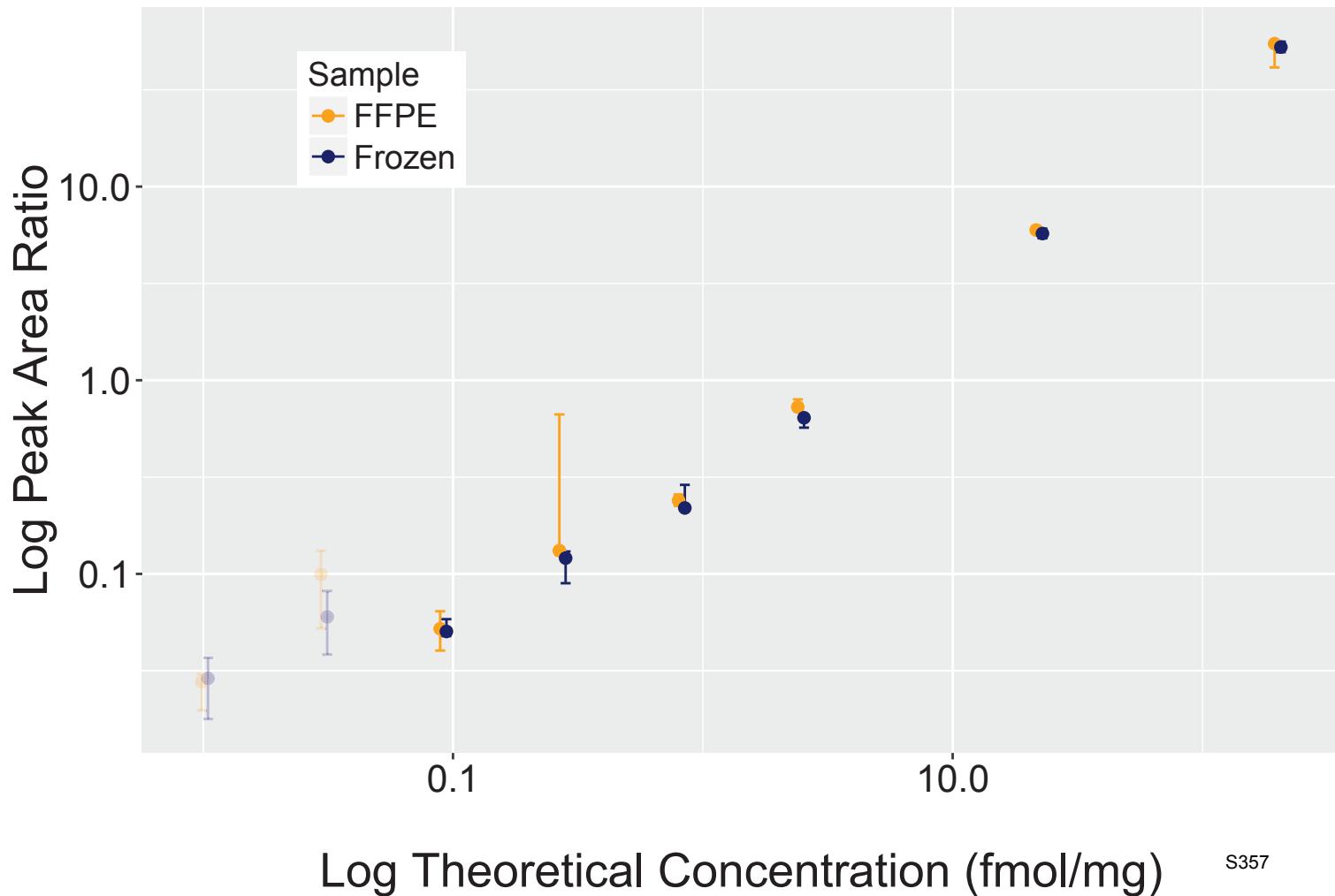
S355

Analyte: EPCAM.LAVNC[+57]FVNNNR

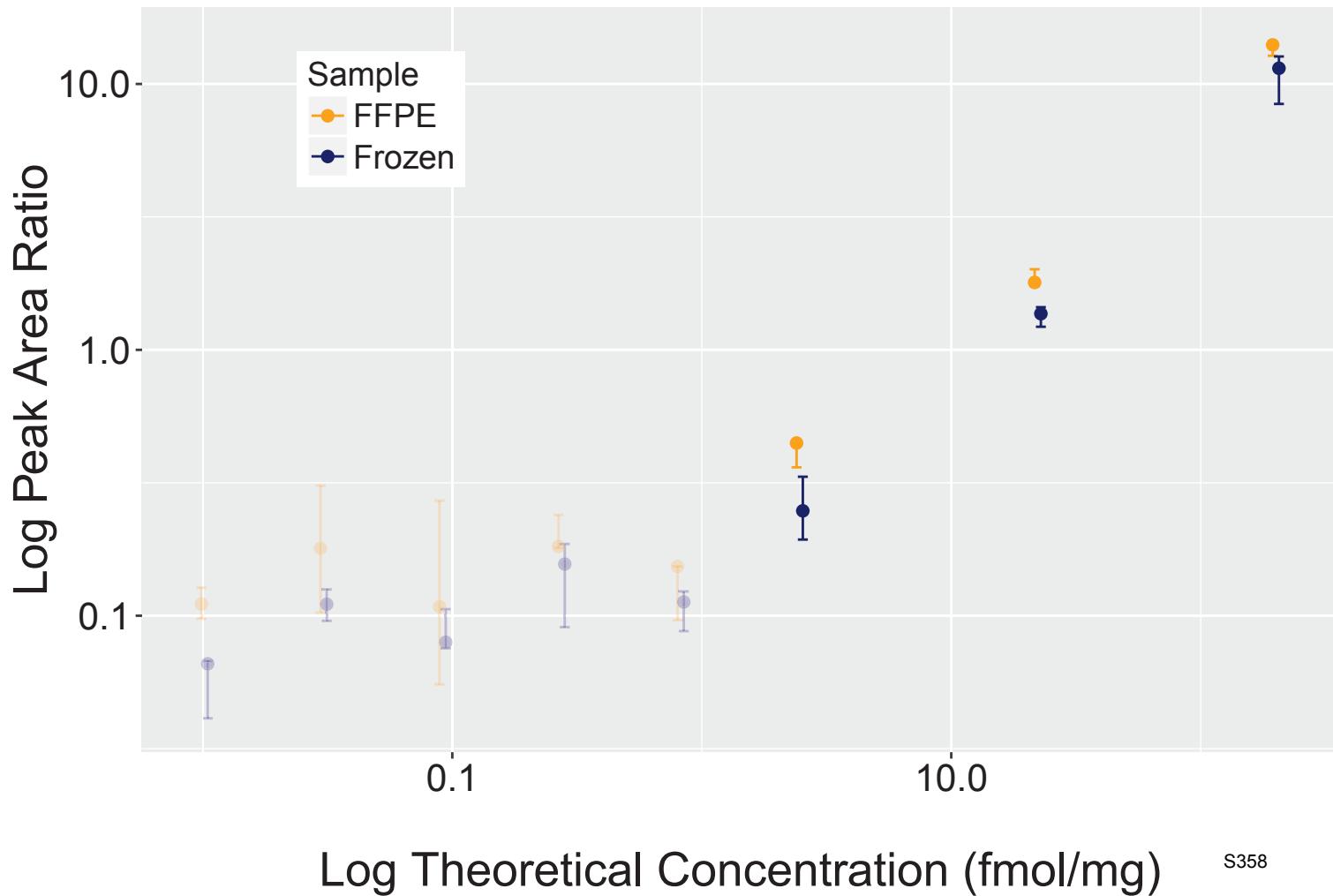


S356

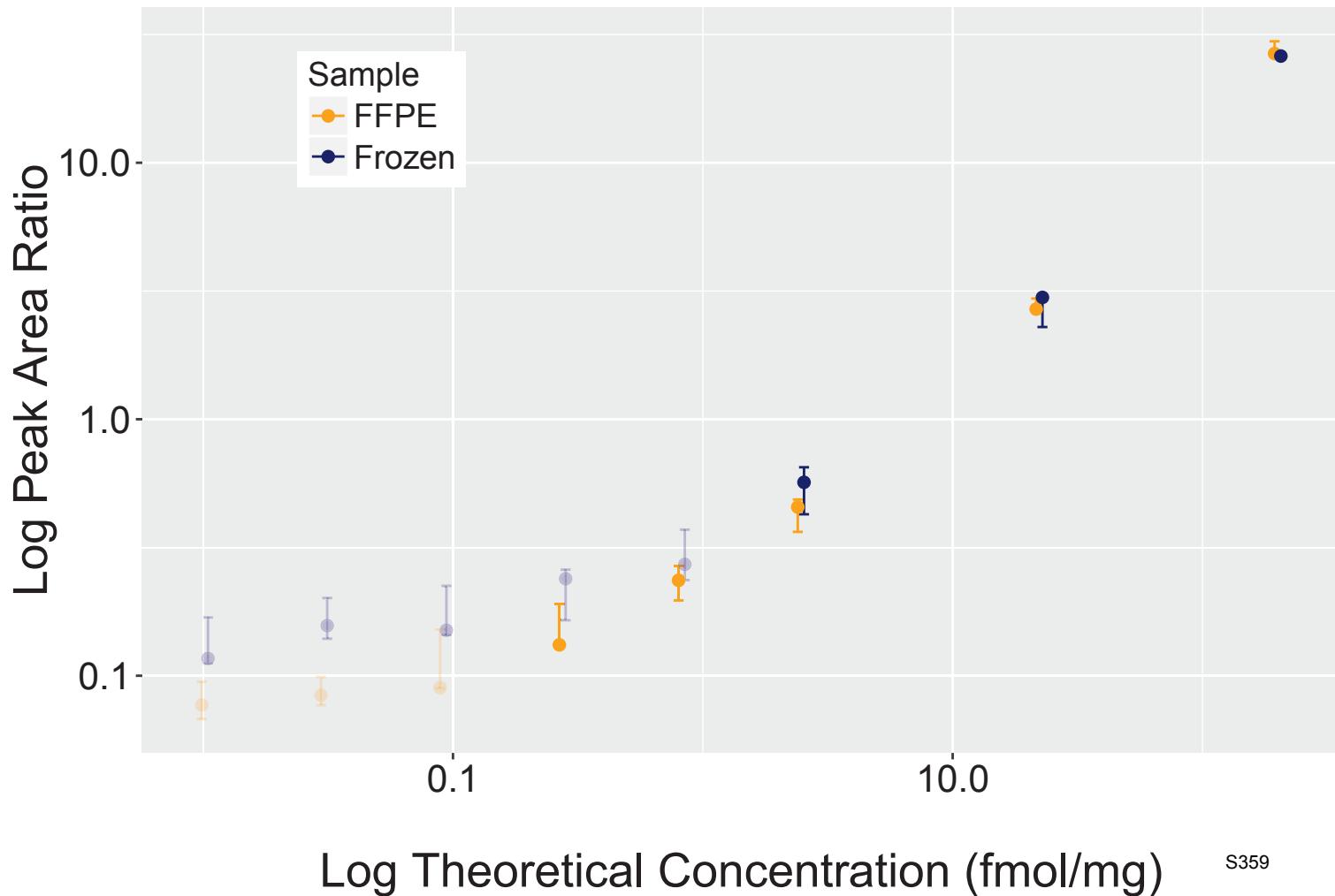
Analyte: PMPCB.LC[+57]TSVTESEVAR



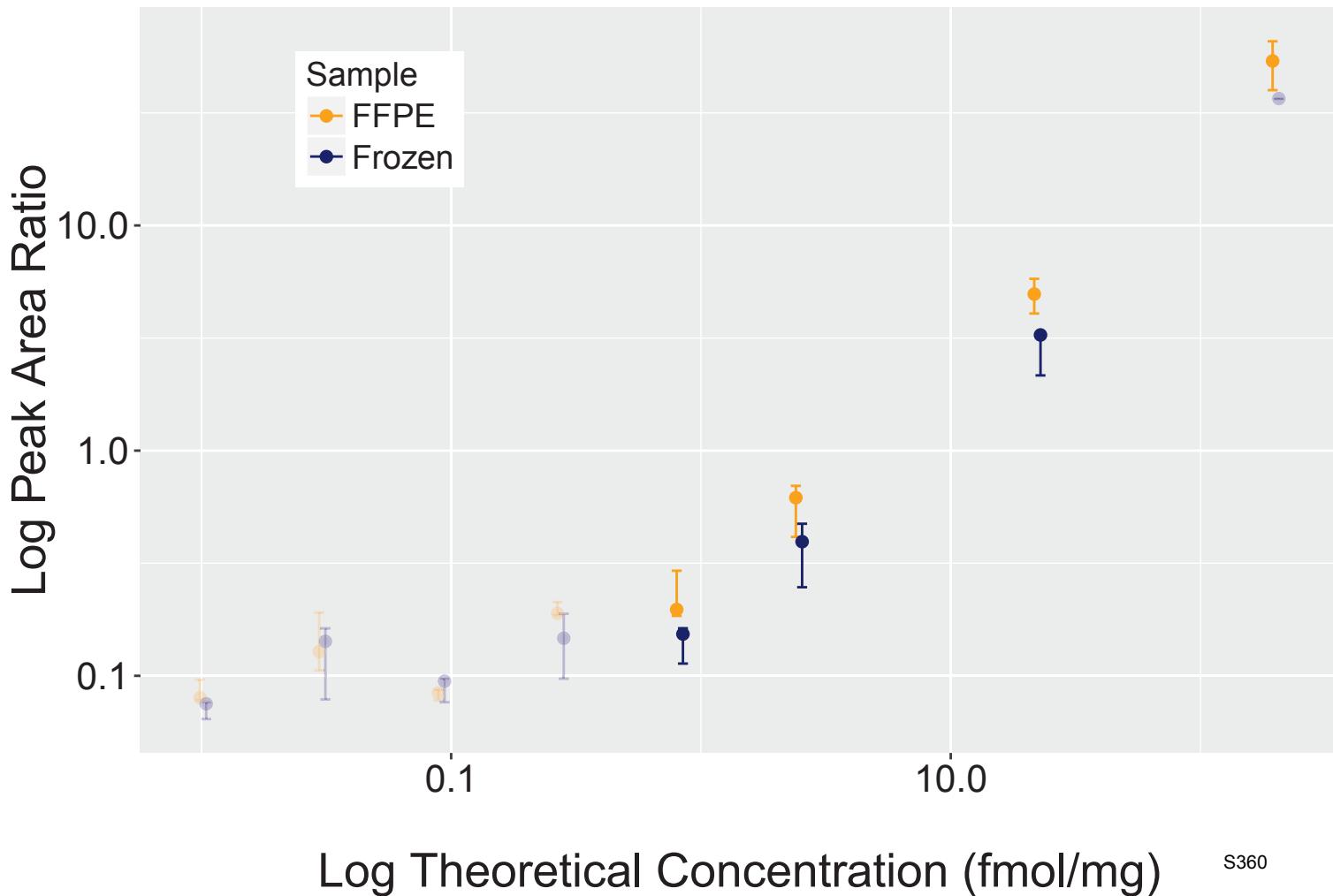
Analyte: MANF.LC[+57]YYIGATDDAATK



Analyte: ATP6V1C1.LDAFVEGVVK

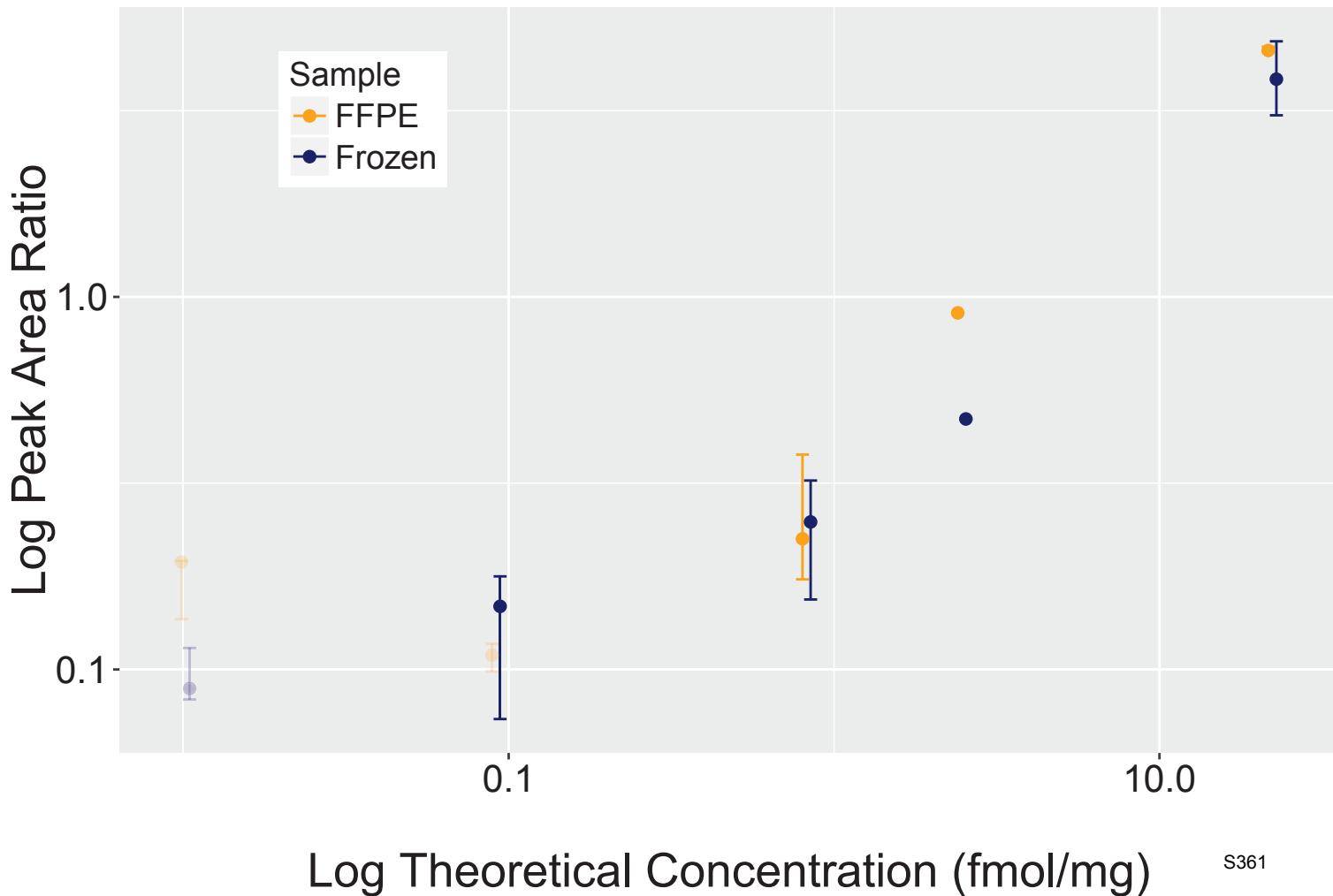


Analyte: NAP1L1.LDGLVETPTGYIESLPR

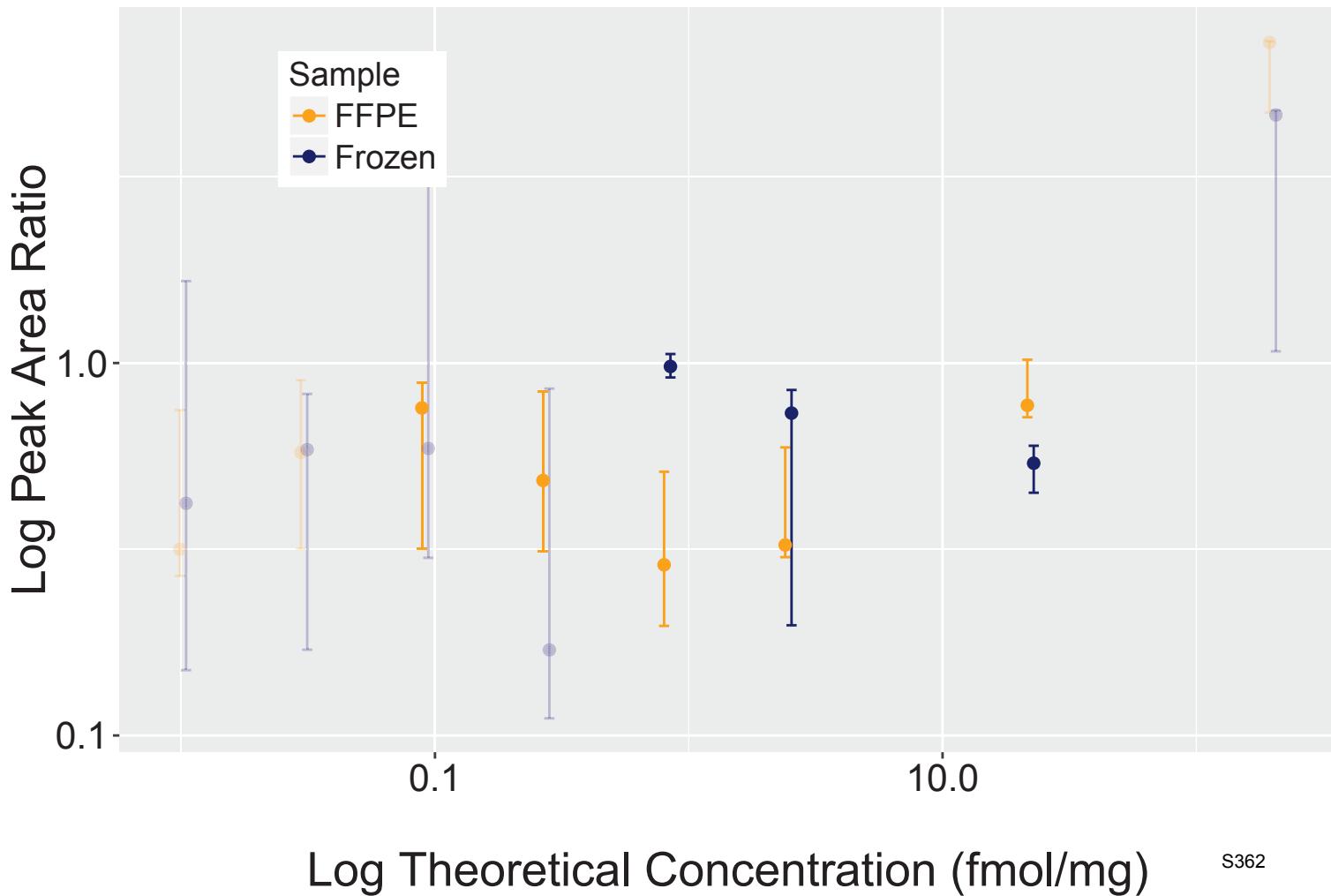


S360

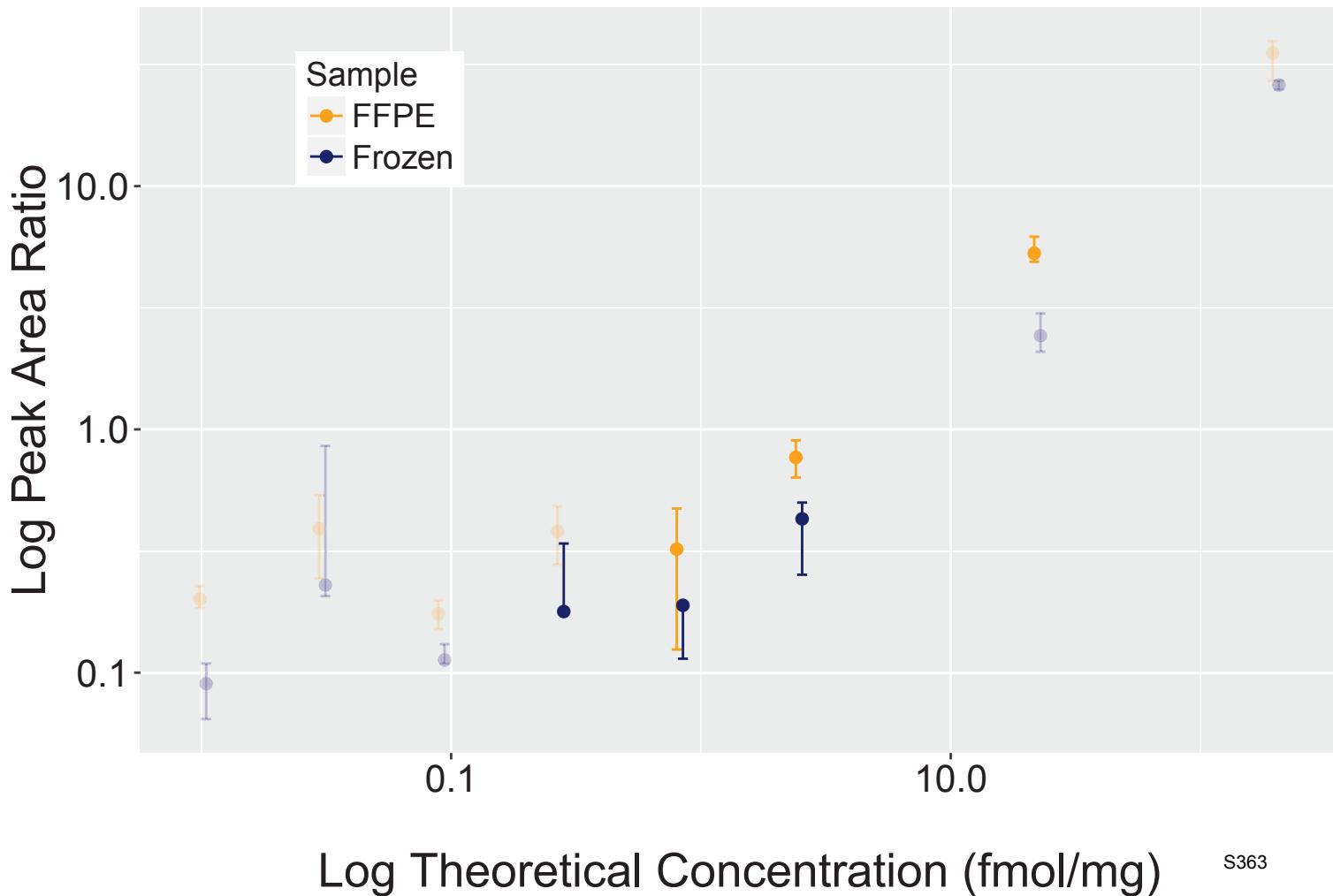
Analyte: MTHFD1.LDIDPETITWQR



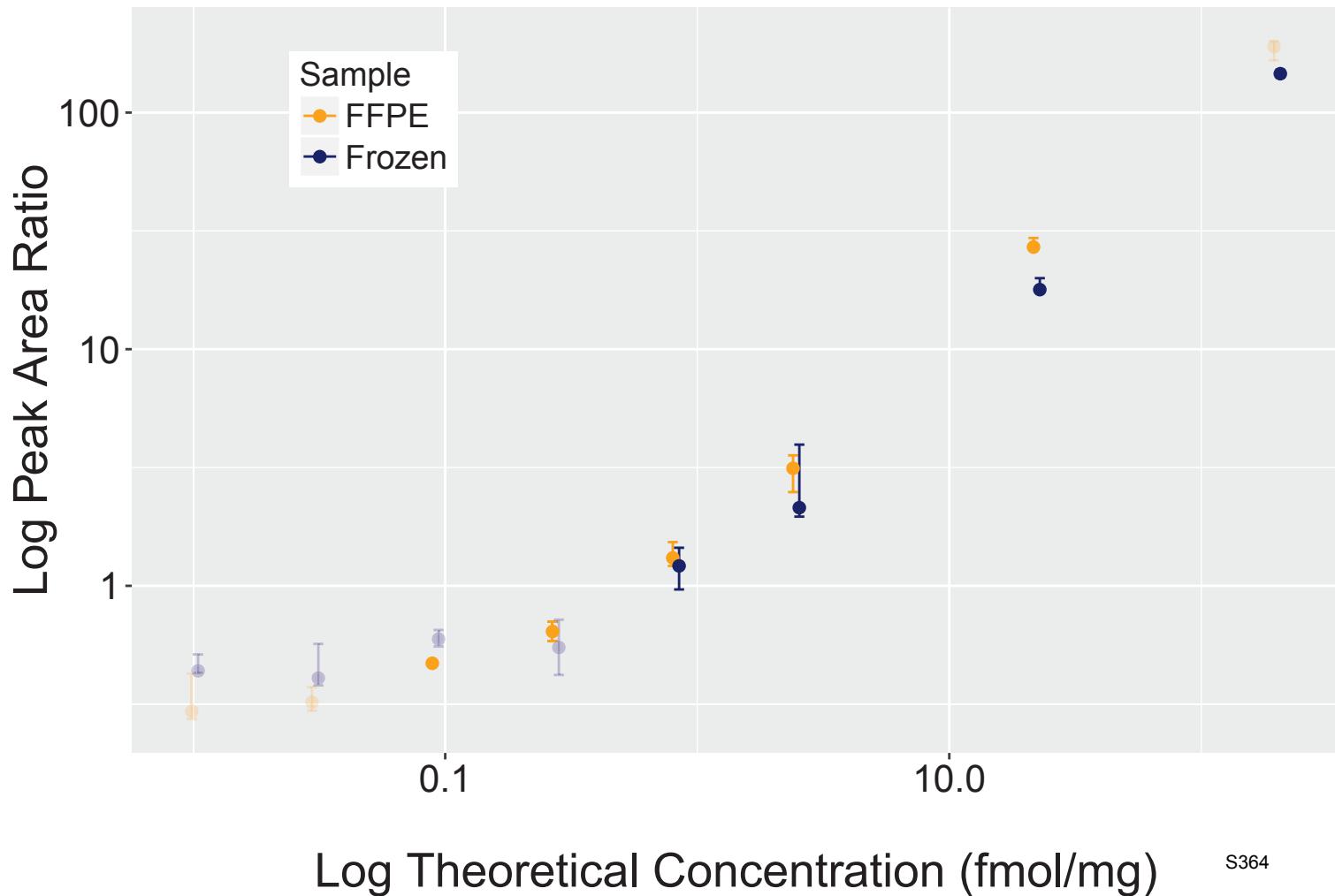
Analyte: TRIM28.LDLDLTADSQPPVFK



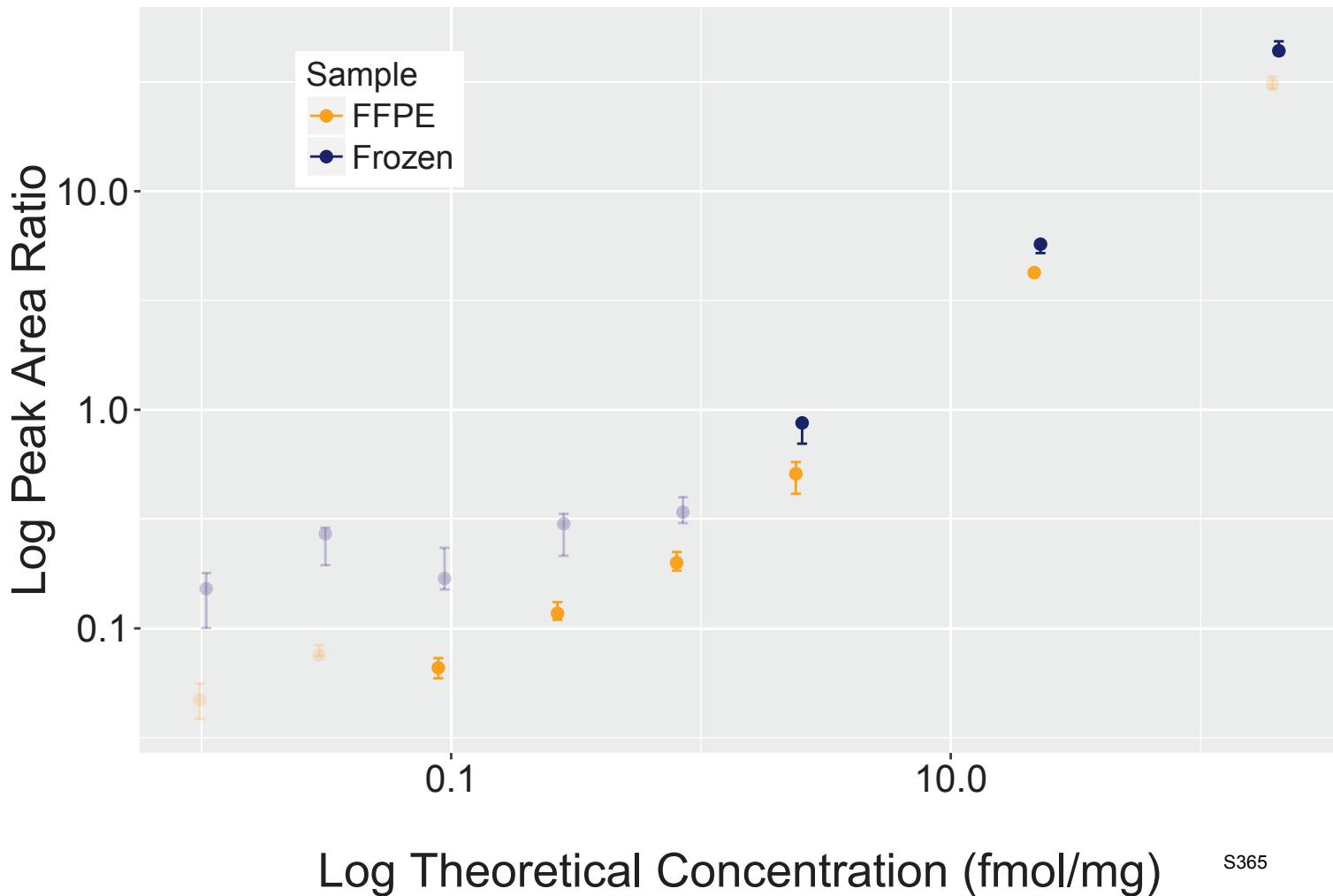
Analyte: TBCB.LDQEDALLGSYPVDDGC[+57]R



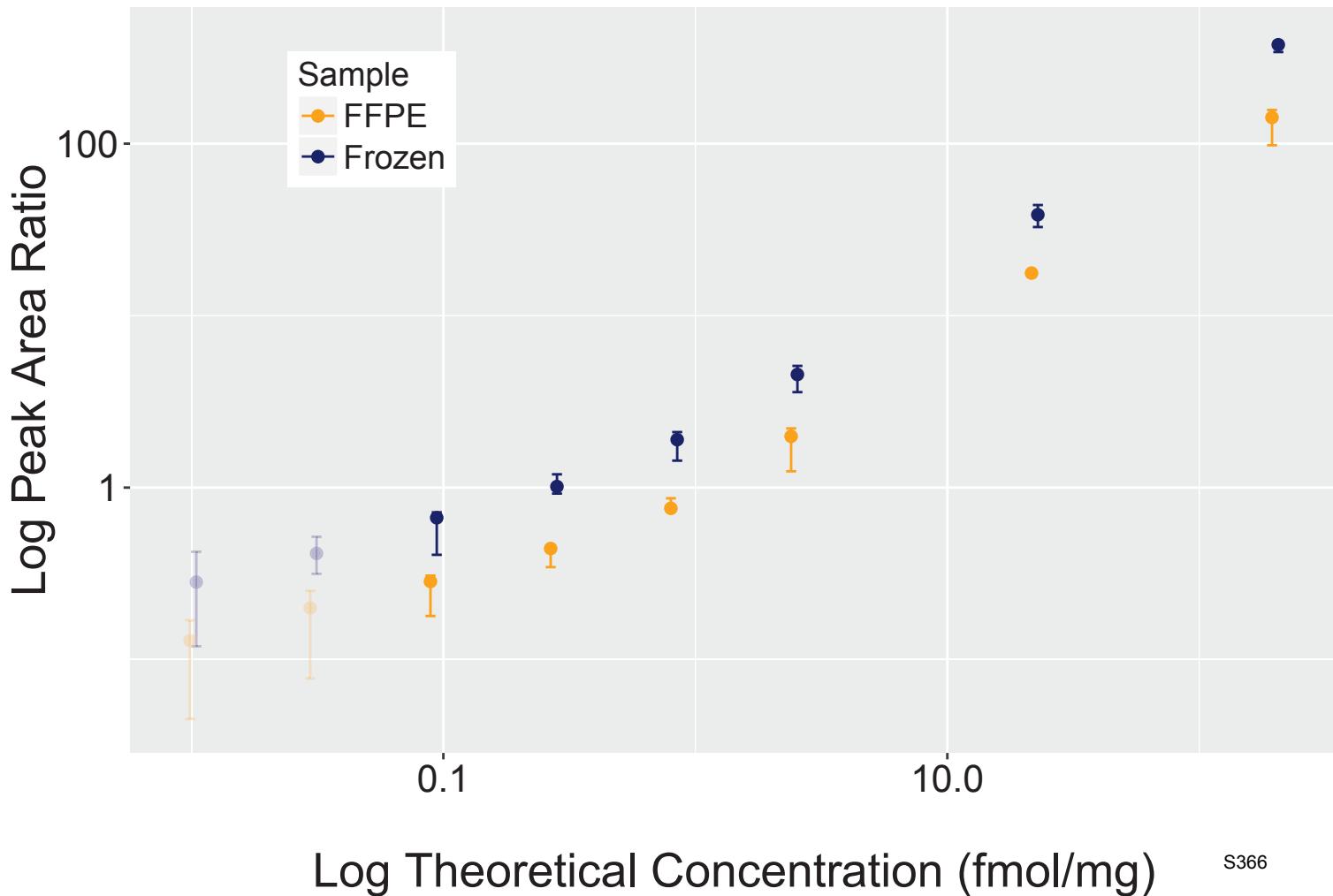
Analyte: GLRX3.LEAEGVPEVSEK



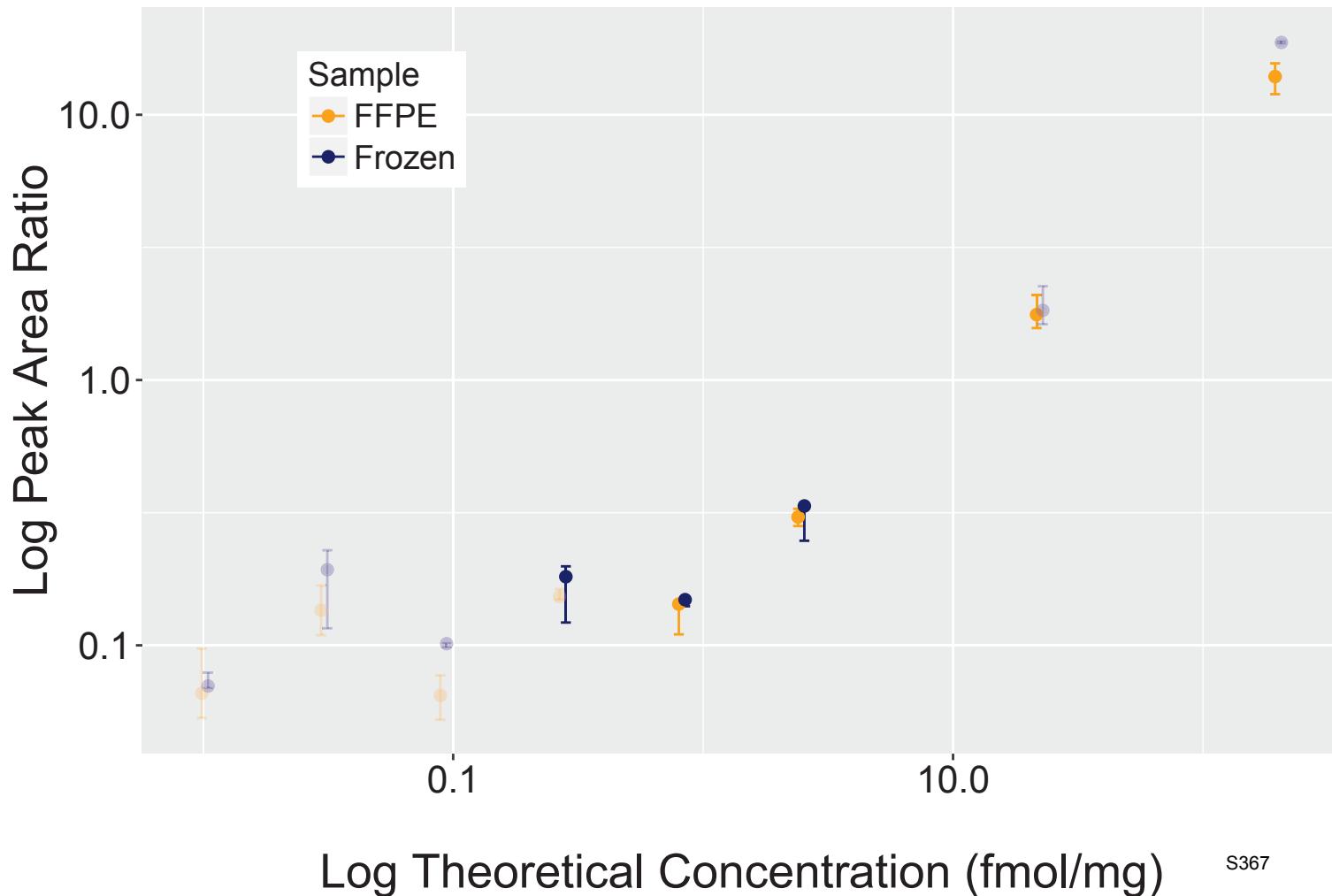
Analyte: H2AFY.LEAIITPPPAK



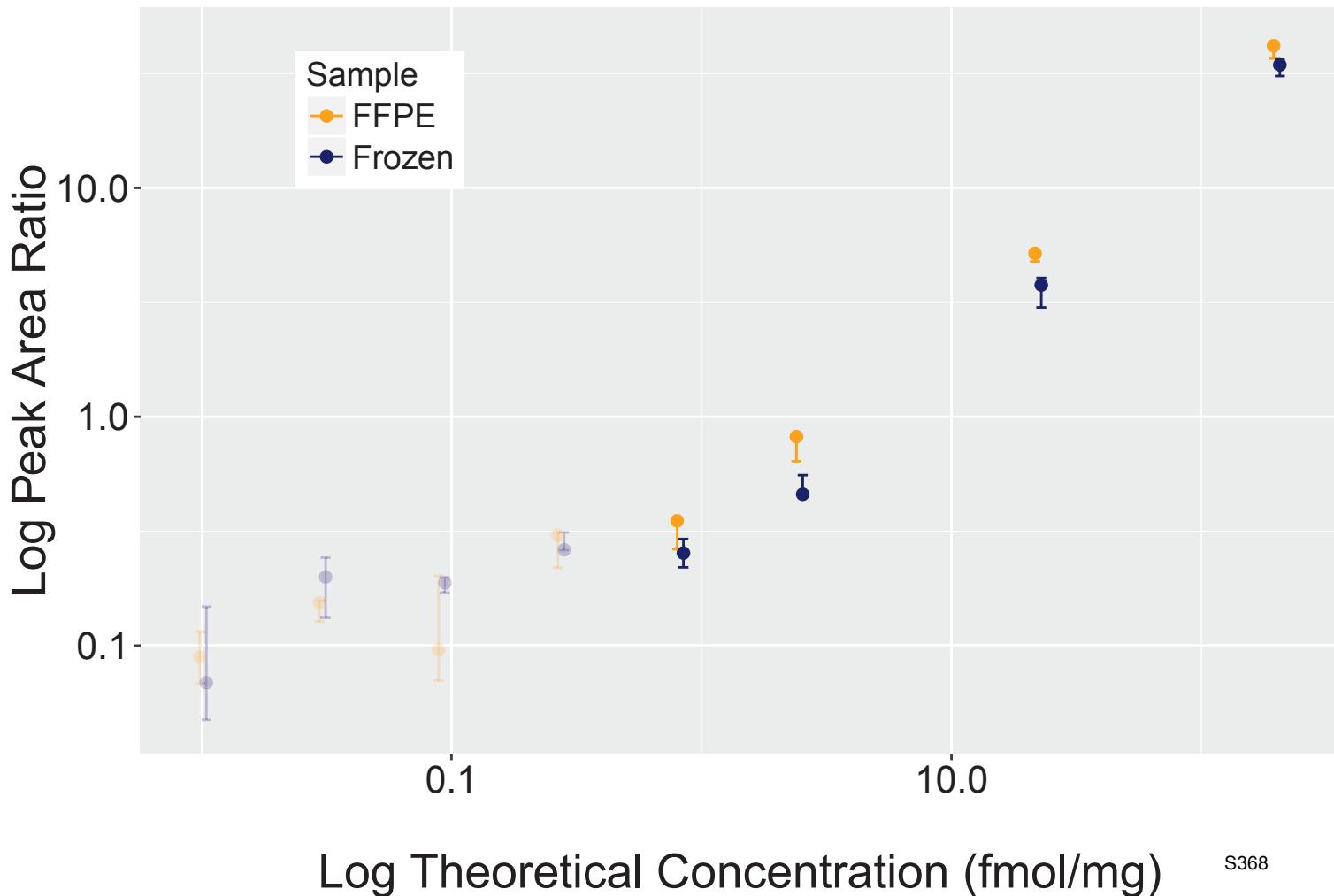
Analyte: HP1BP3.LEDVLPLAFTR



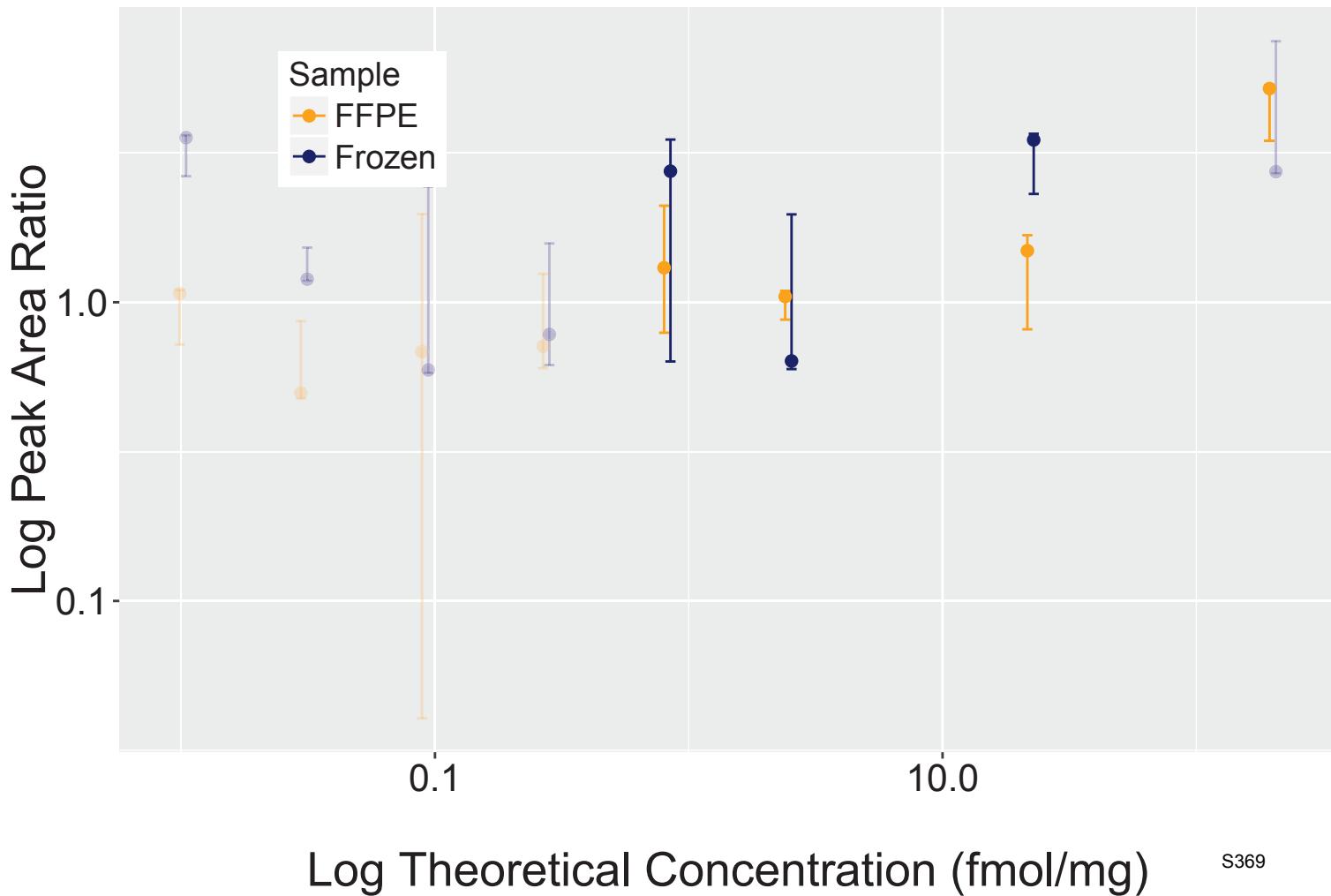
Analyte: CKAP4.LEGLGSSEADQDGLASTVR



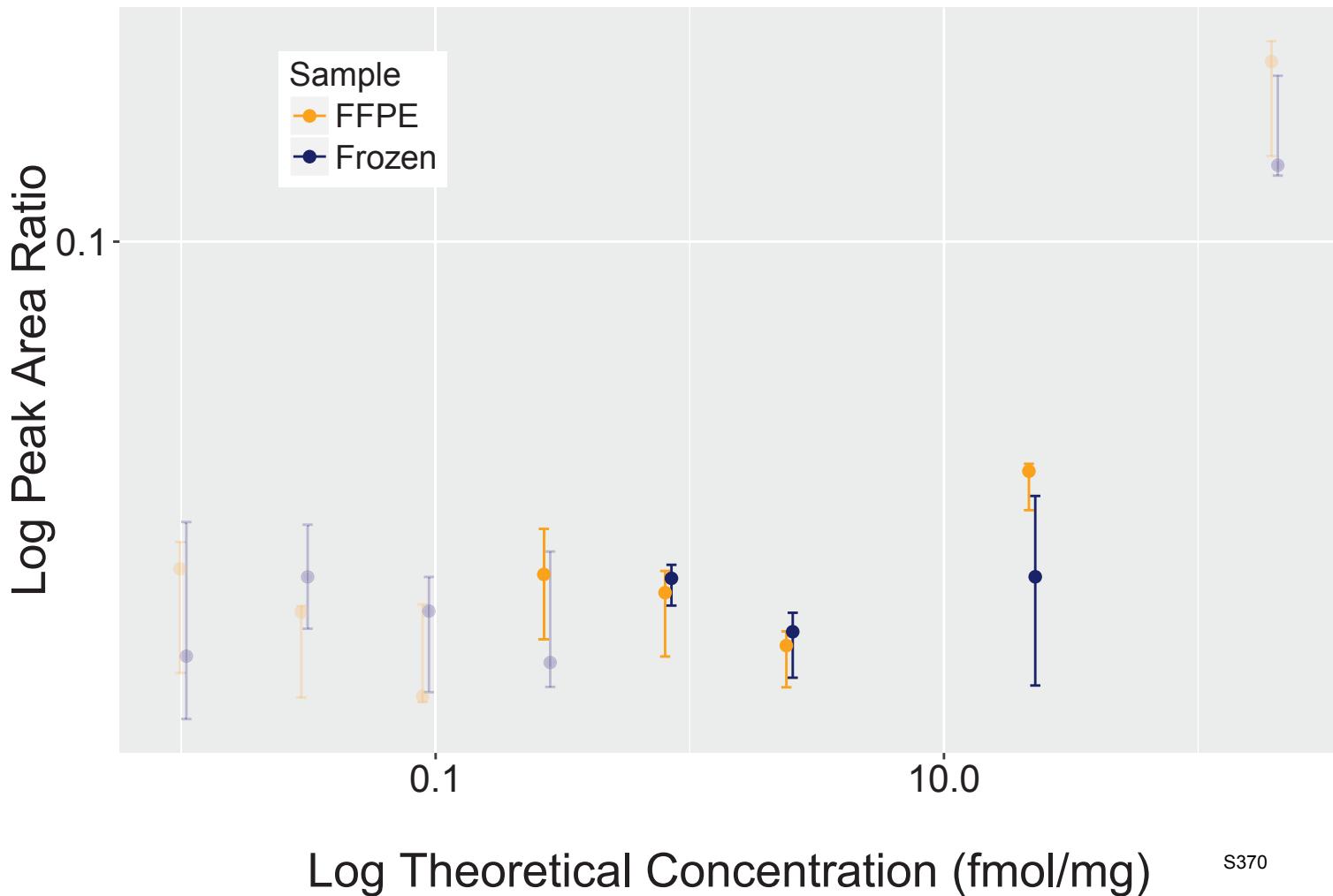
Analyte: CAPN1.LEIC[+57]NLTPDALK



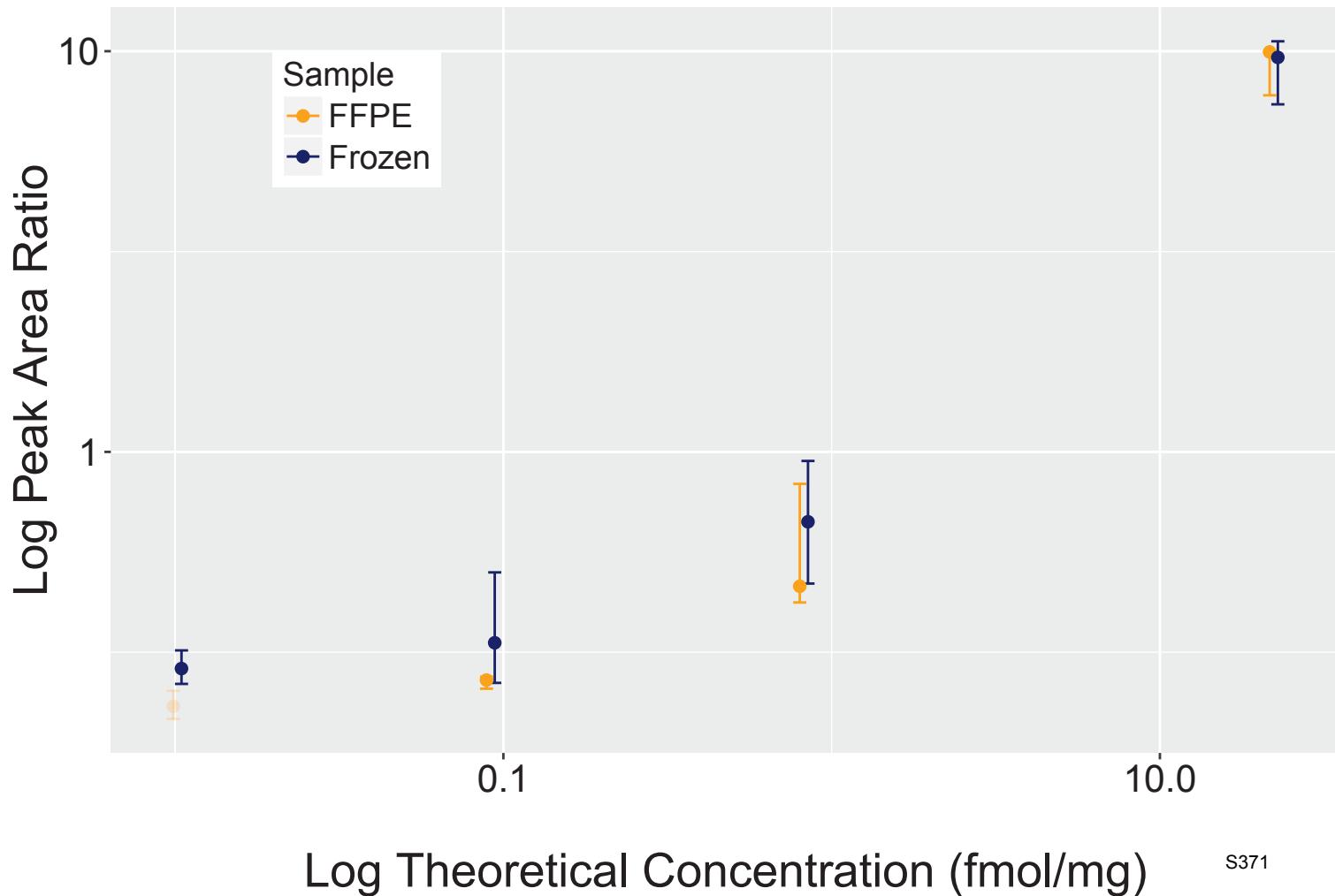
Analyte: CALD1.LEQYTSIAEGTK



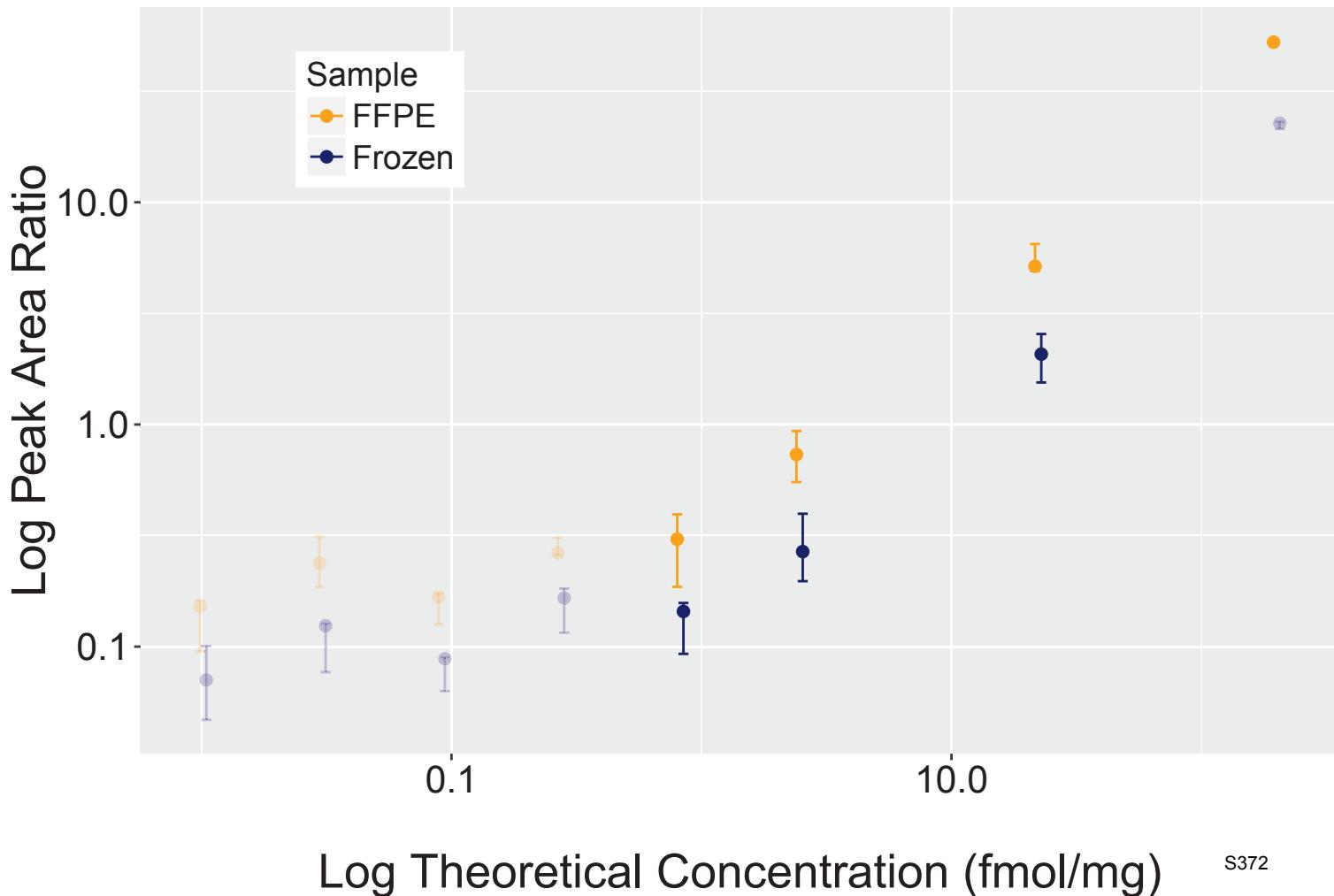
Analyte: CLU.LFDSDPITVTPVEVSR



Analyte: EHD1.LFEAEEQDLFK

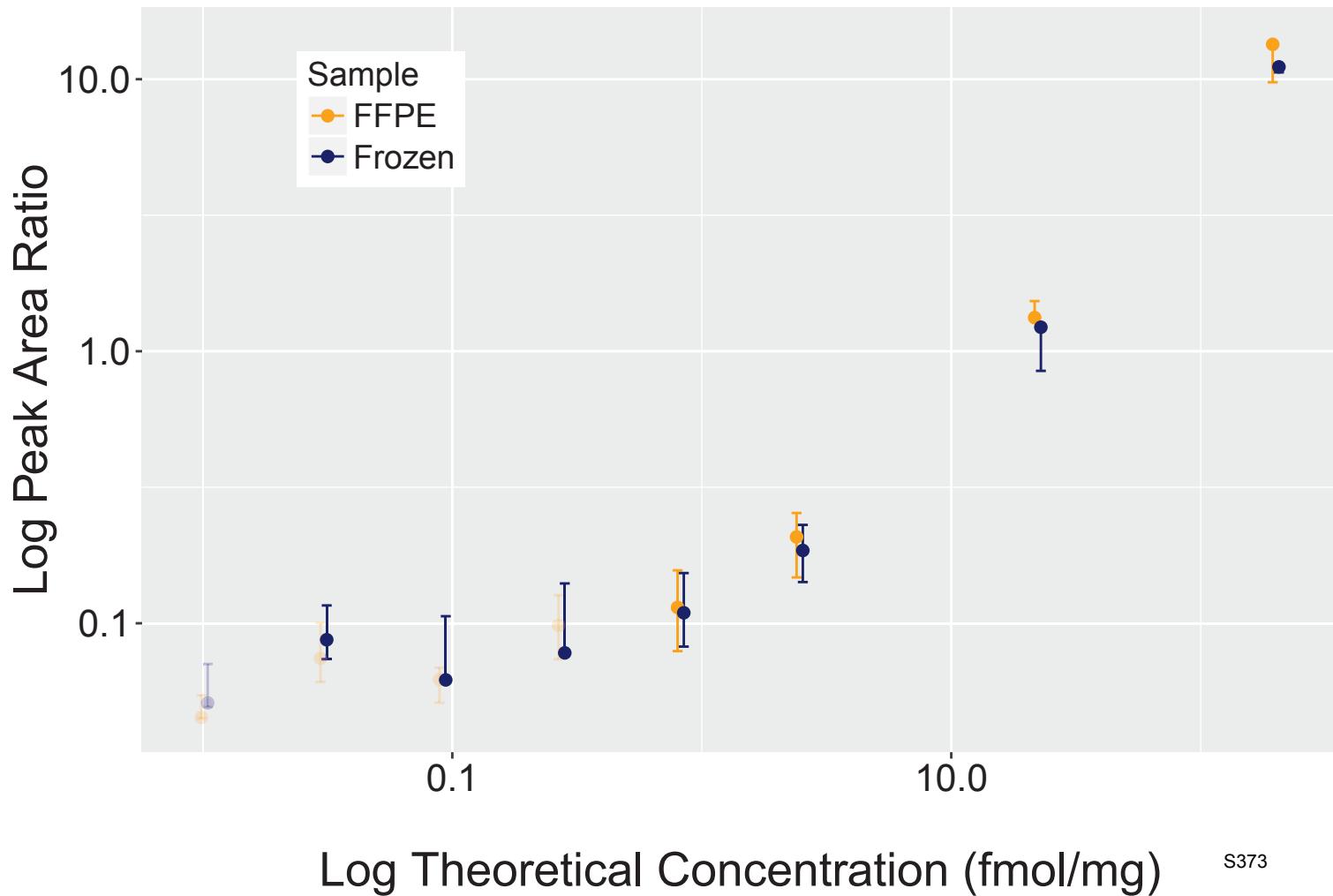


Analyte: APOA1BP.LFGYEPTIYYPK

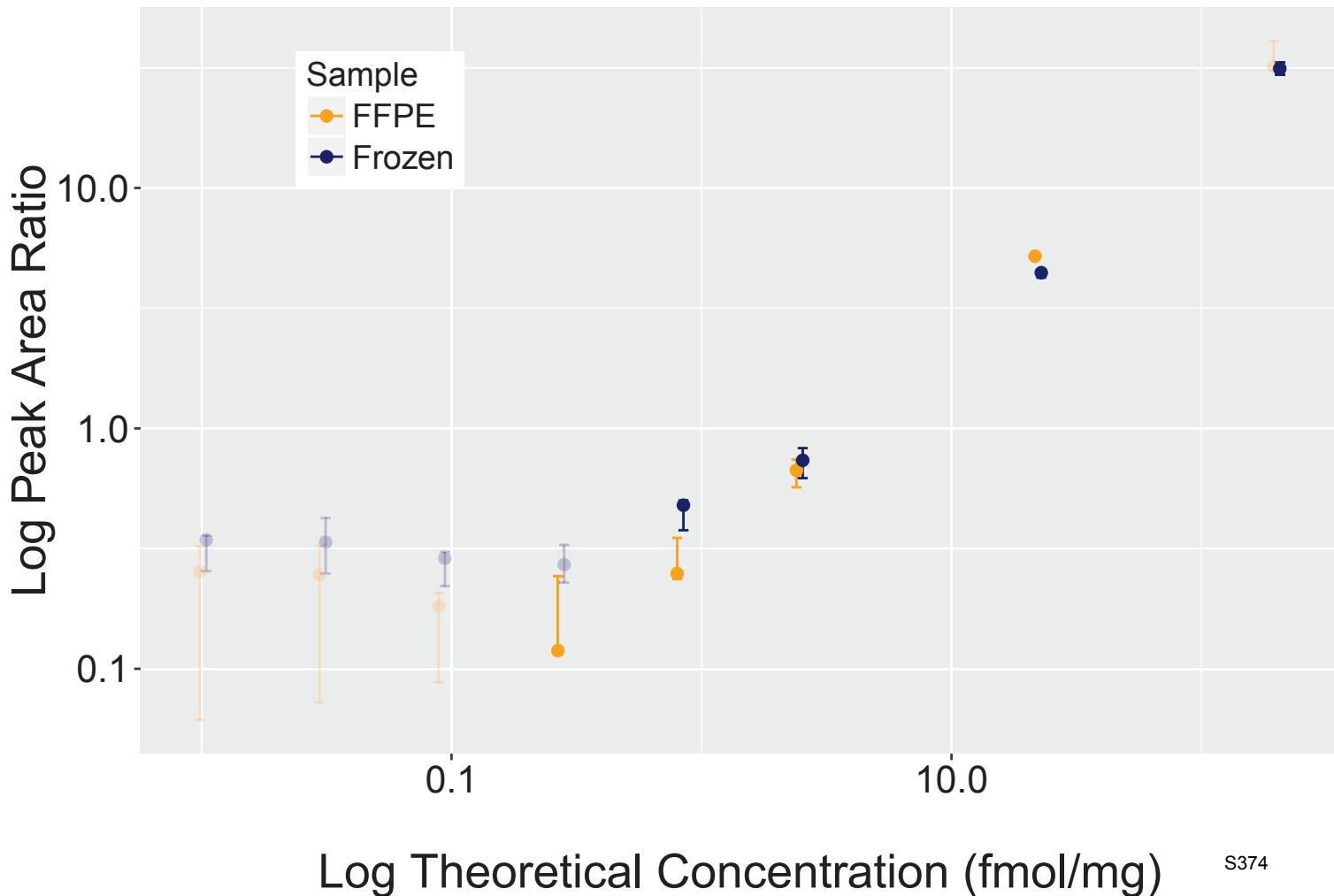


S372

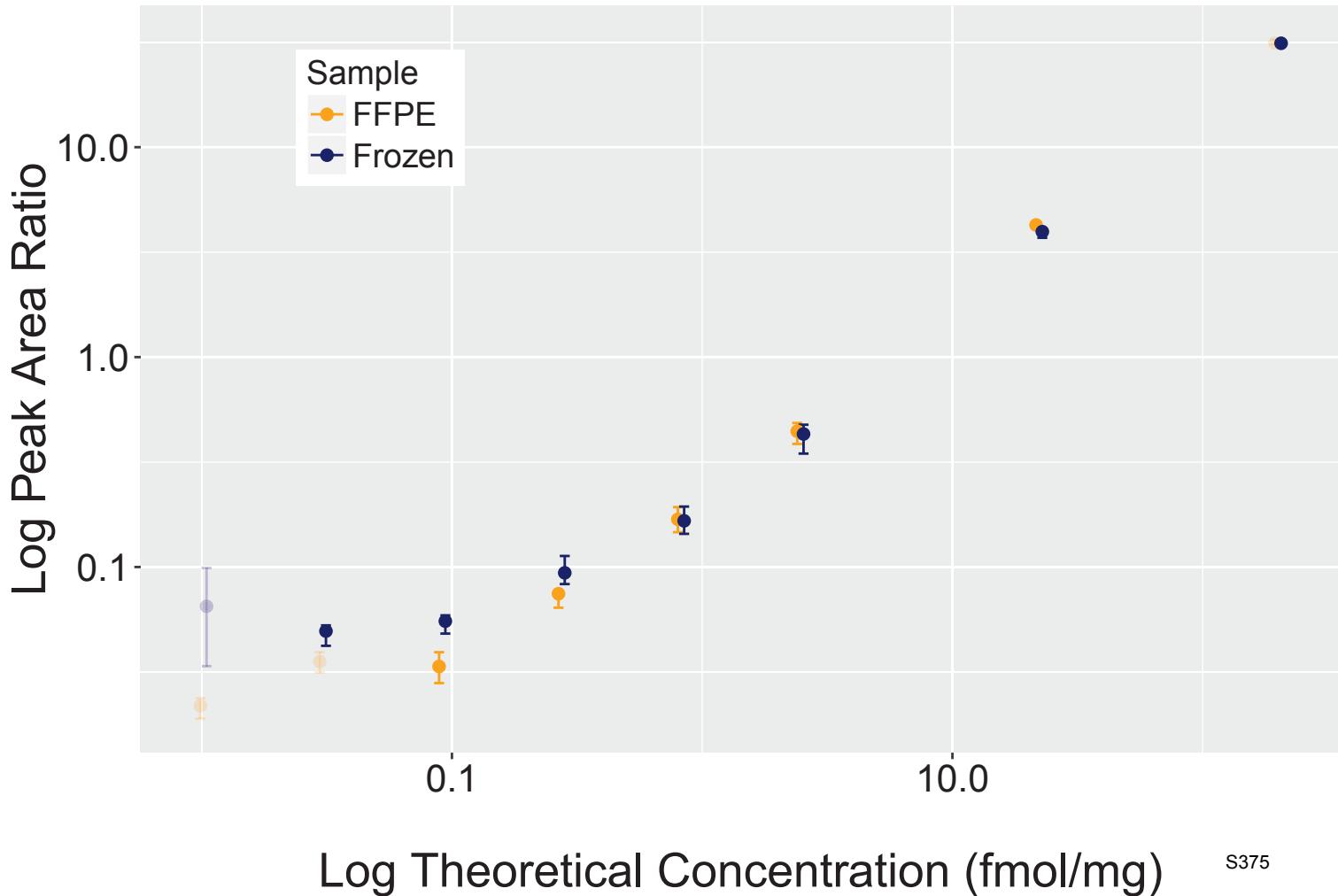
Analyte: CBR1.LFSGDVVLTAR



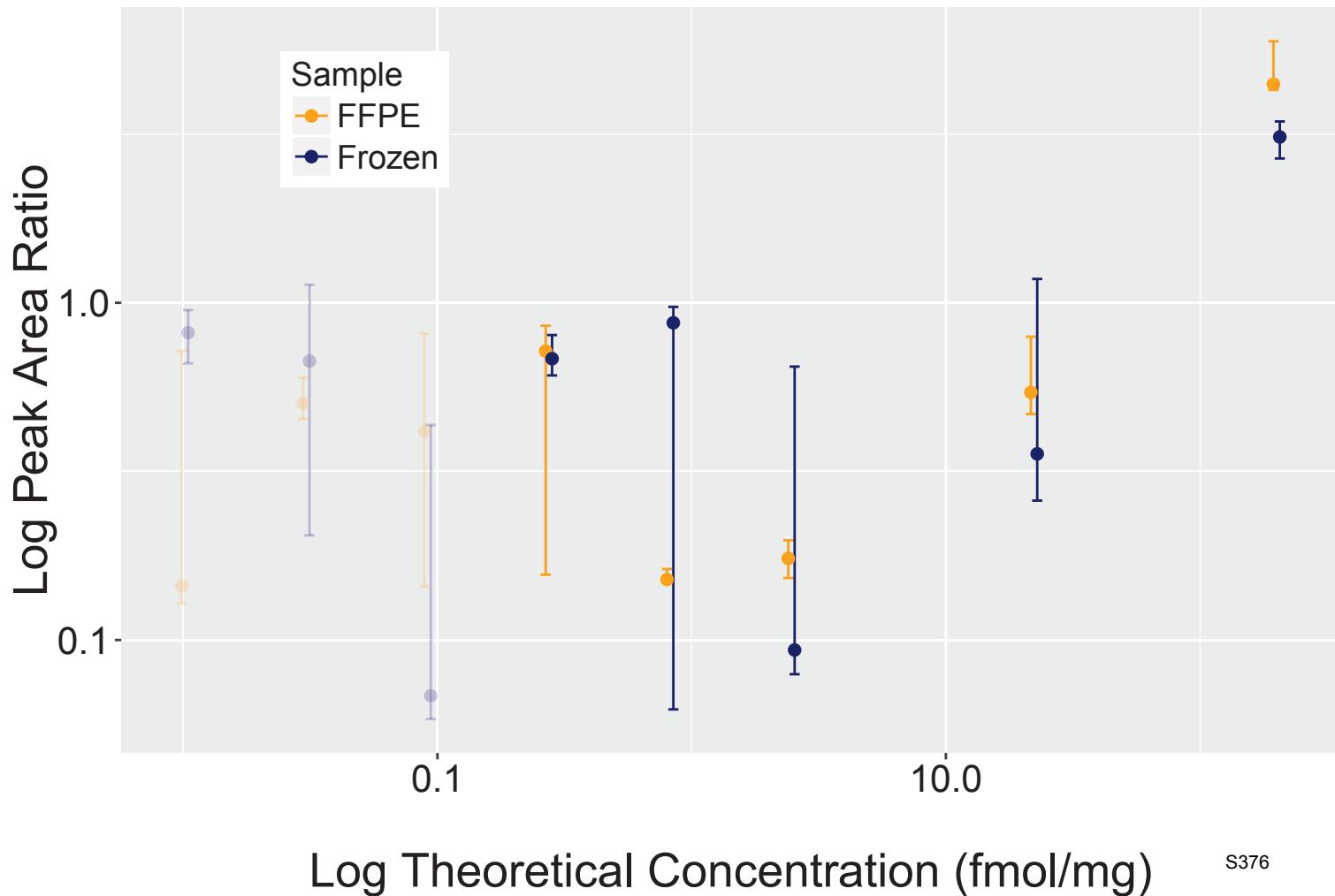
Analyte: TRAP1.LFSTQTAEDK



Analyte: KIF5B.LFVQDLATR

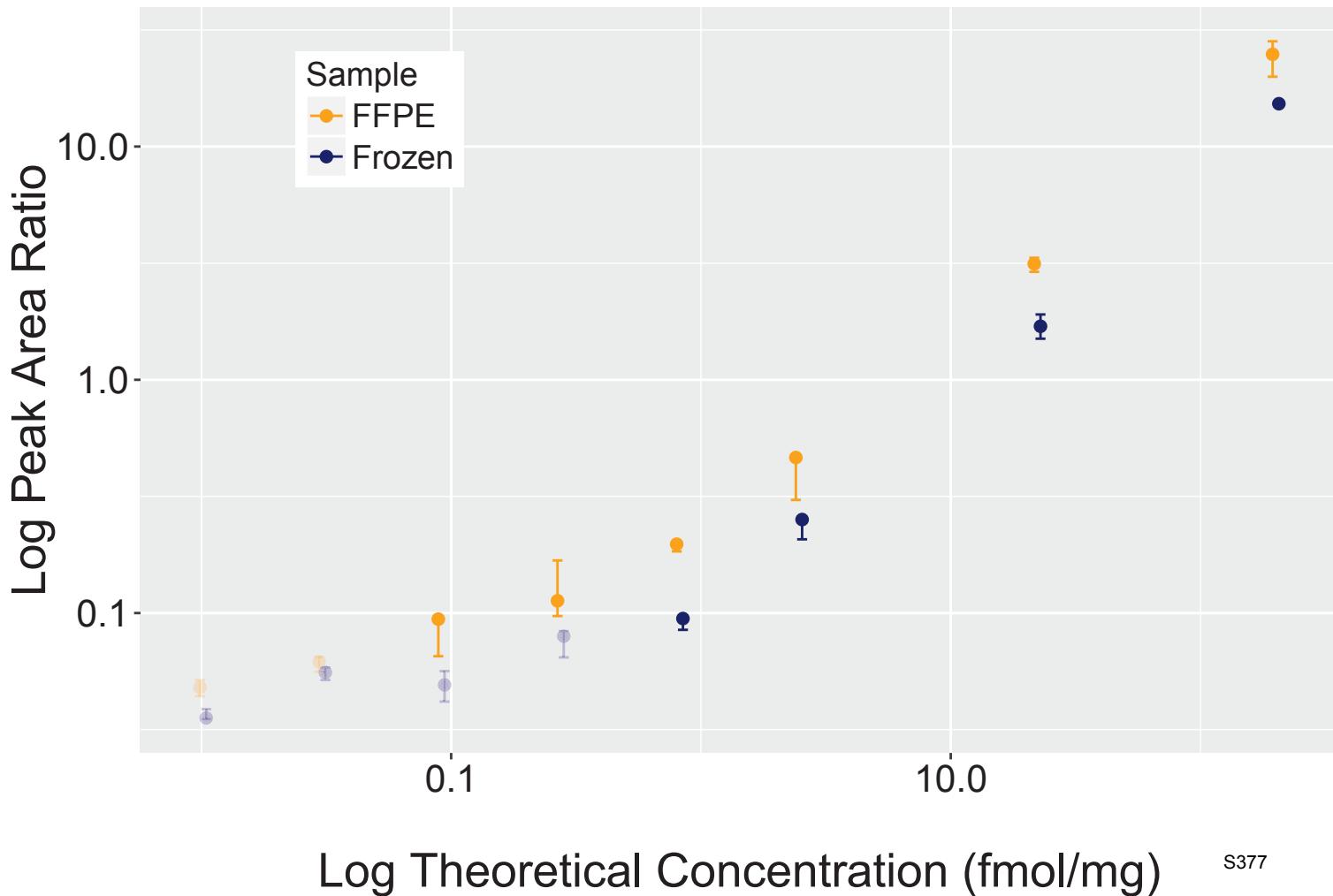


Analyte: SDHA.LGANSLLDLVVFGR

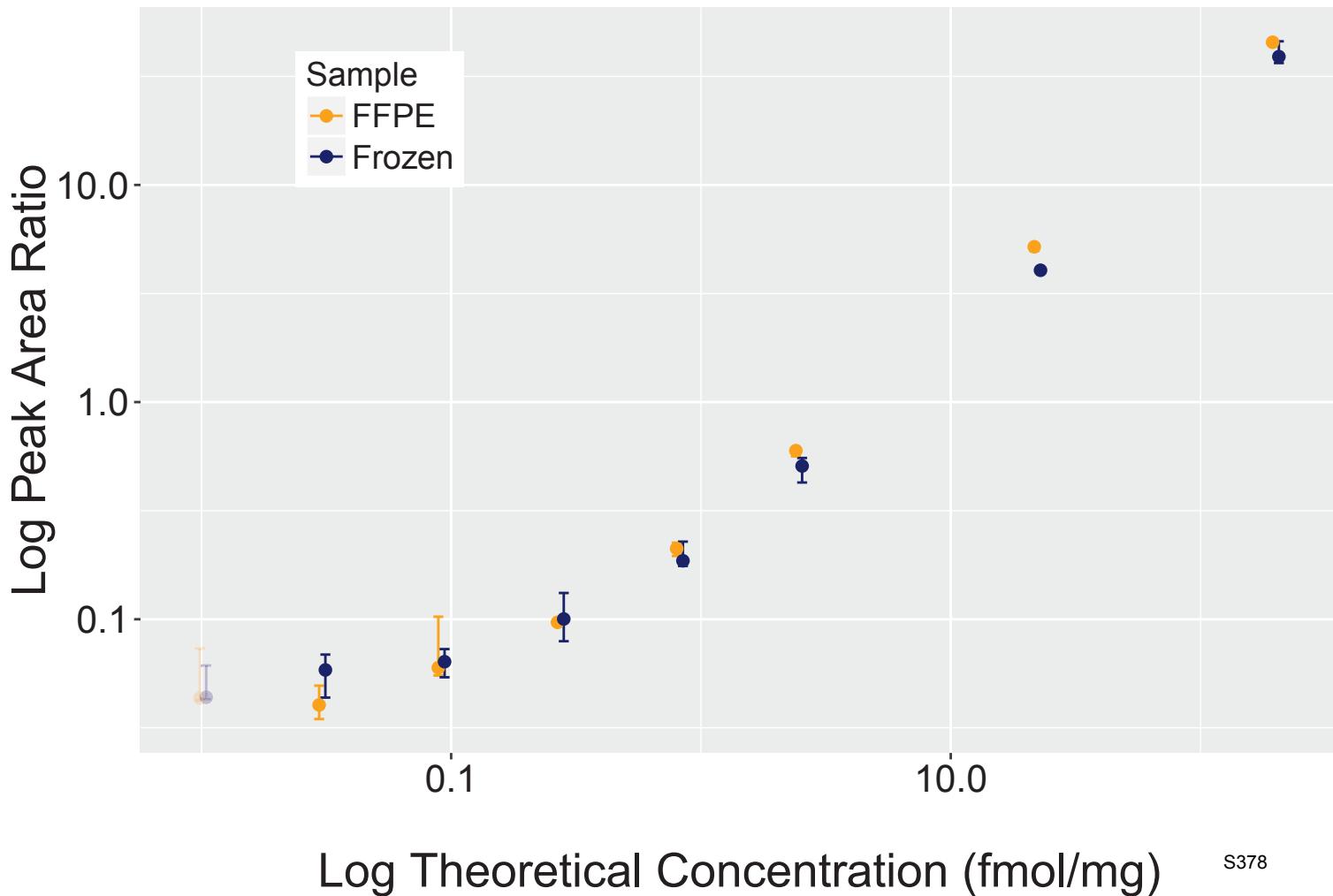


S376

Analyte: VCP.LGDVISIQPC[+57]PDVK

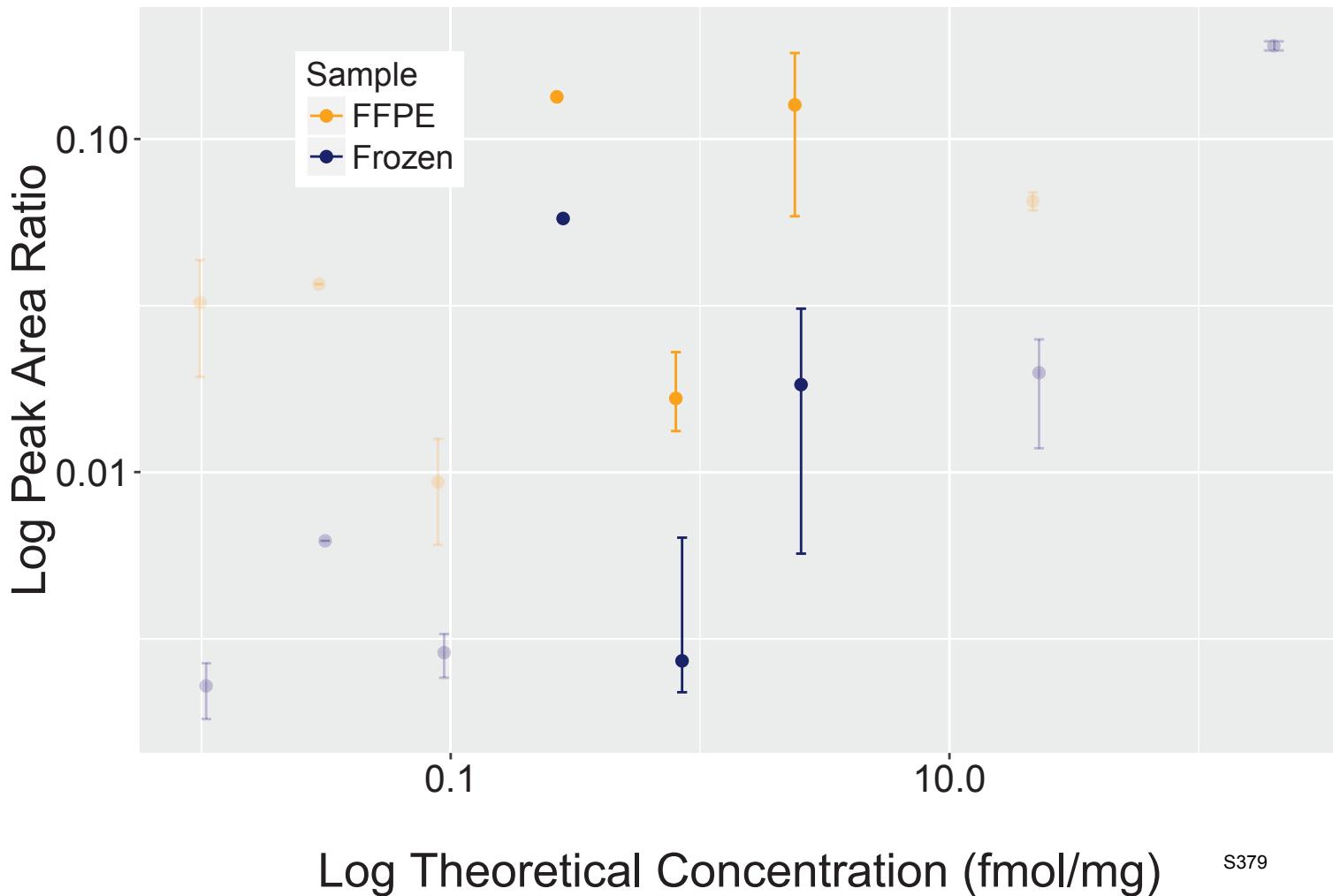


Analyte: UCHL1.LGFEDGSVLK

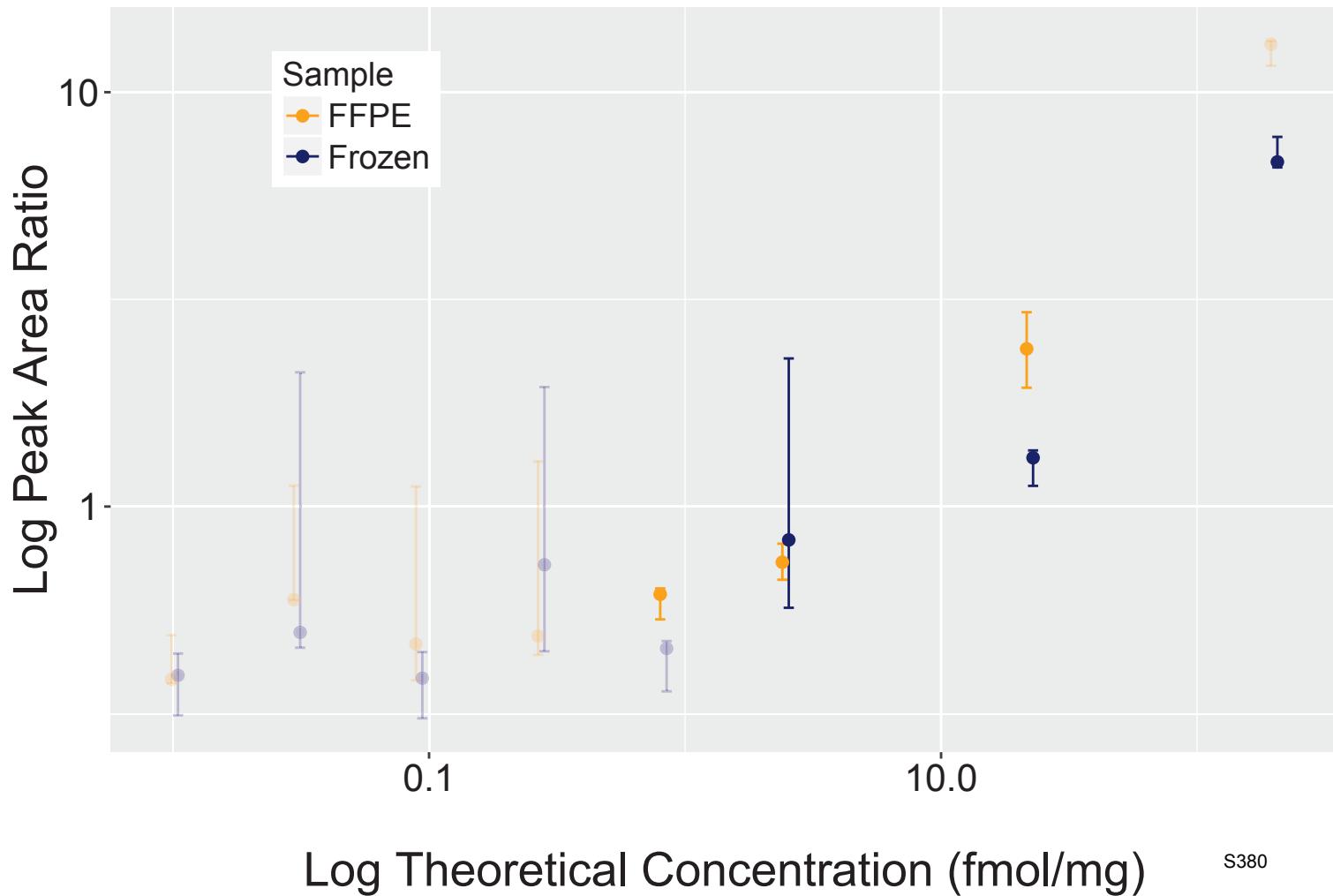


S378

Analyte: TAGLN.LGFQVWLK

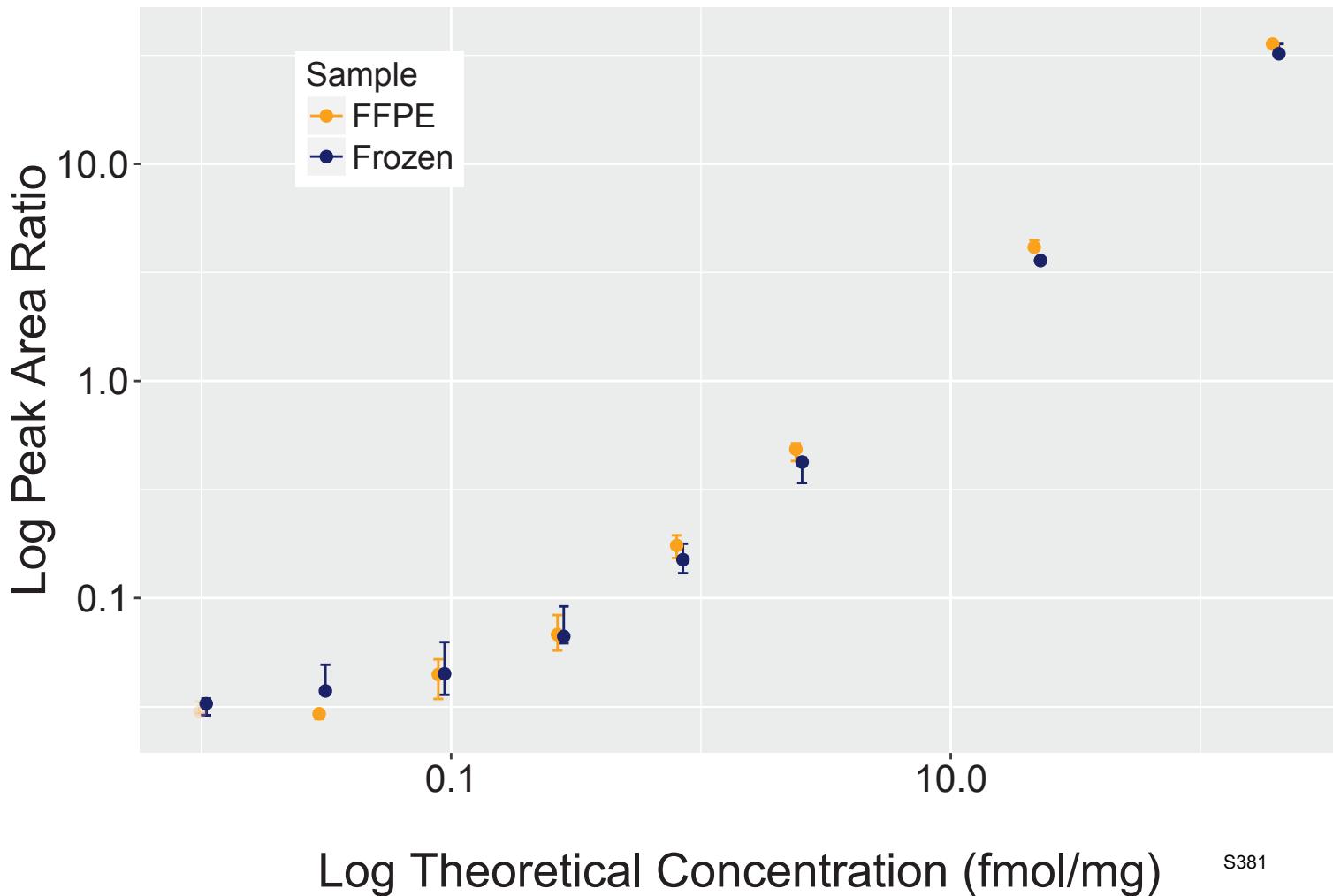


Analyte: CCT2.LGGSLADSYLLDEGFLLDK

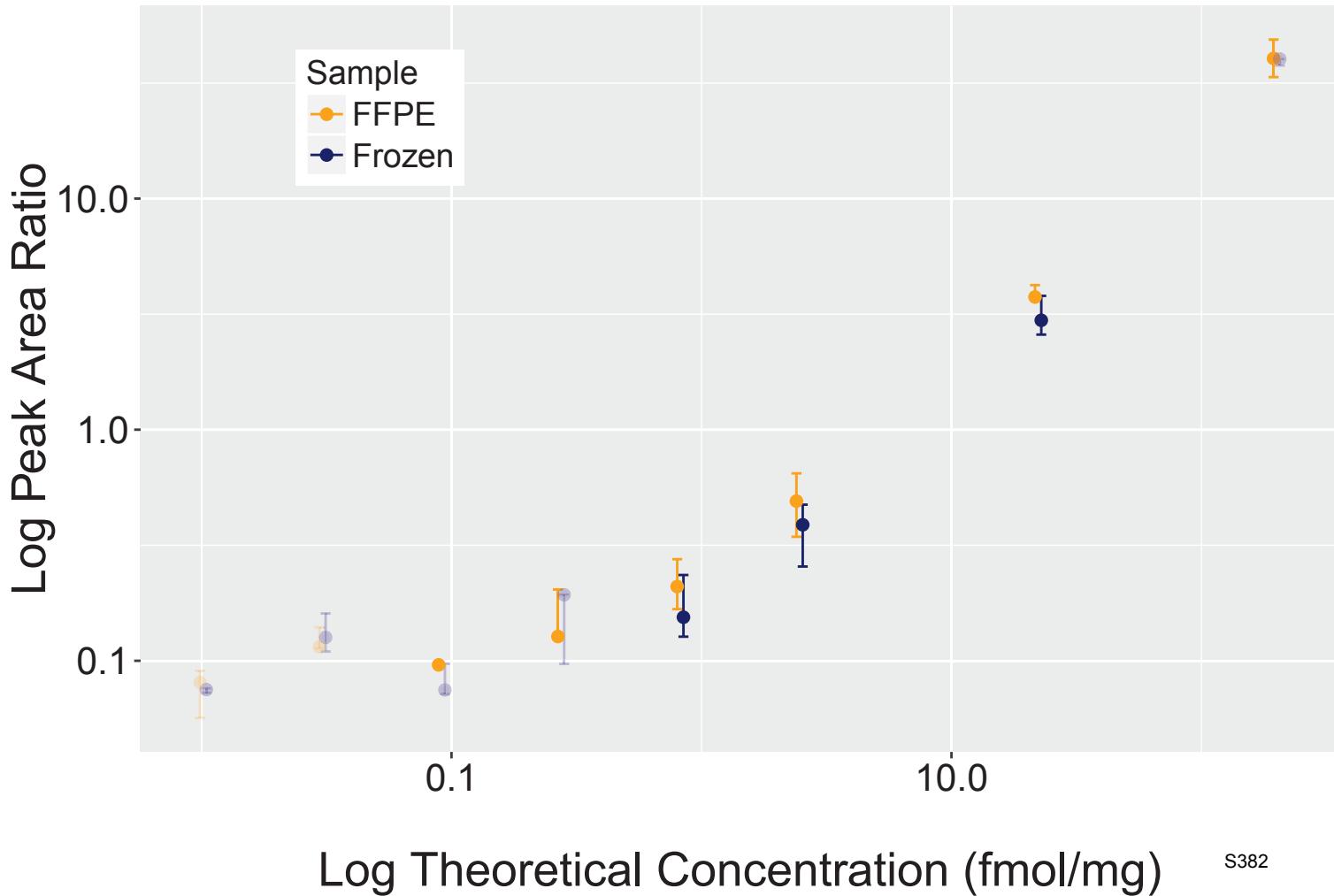


S380

Analyte: SSH3.LGLPLQQYR

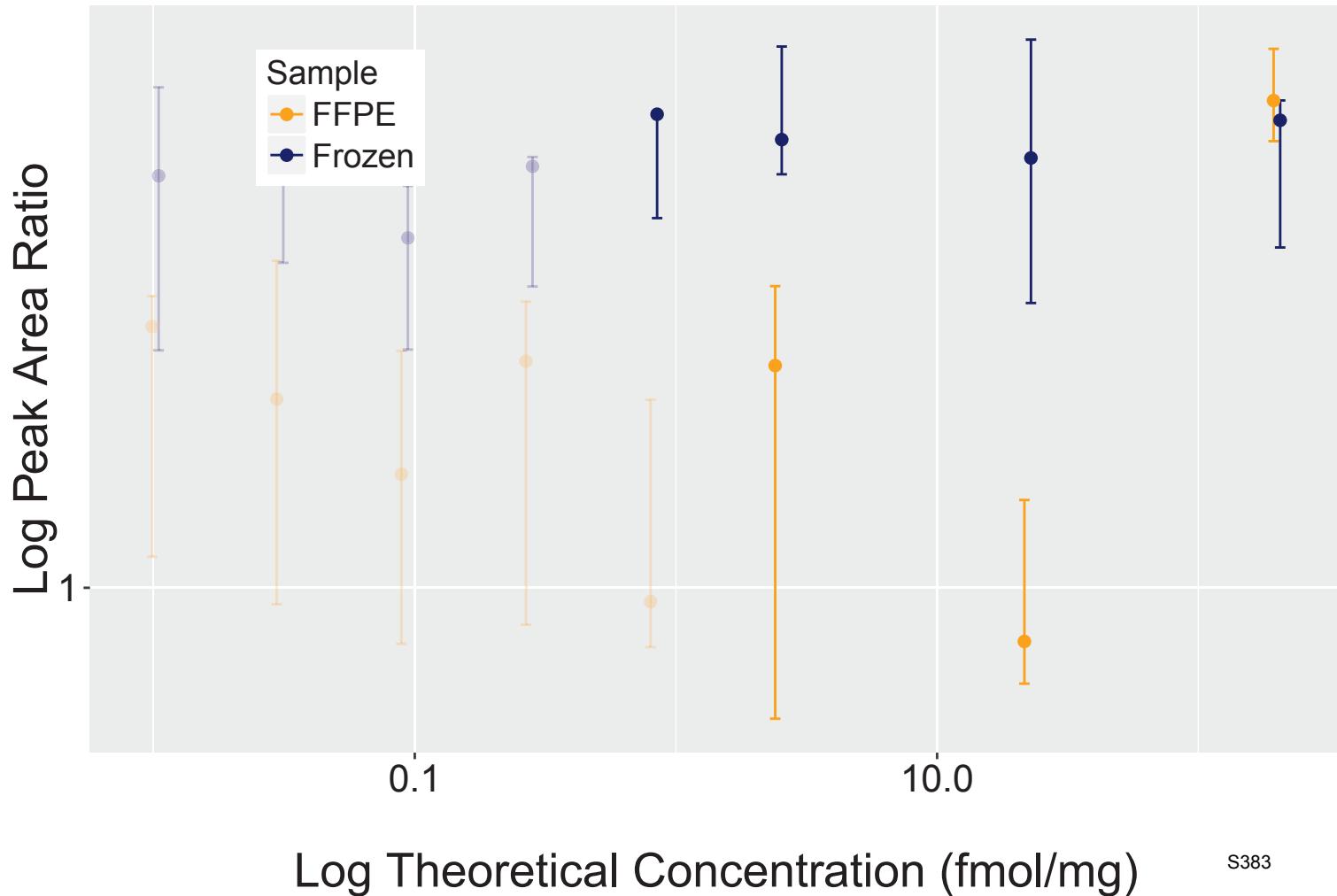


Analyte: NPEPPS.LGLQNDLFSLAR



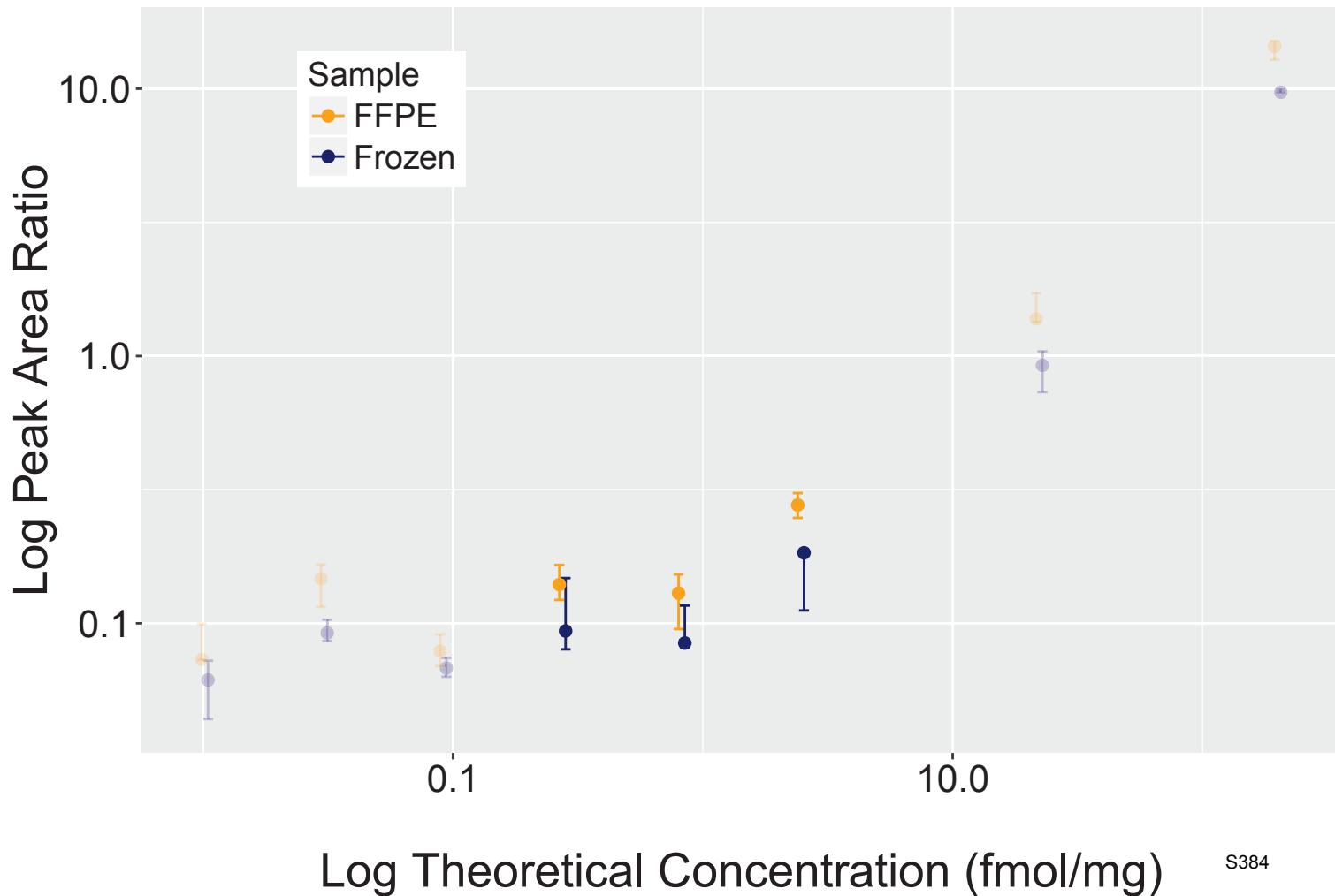
S382

Analyte: FLNB.LGSAADFLLDISETDLSSLTASIK

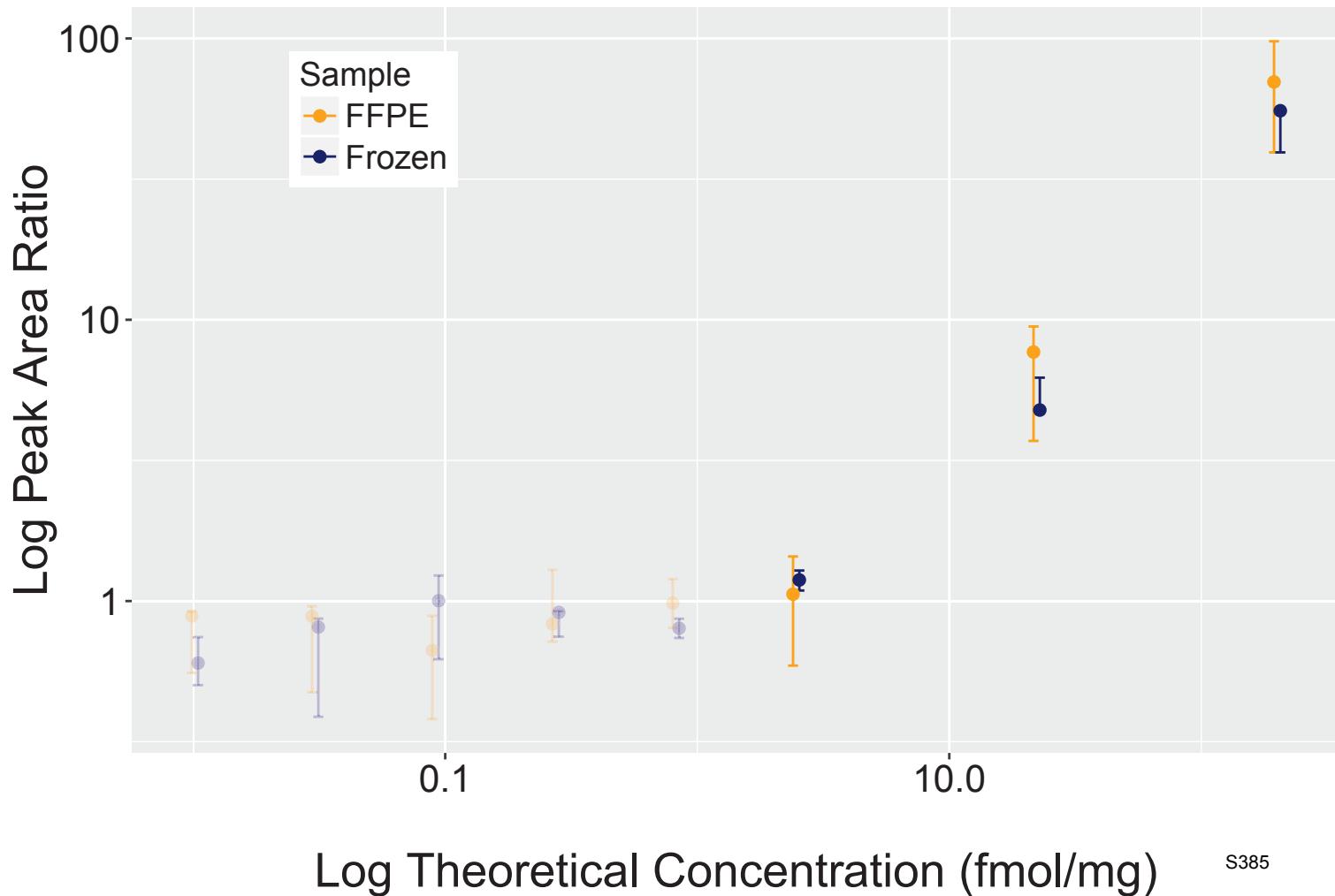


S383

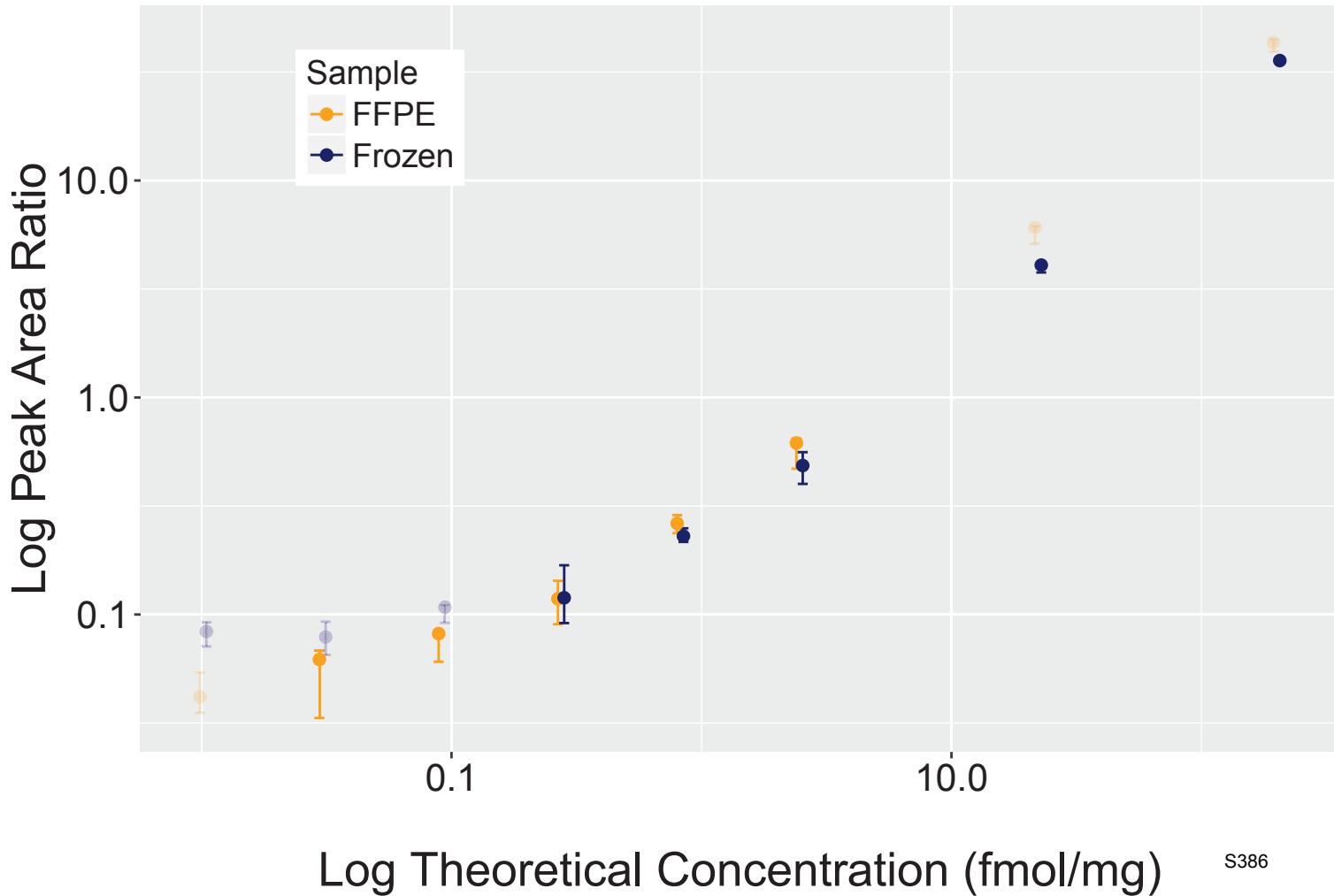
Analyte: HNRNPM.LGSTVFVANLDYK



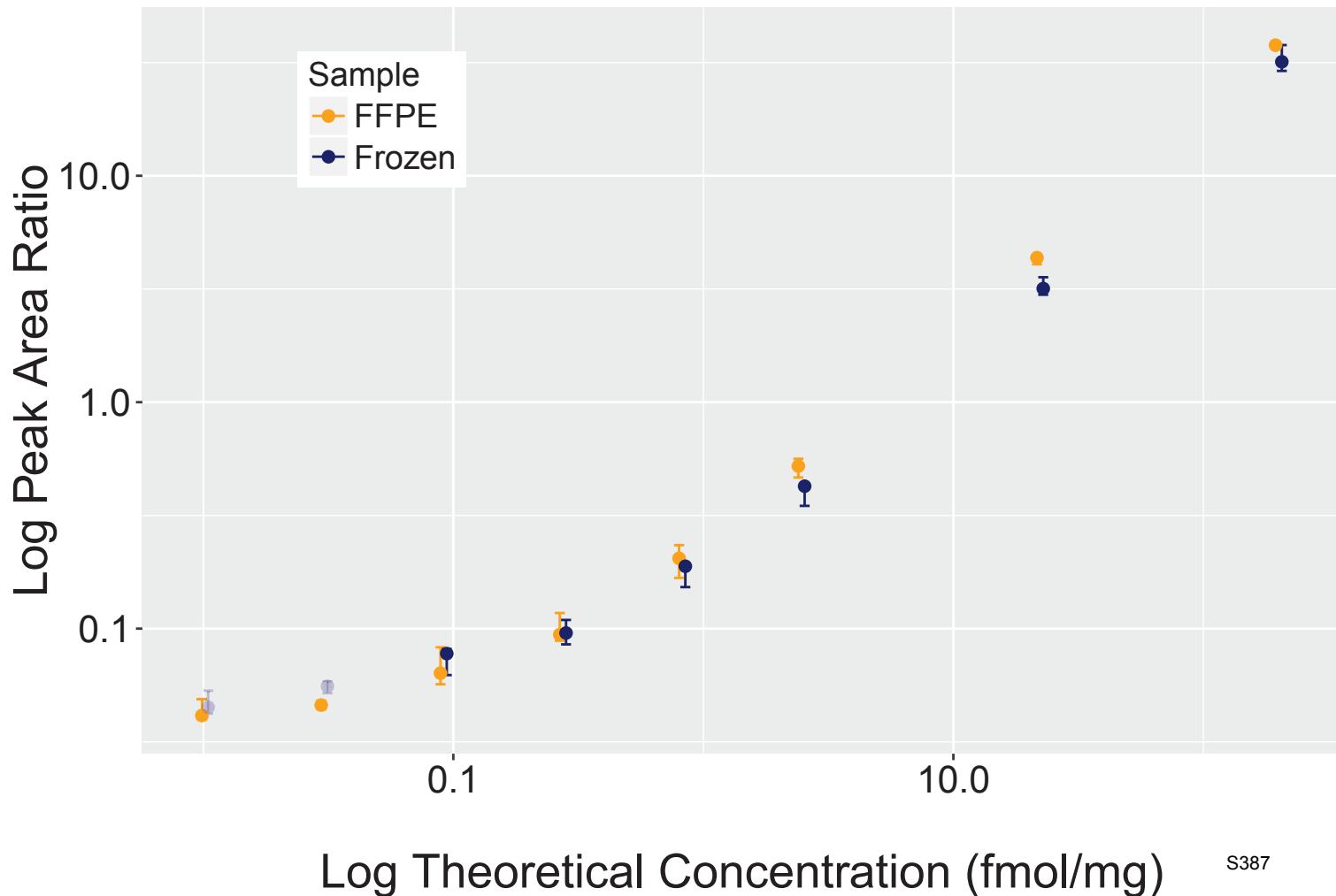
Analyte: DDX21.LGVC[+57]FDVPTASVTEIQEK



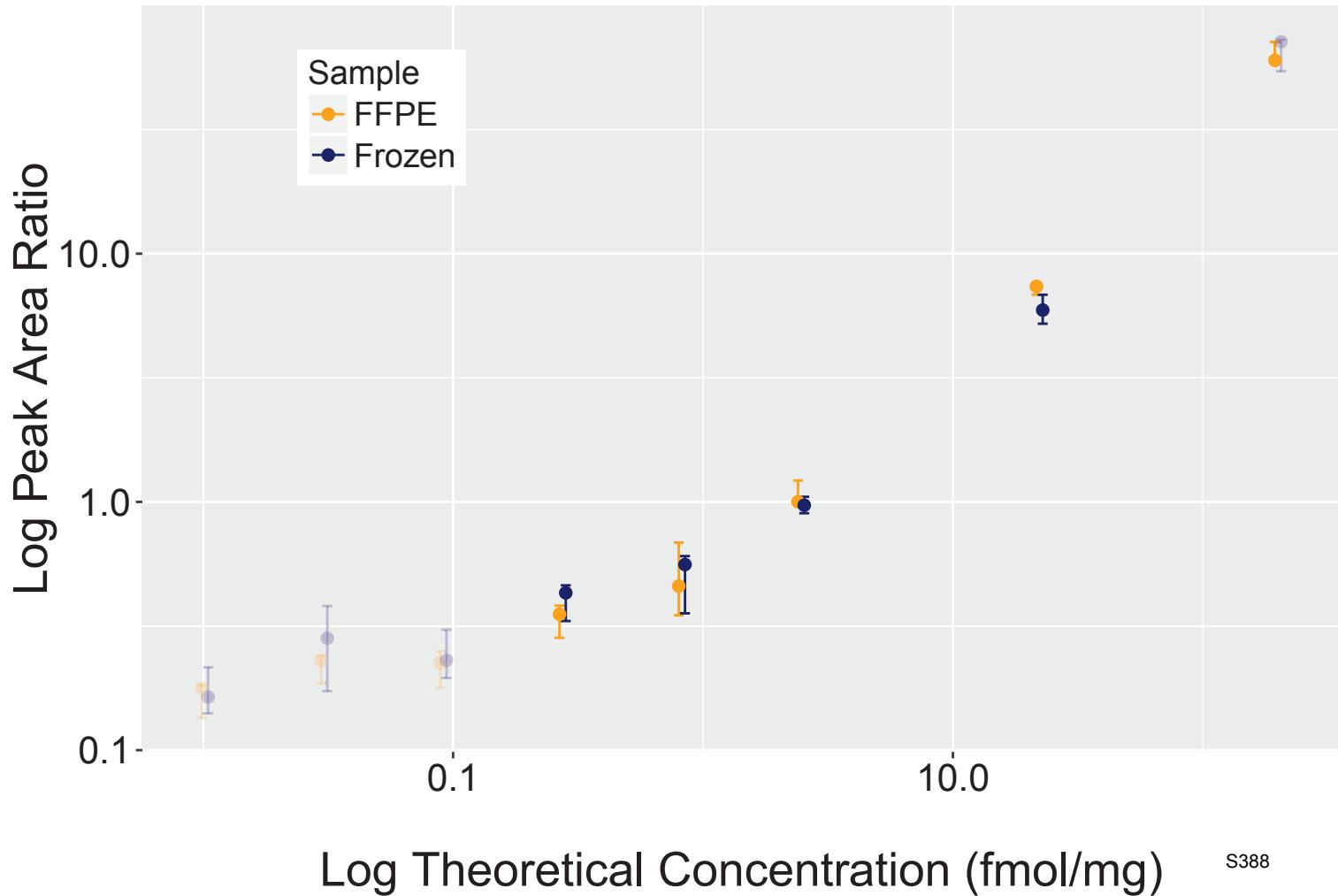
Analyte: SERPINB1.LGVQQLFNSSK



Analyte: PTPN1.LHQEDNDYINASLIK

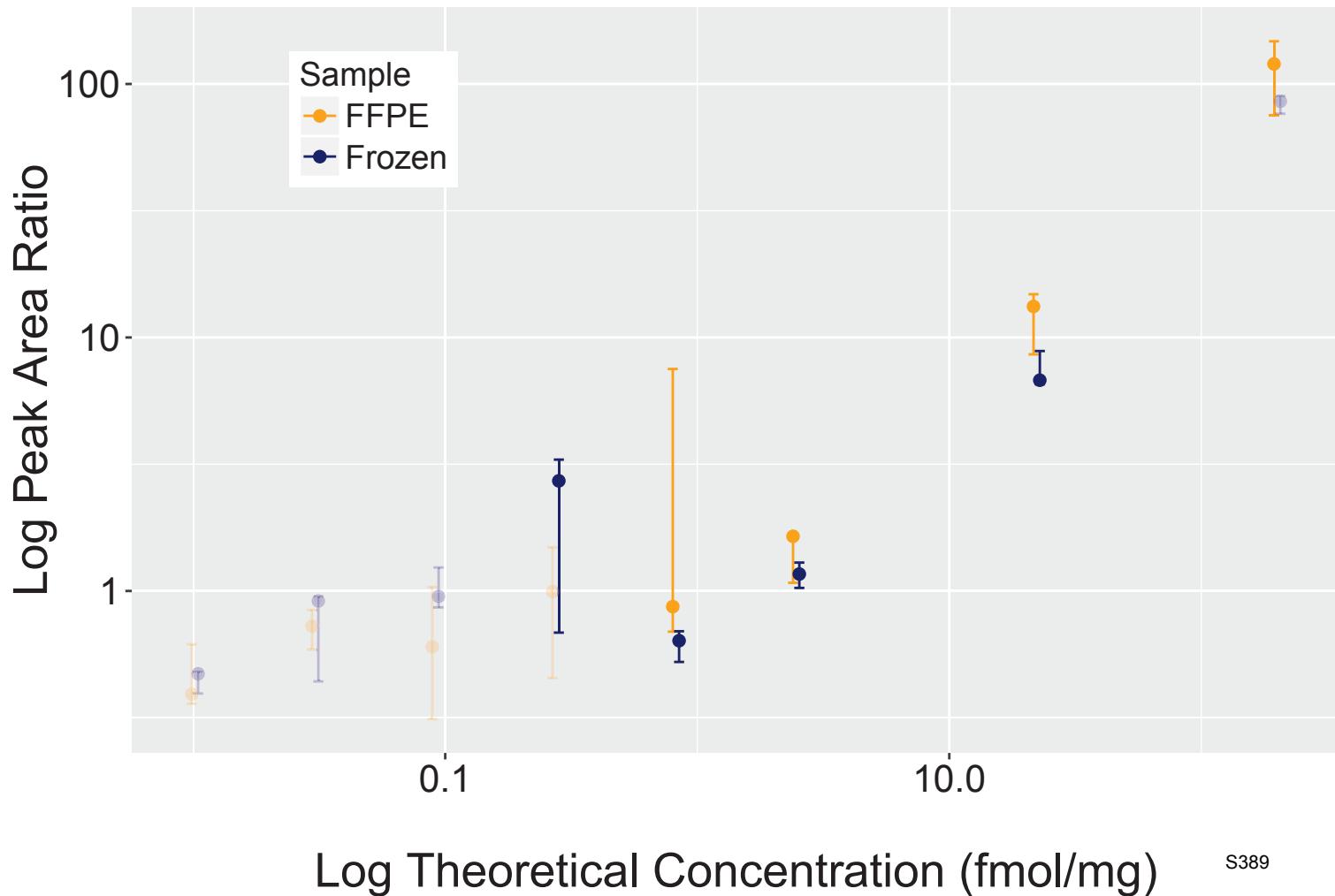


Analyte: CRAT.LIEGVLDFK



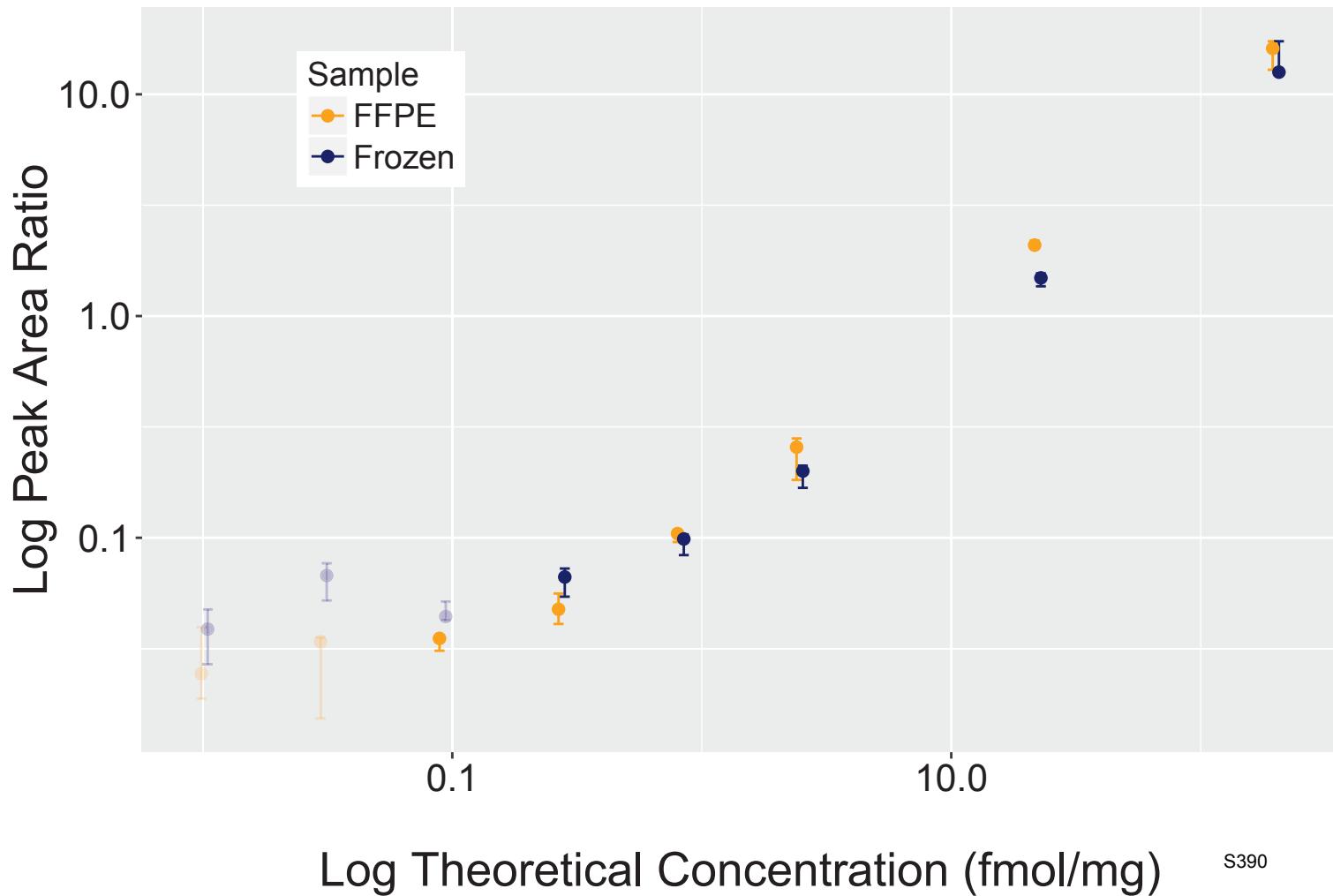
S388

Analyte: GRB7.LIGQQGLVDGLFLVR



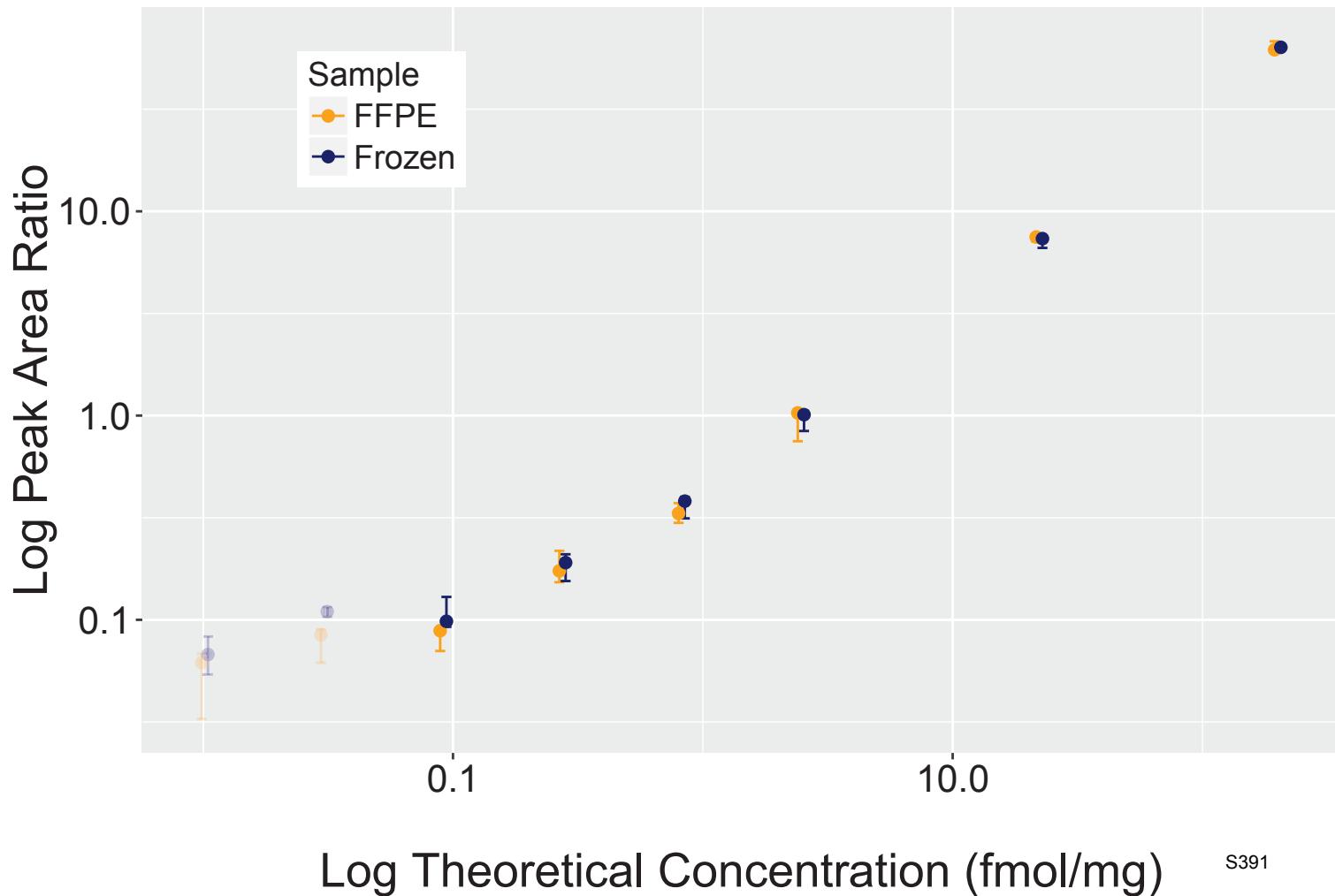
S389

Analyte: PRDX5.LLADPTGAFGK



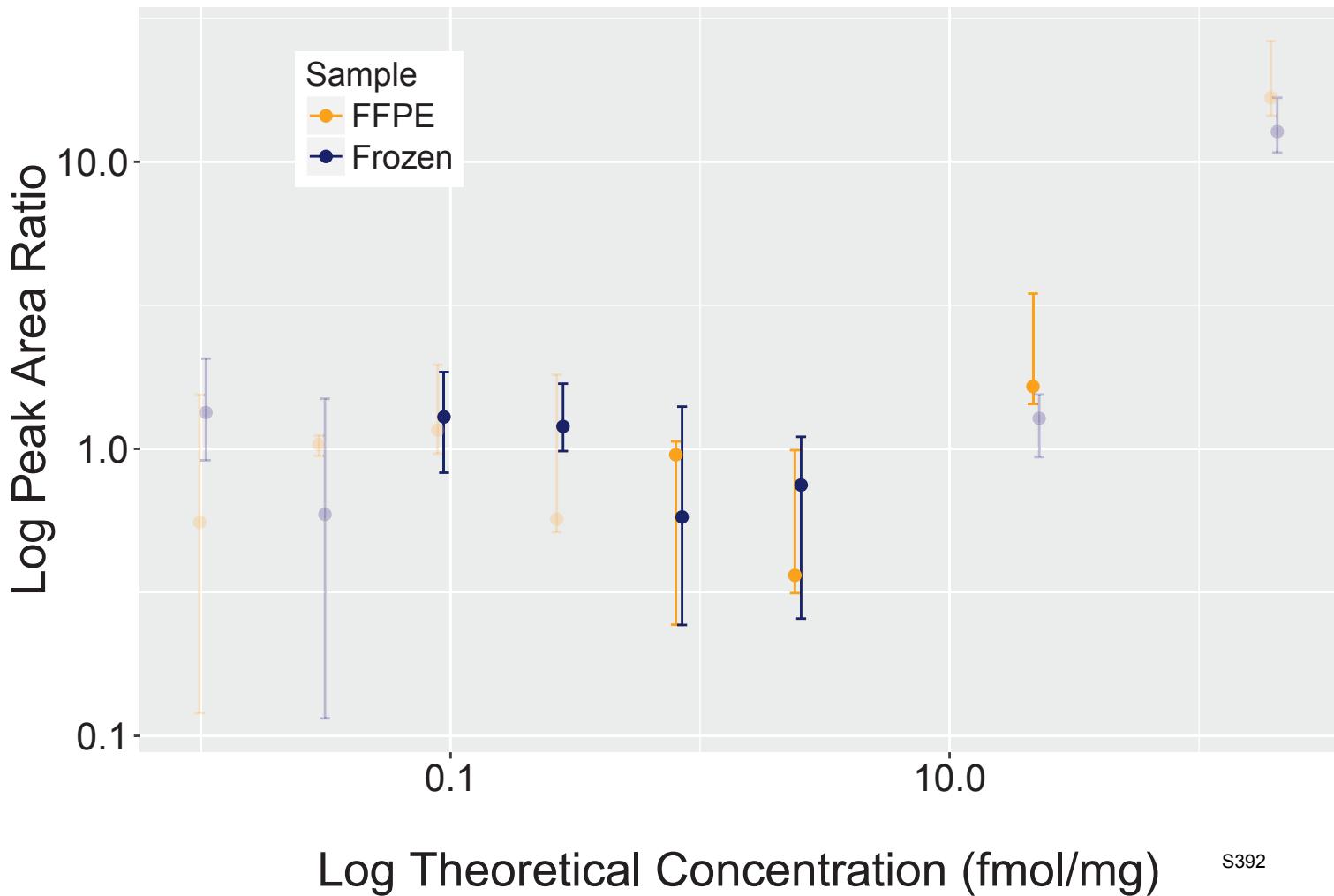
S390

Analyte: ERBB2.LLDIDETEYHADGGK



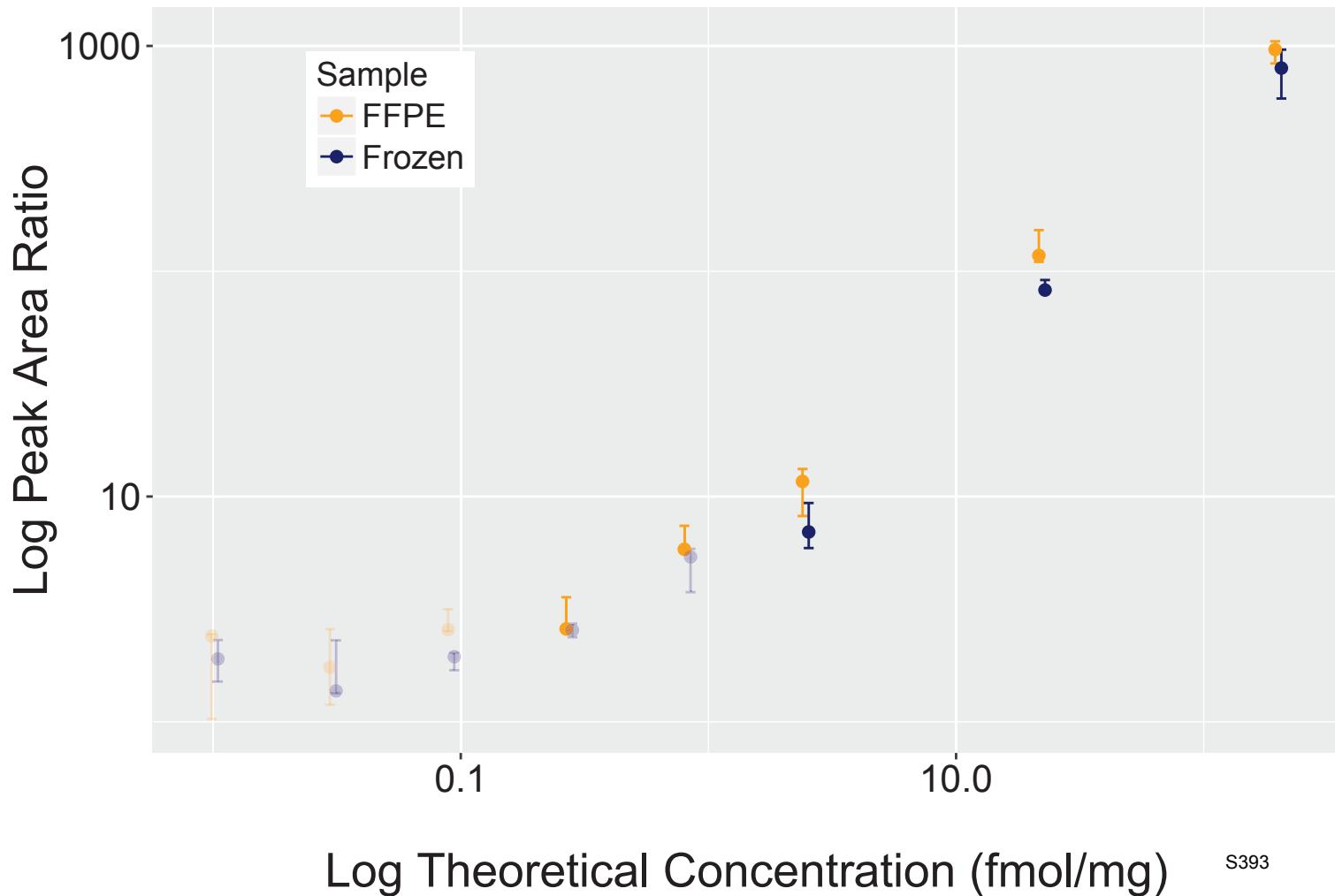
S391

Analyte: OGDH.LLDTAFDLDVFK

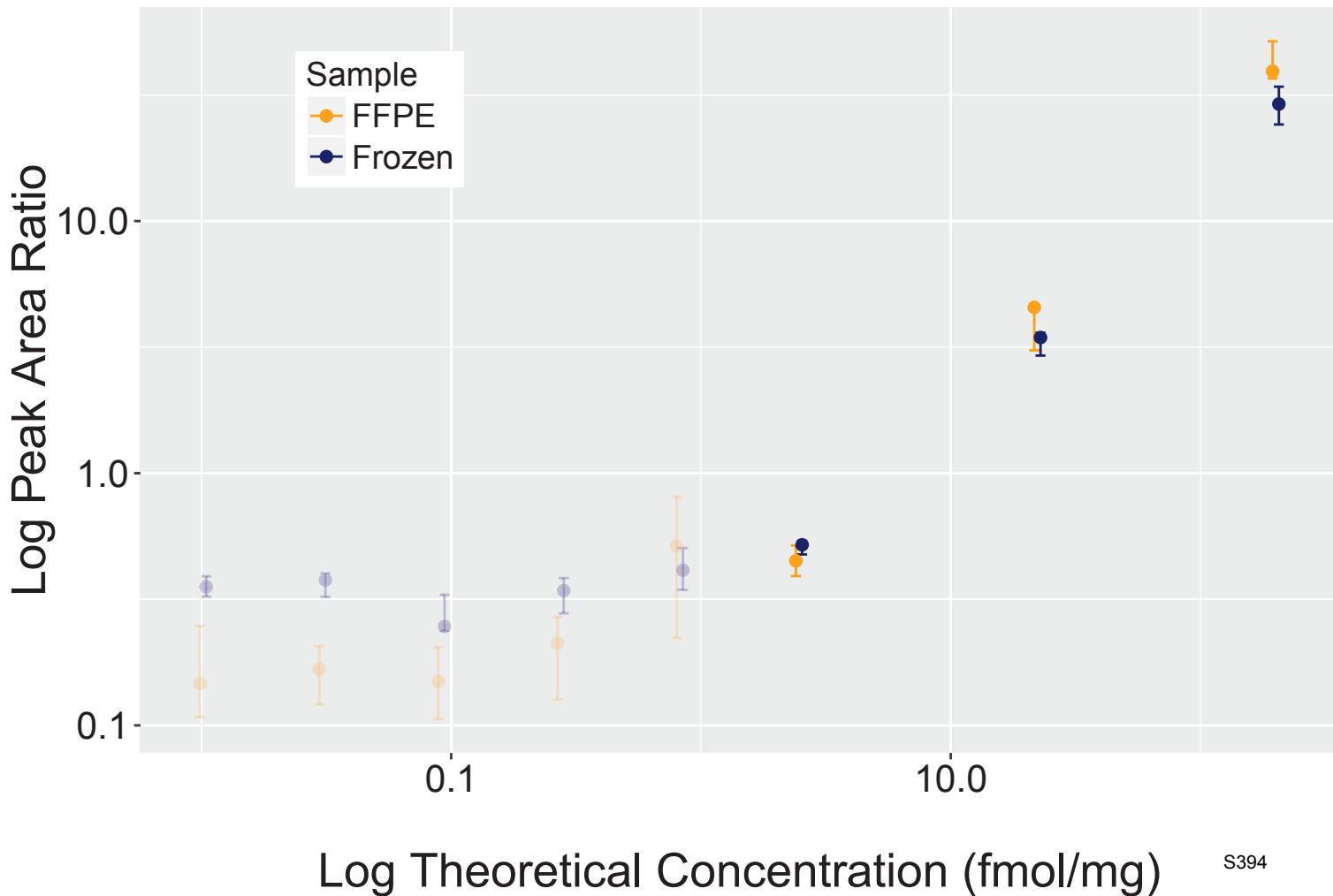


S392

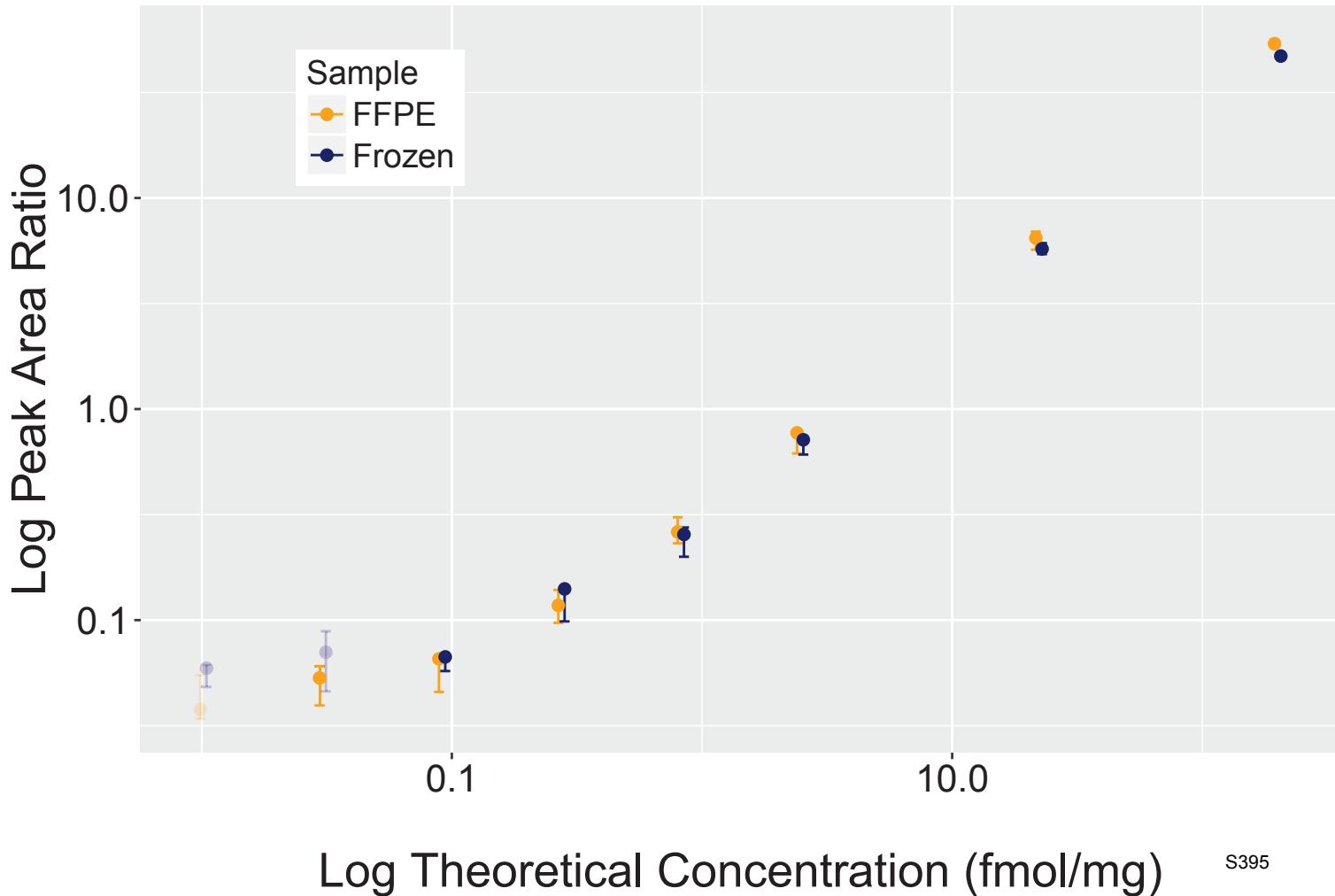
Analyte: ESR1.LLFAPNLLDR



Analyte: HUWE1.LLGPSAAADILQLSSSLPLQSR

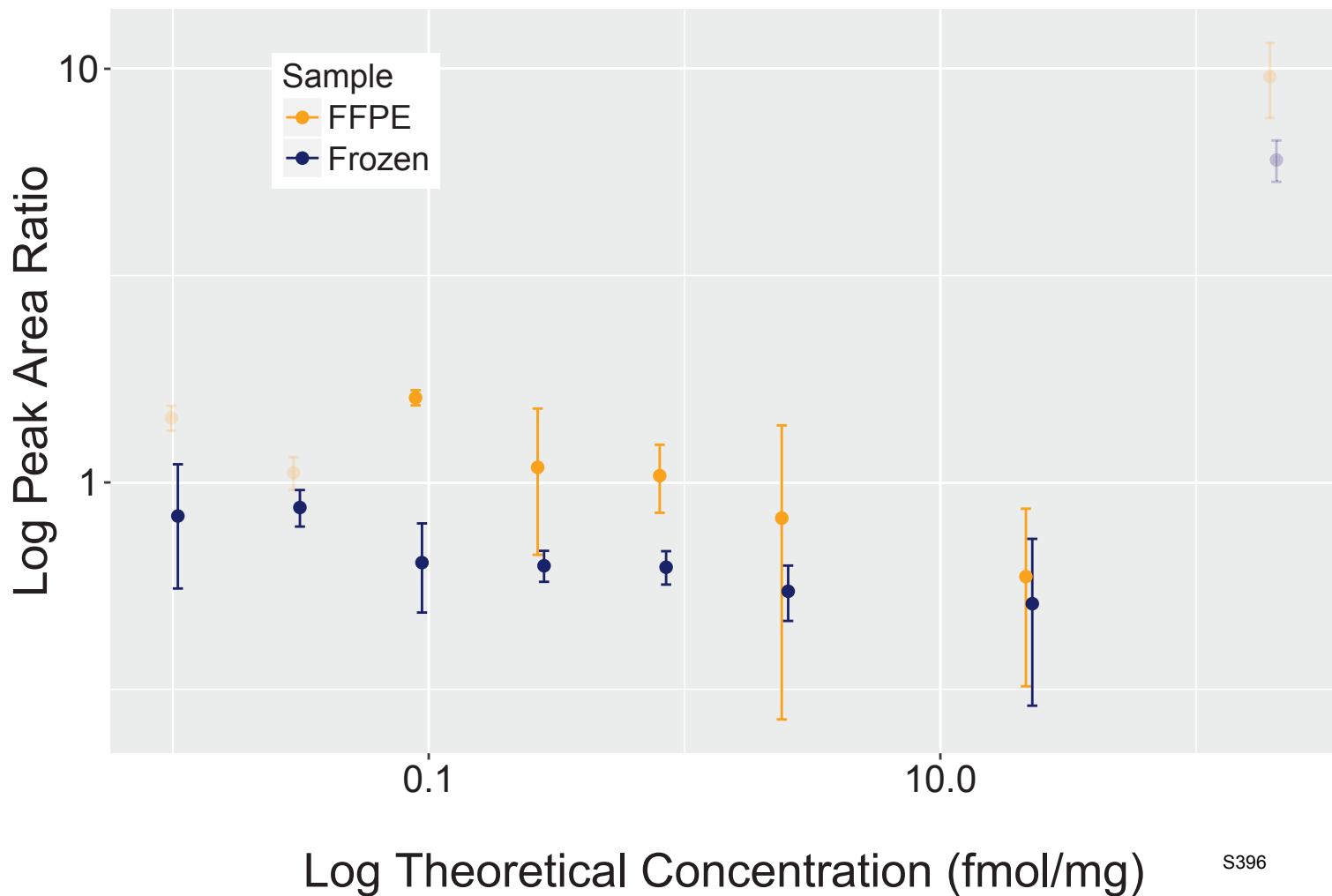


Analyte: RUVBL2.LLIVSTTPYSEK



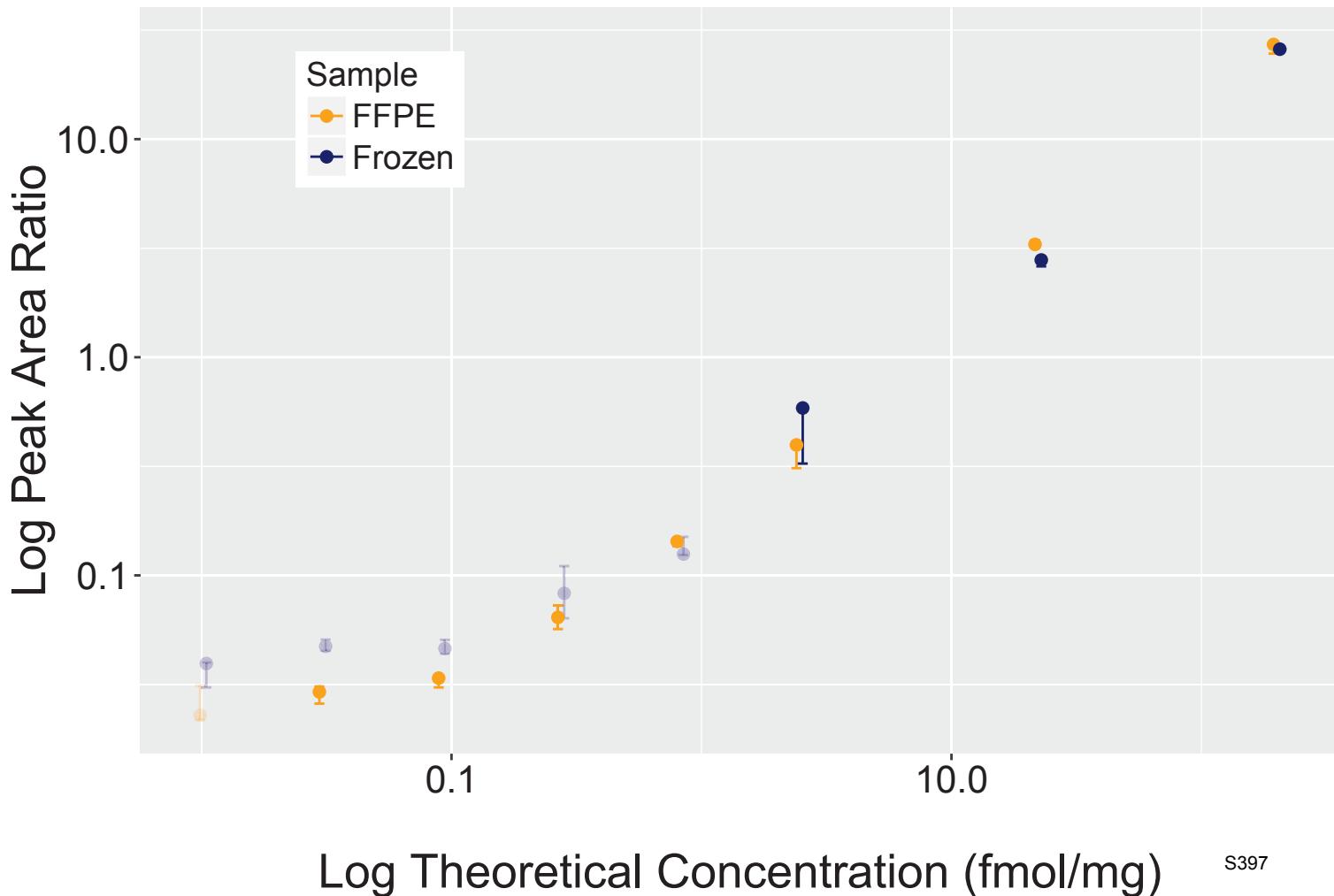
S395

Analyte: HSPH1.LLTETEDWLYEEGEDQAK

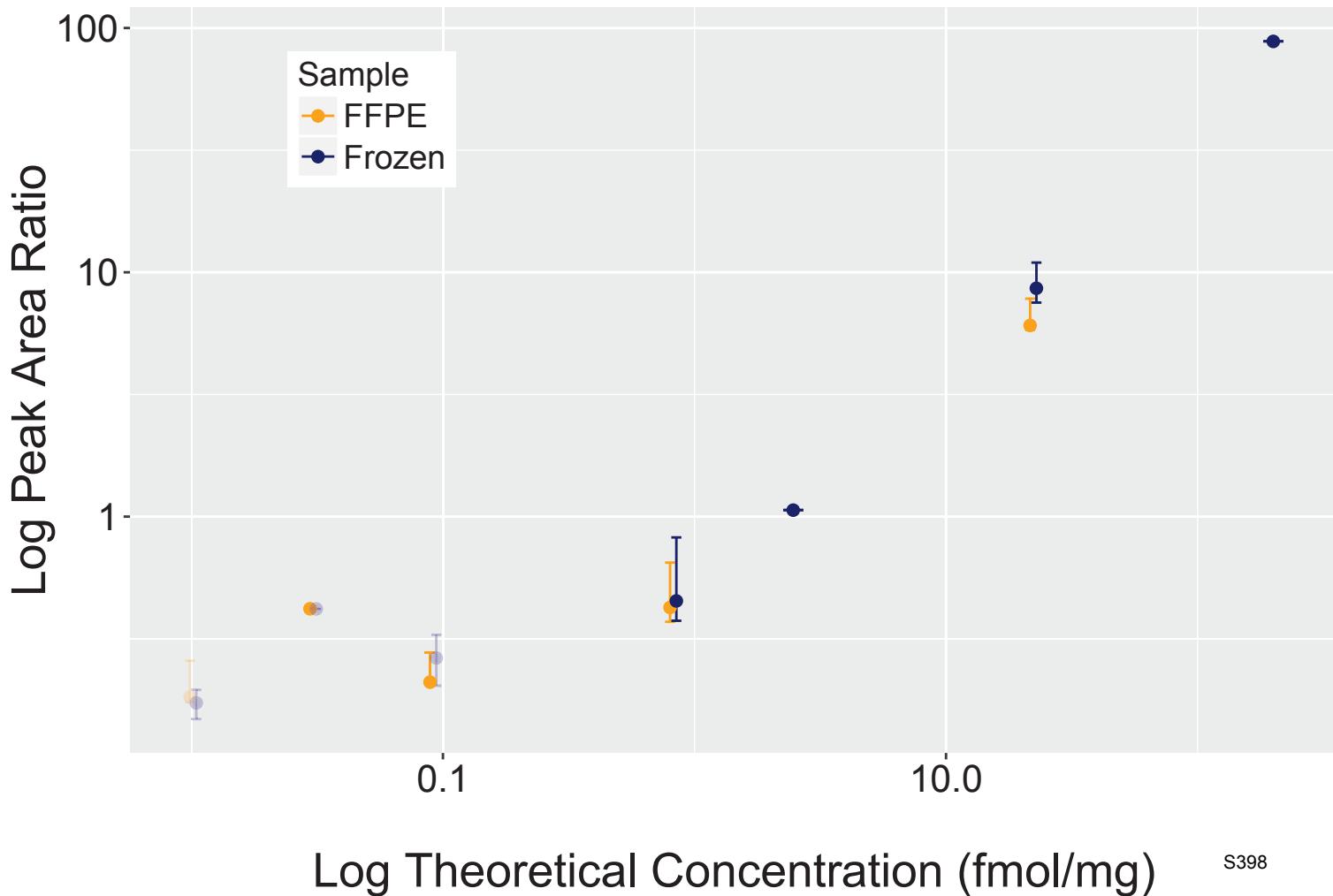


S396

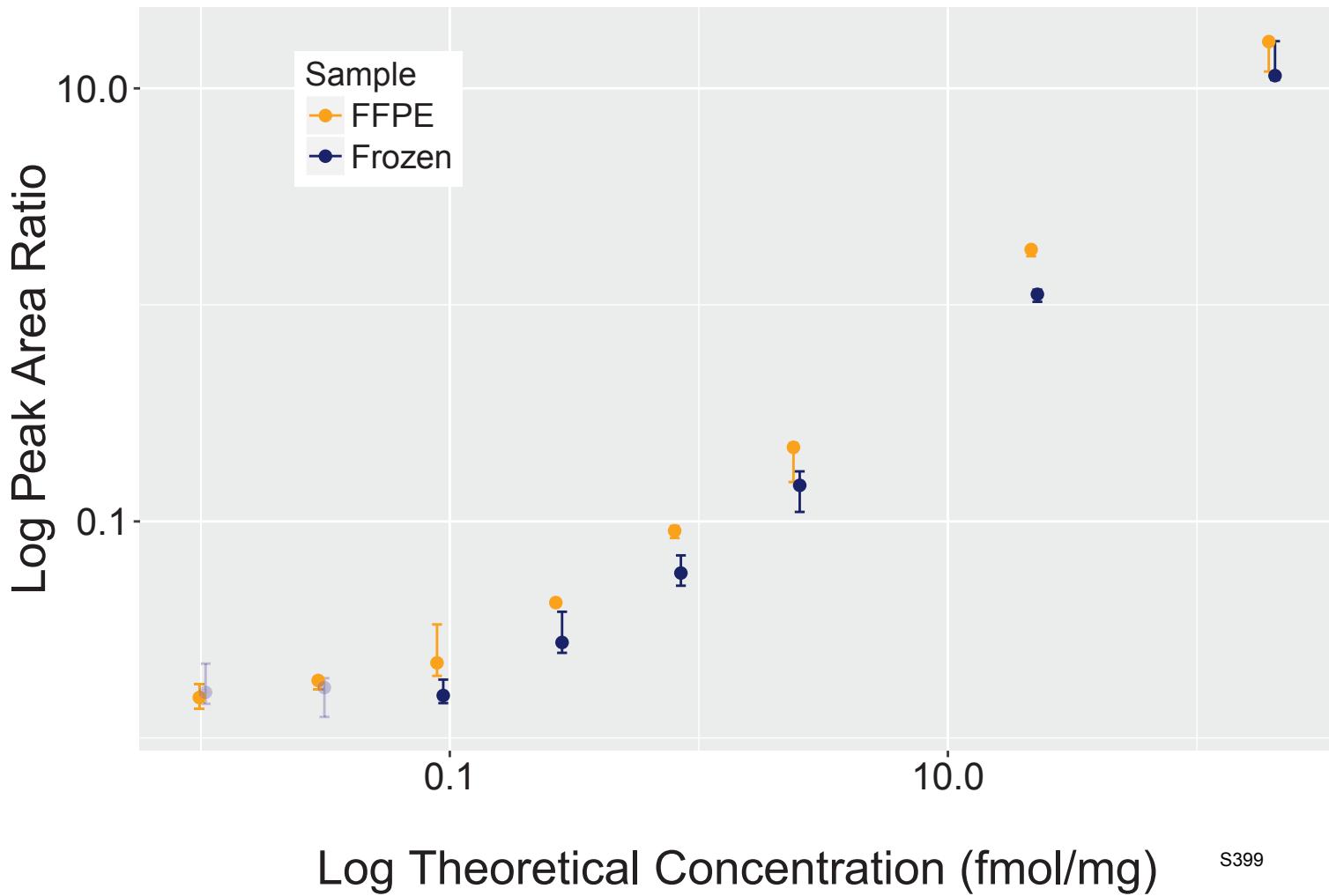
Analyte: OTUB1.LLTSGYLQR



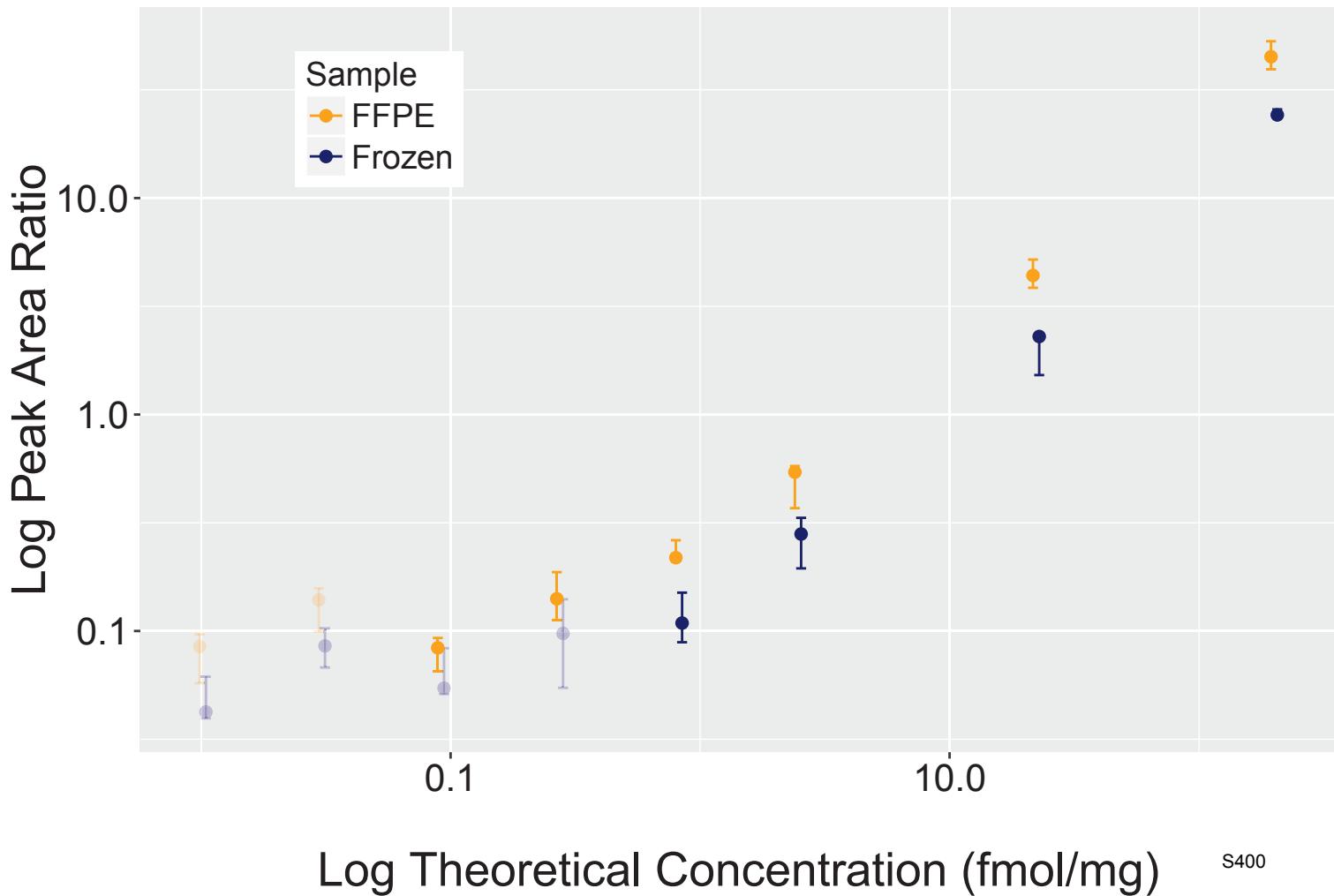
Analyte: DHCR7.LLVSGFWGVAR



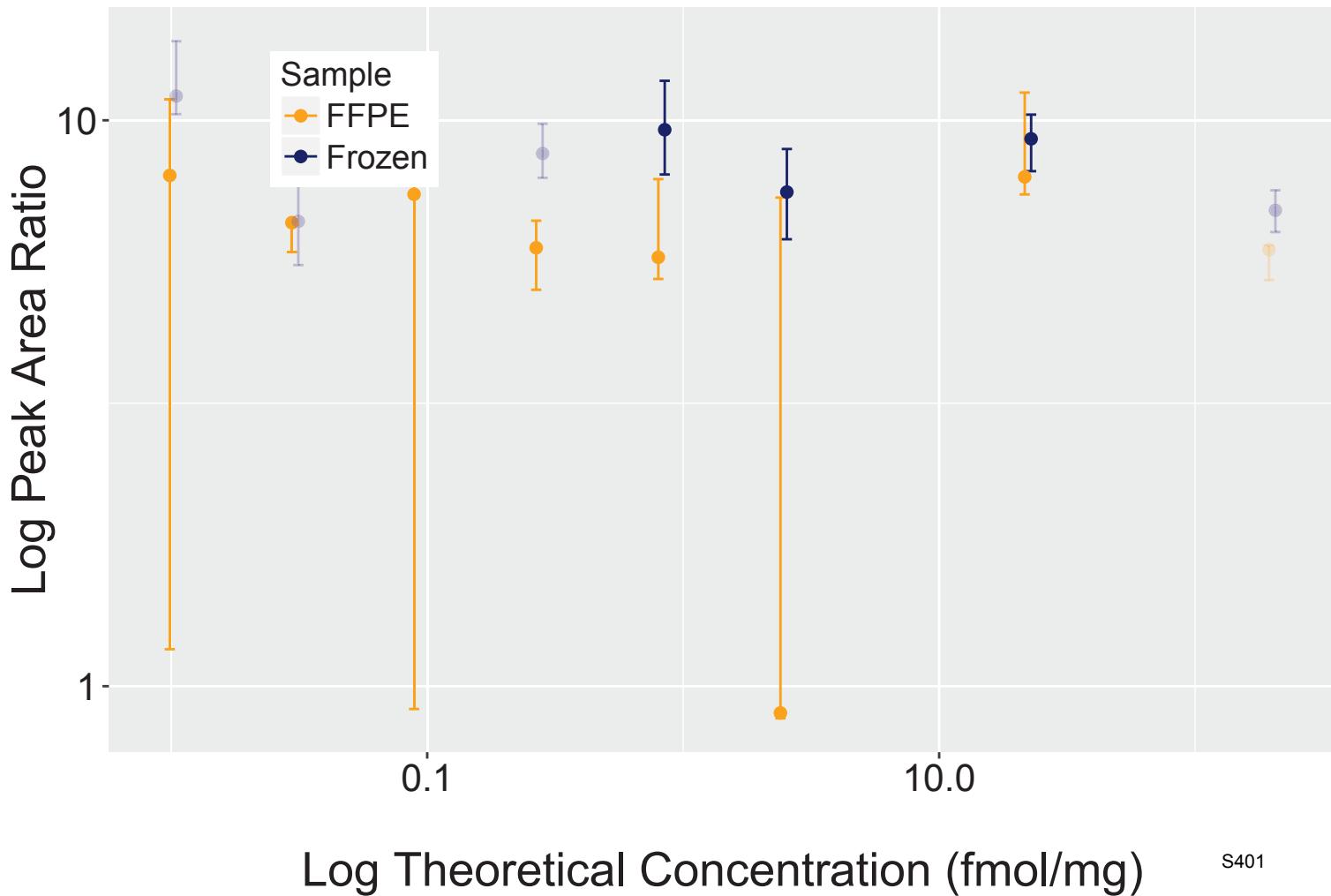
Analyte: SLC9A3R1.LLVVDPETDEQLQK



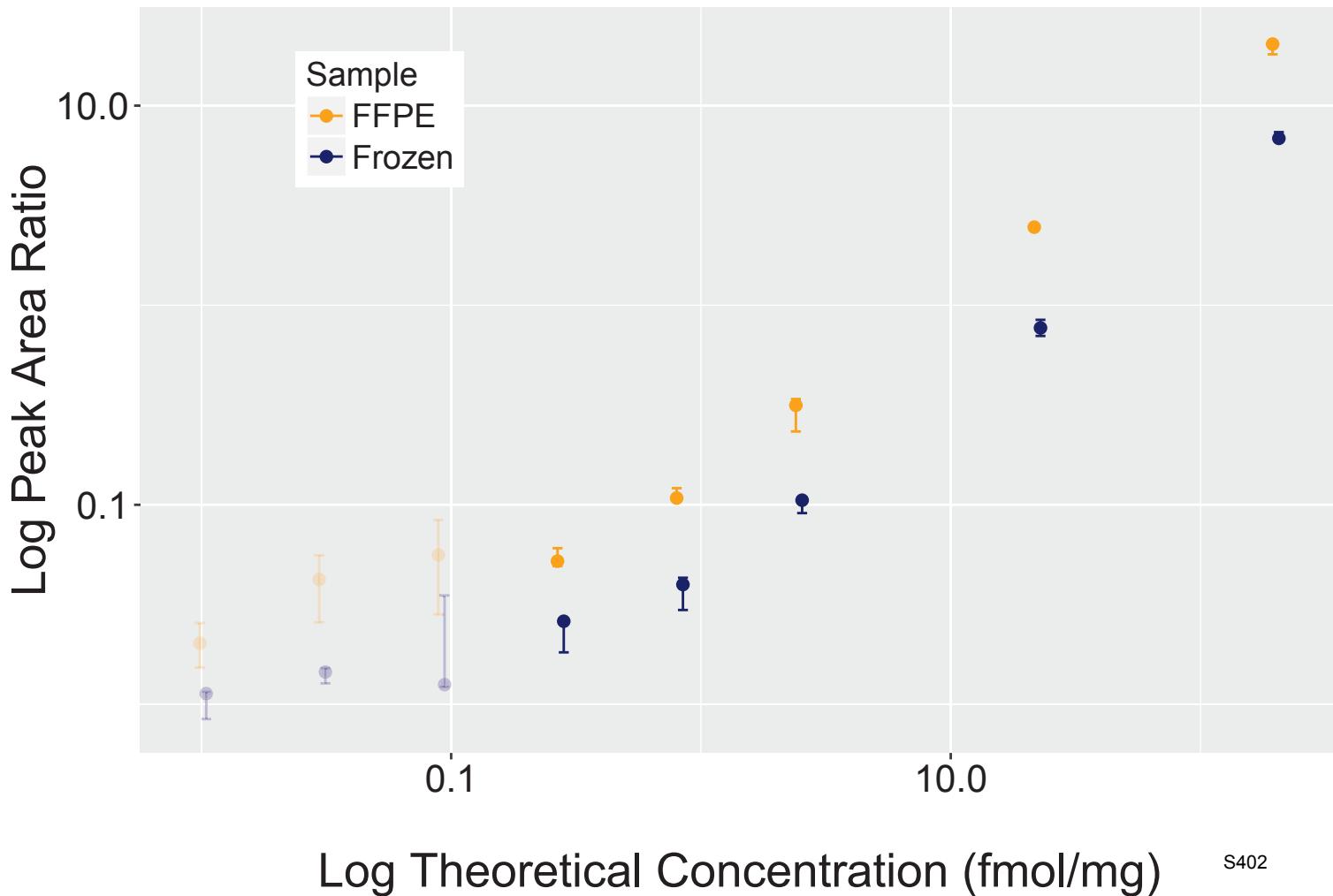
Analyte: ETFA.LLYDLADQLHAAVGASR



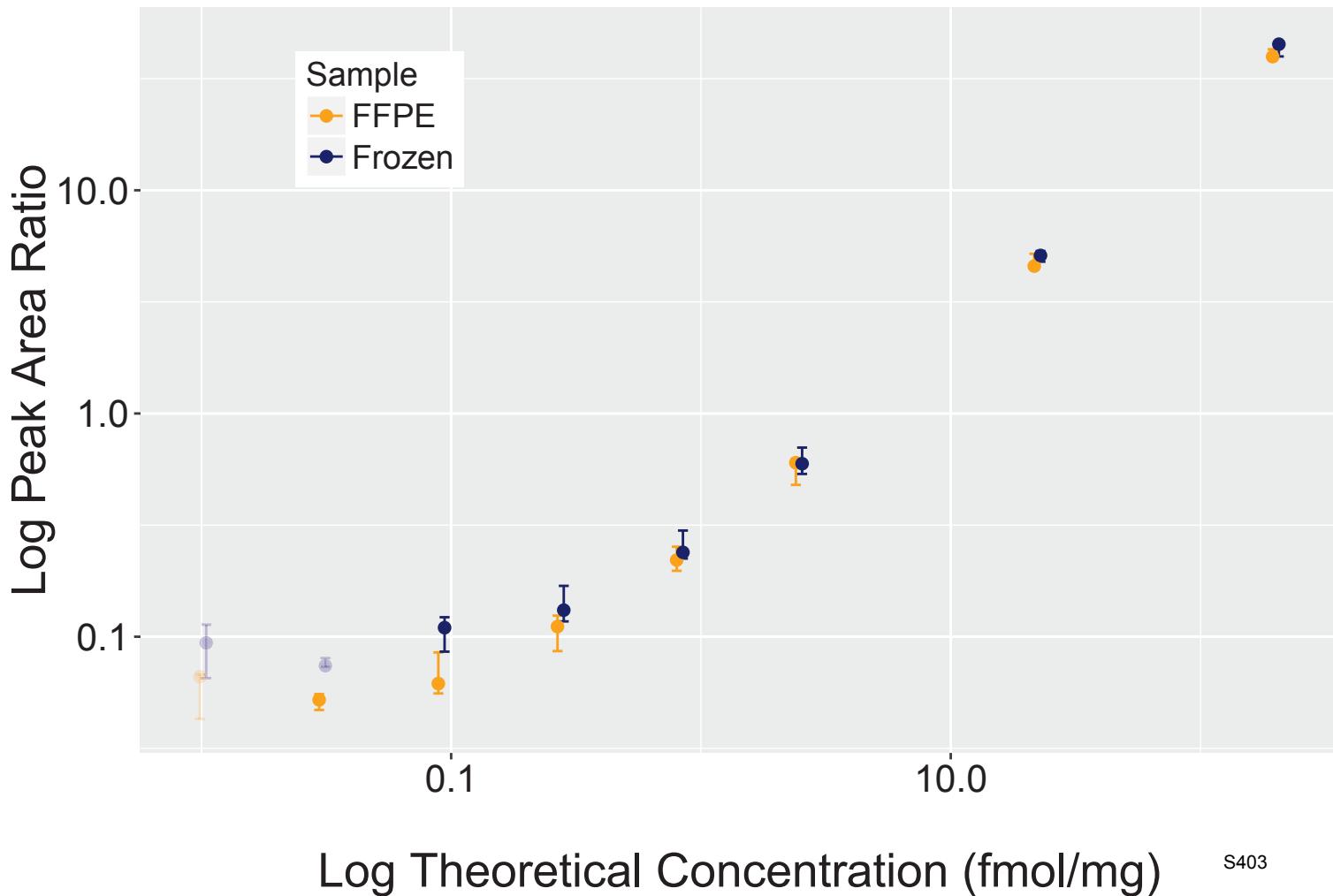
Analyte: IDH2.LNEHFLNTTDFLDTIK



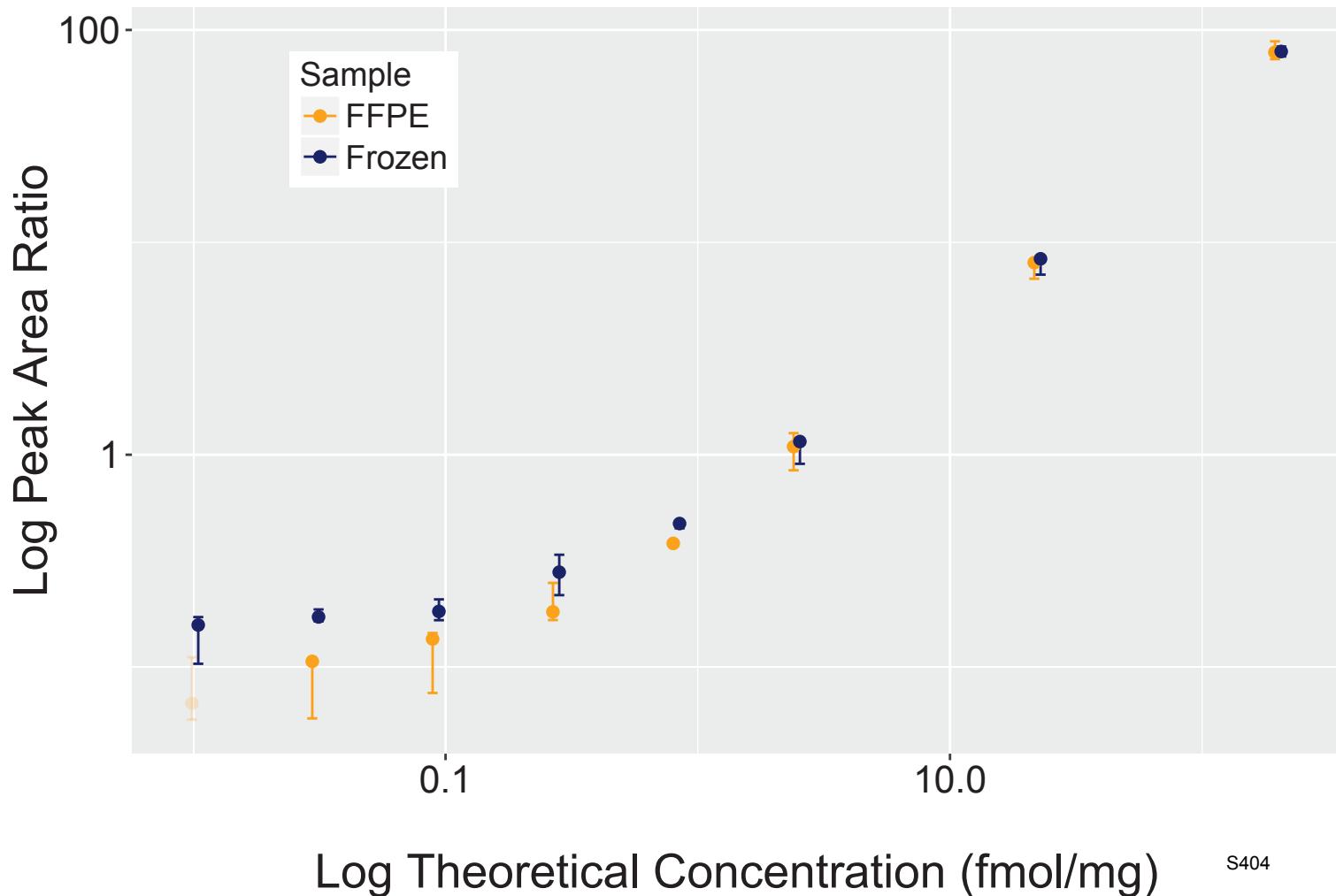
Analyte: PDIA3.LNFAVASR



Analyte: ETFB.LPAVVTADLR

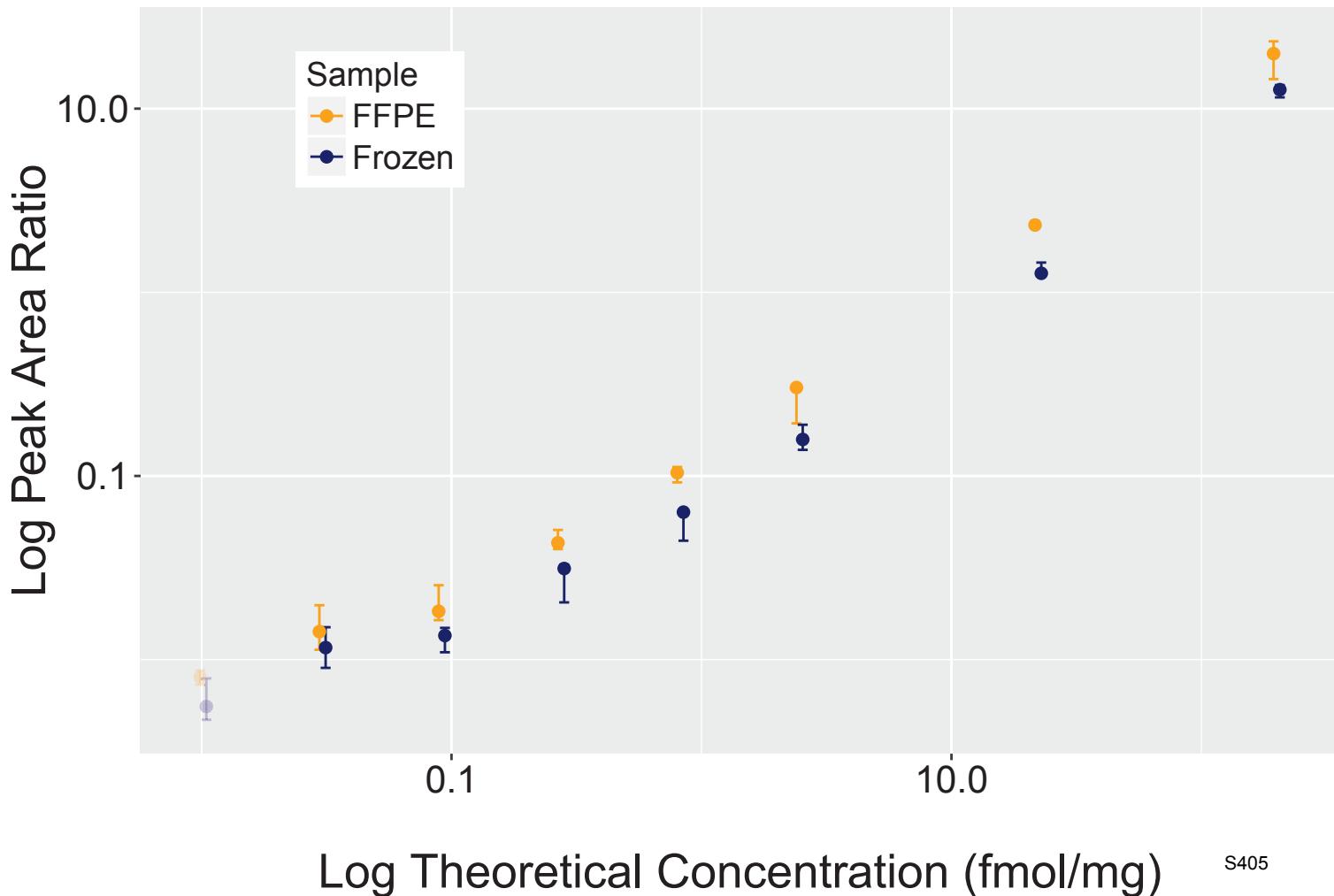


Analyte: KARS.LPETNLFETEETR

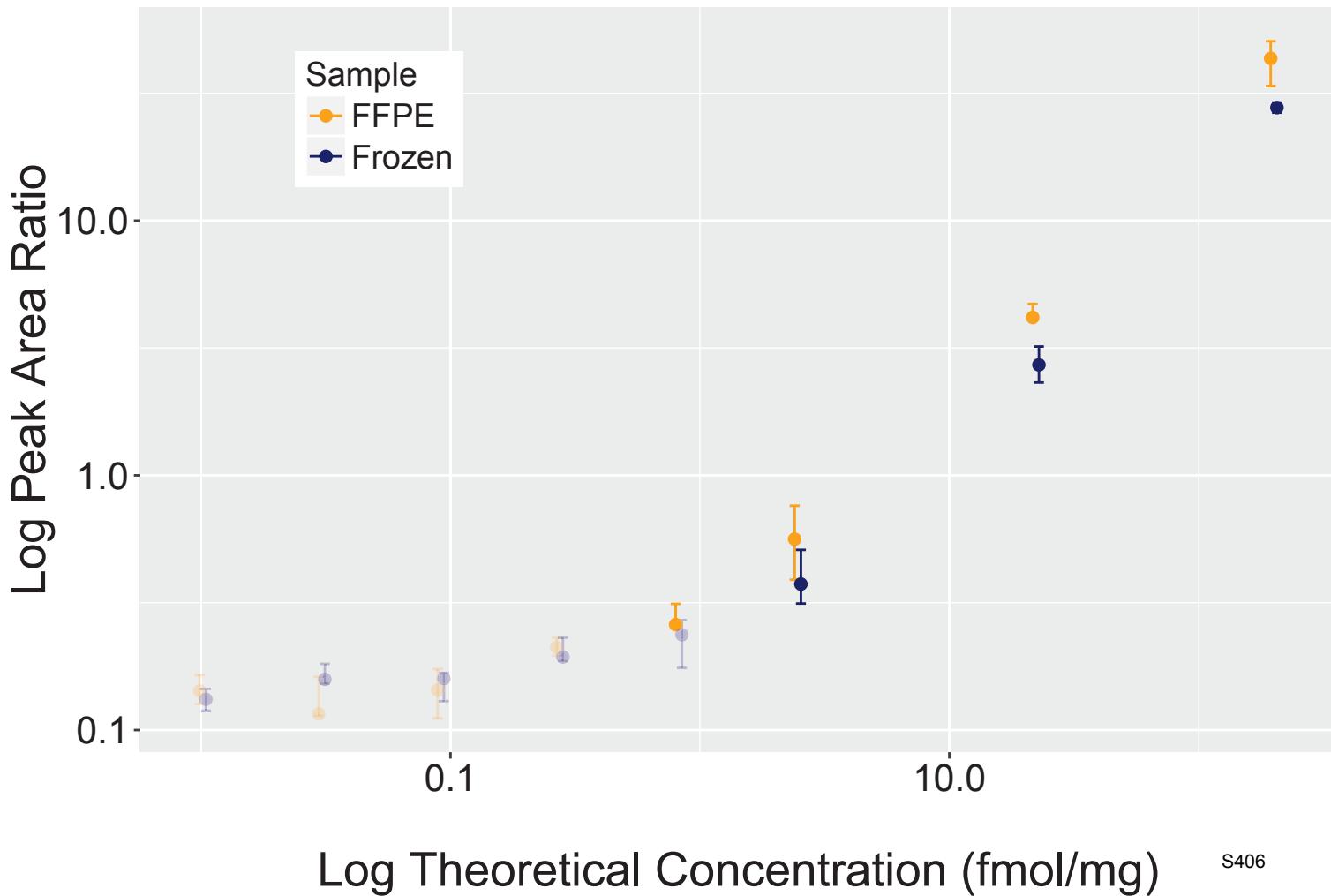


S404

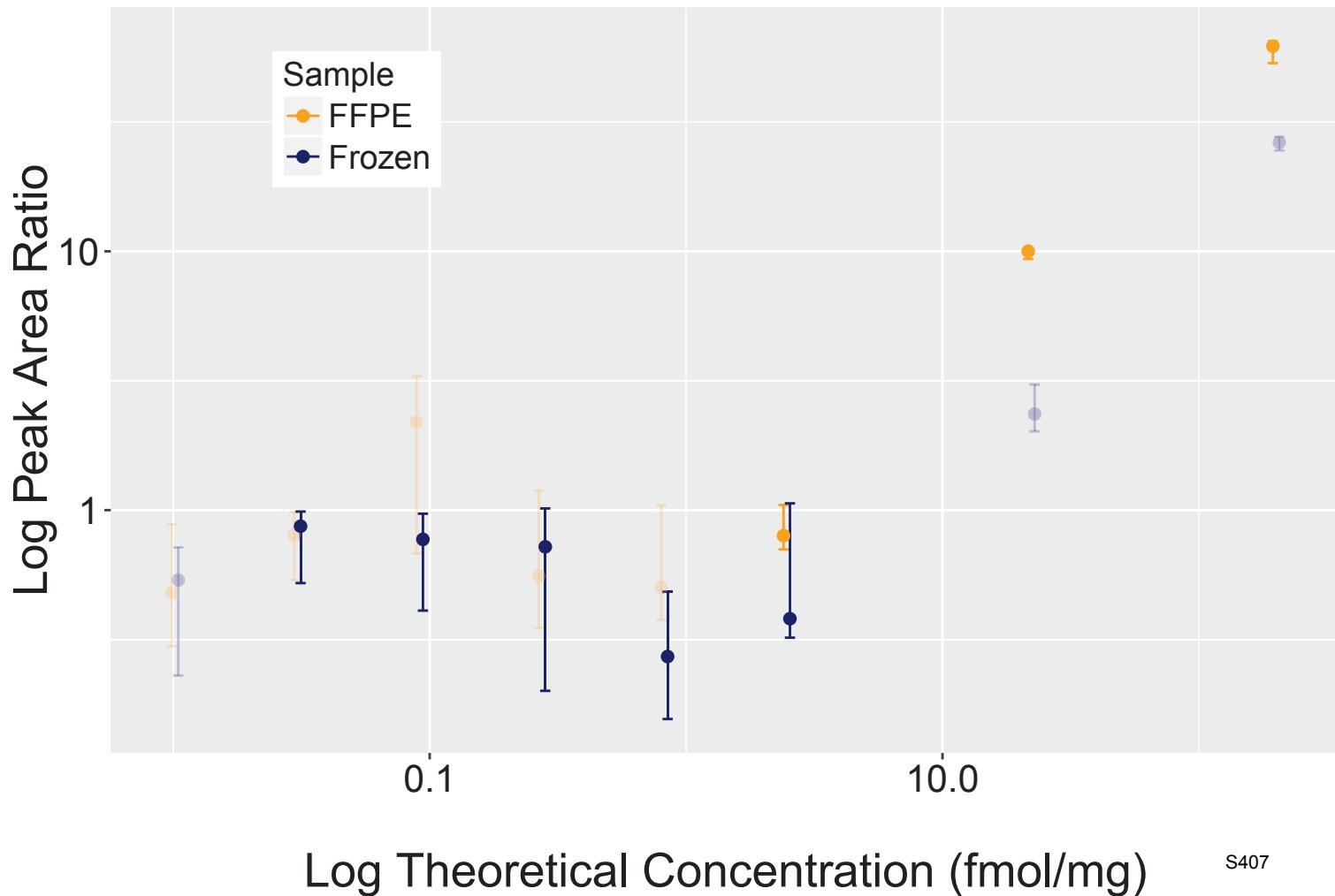
Analyte: PRDX6.LPFPIIDDR



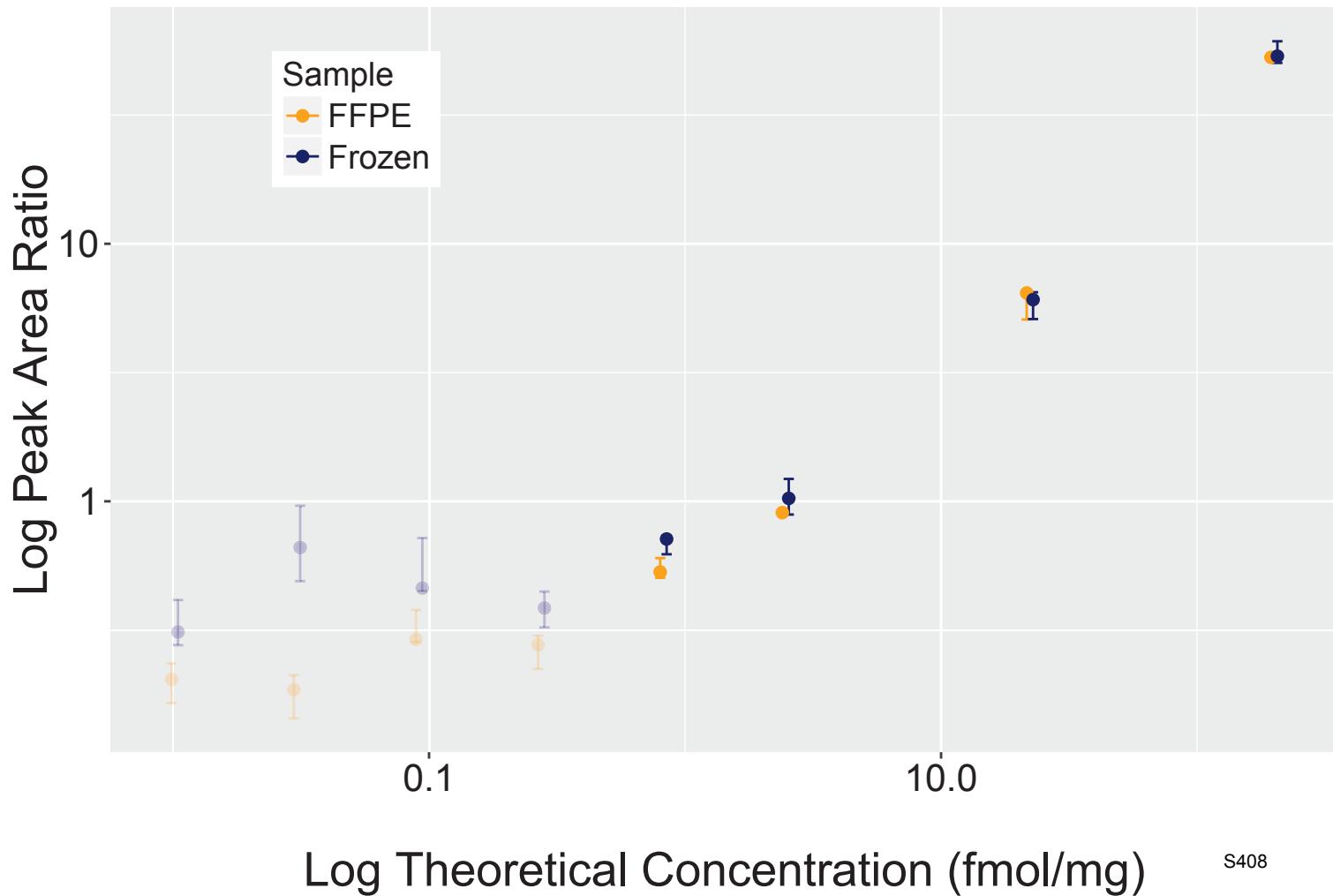
Analyte: CCT7.LPIGDVATQYFADR



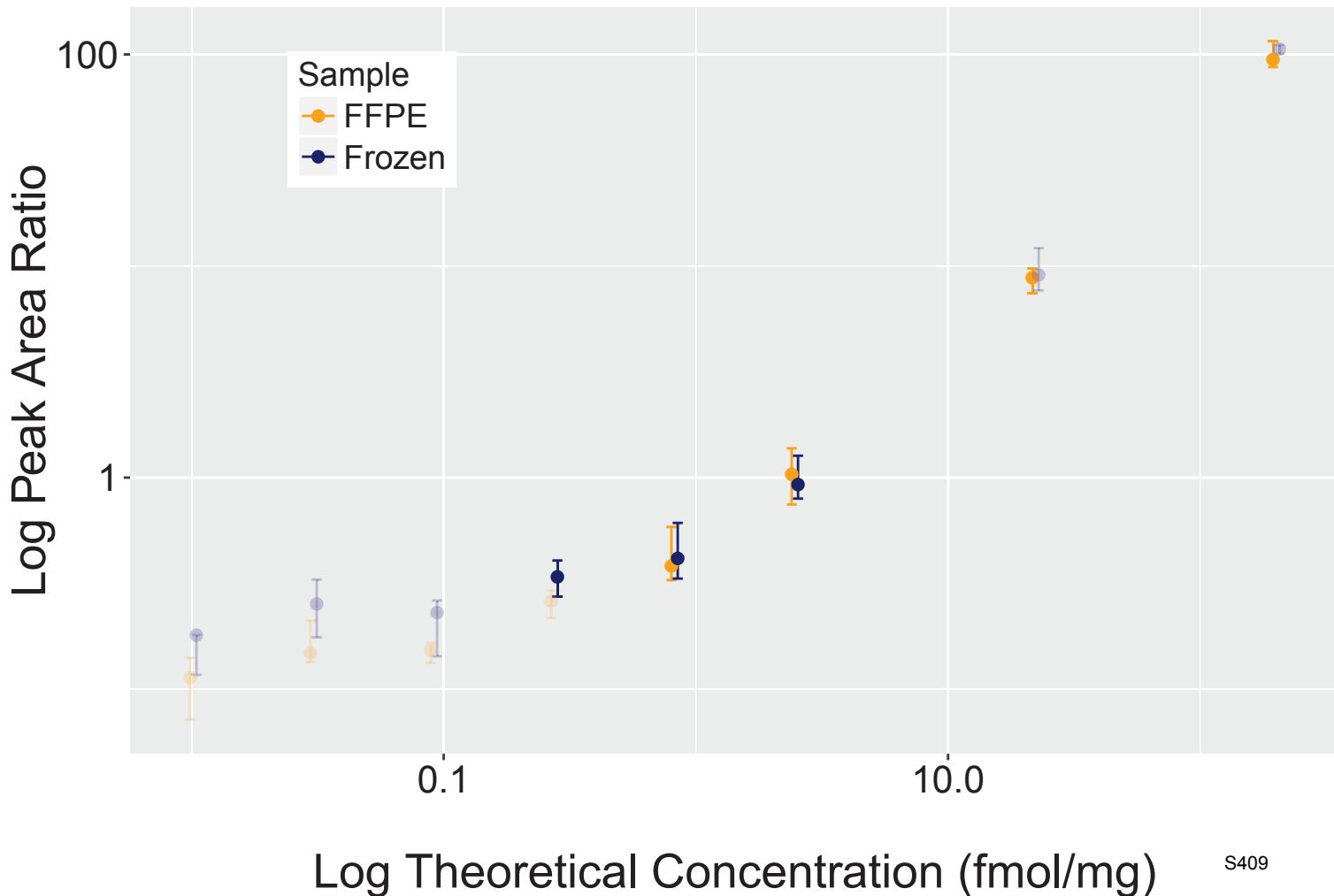
Analyte: UQCRC2.LPNGLVIASLENYSPVSR



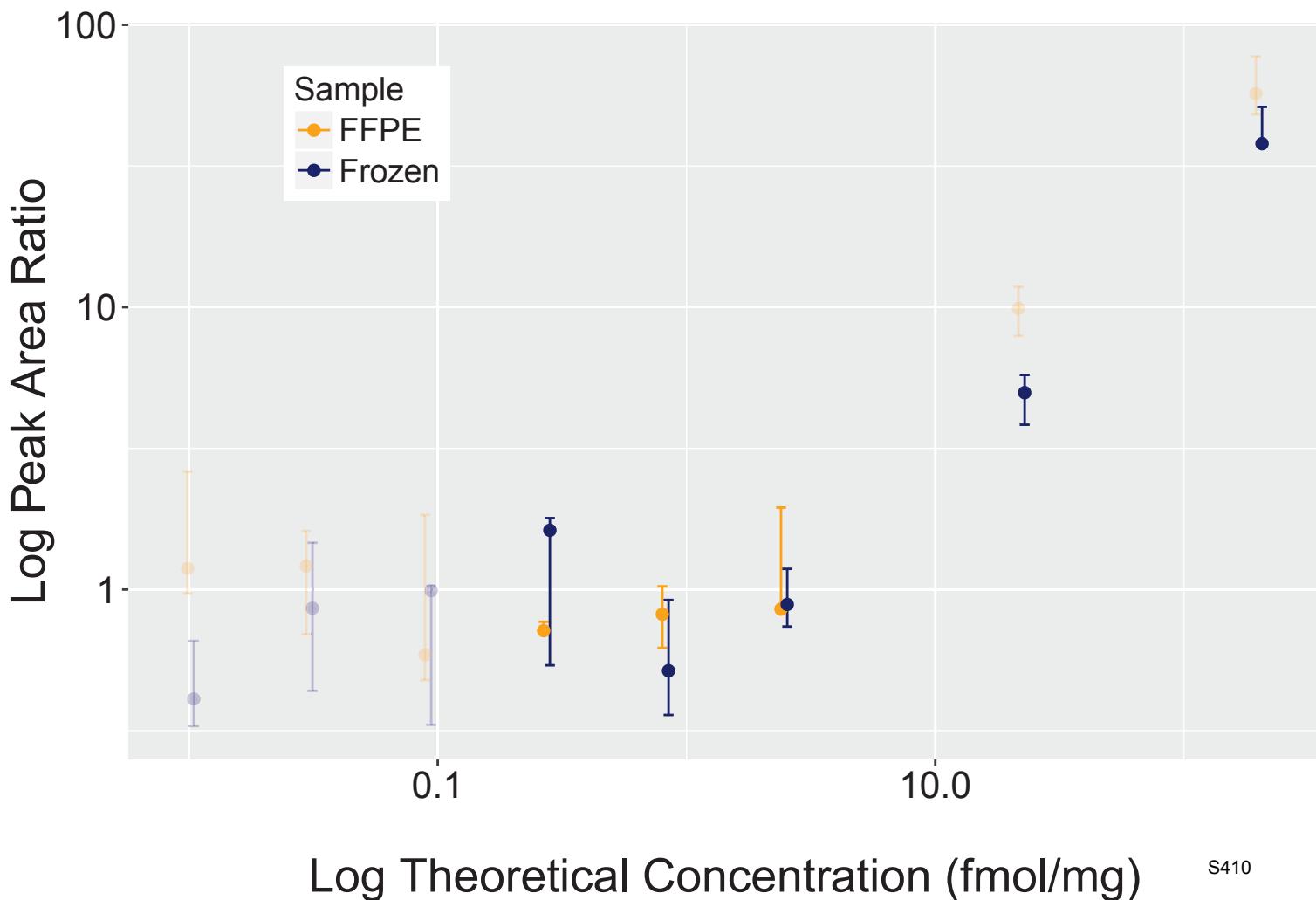
Analyte: CDKN2A.LPVVDLAEELGHR



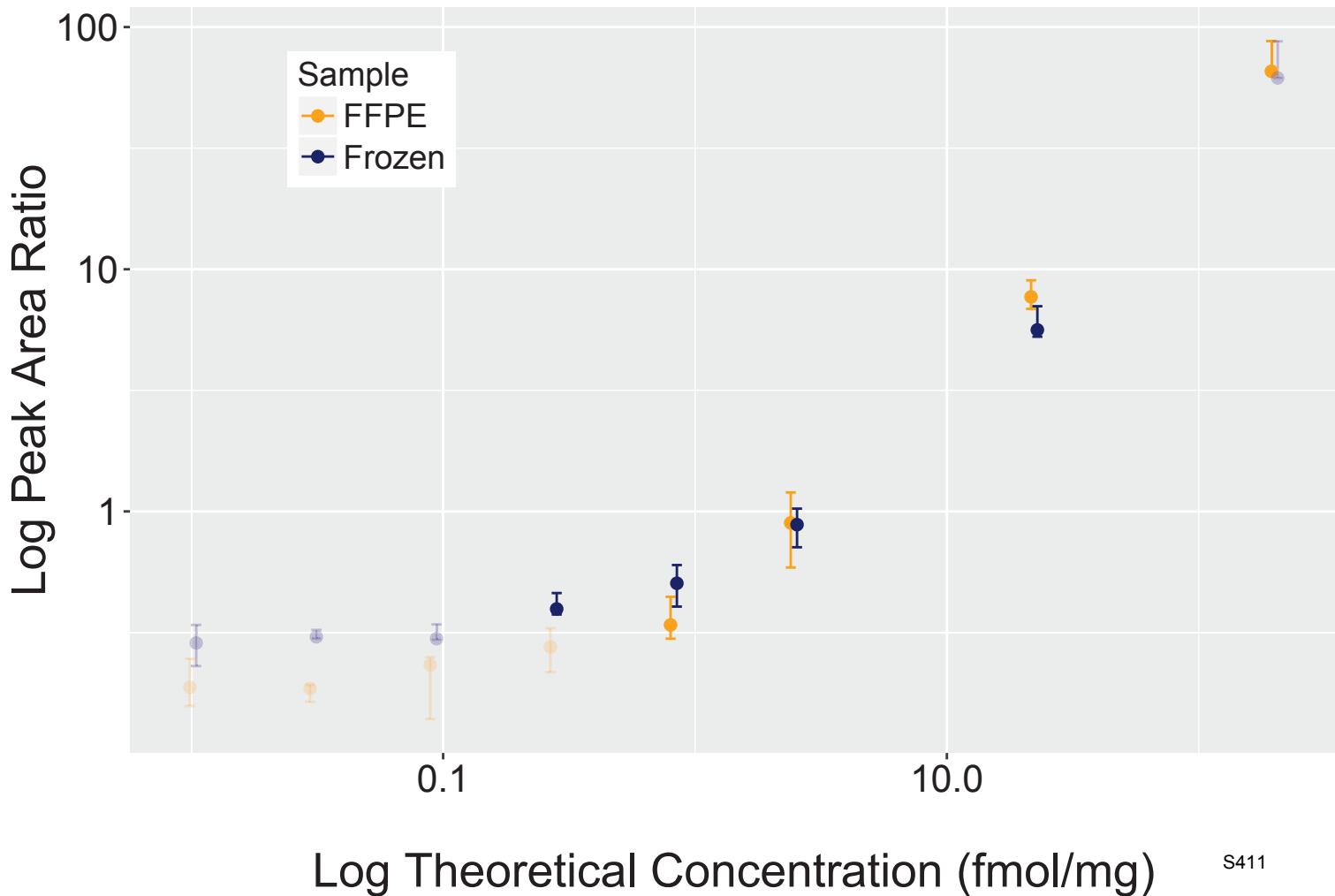
Analyte: CRAT.LPVPPPLQQSLDHYLIK



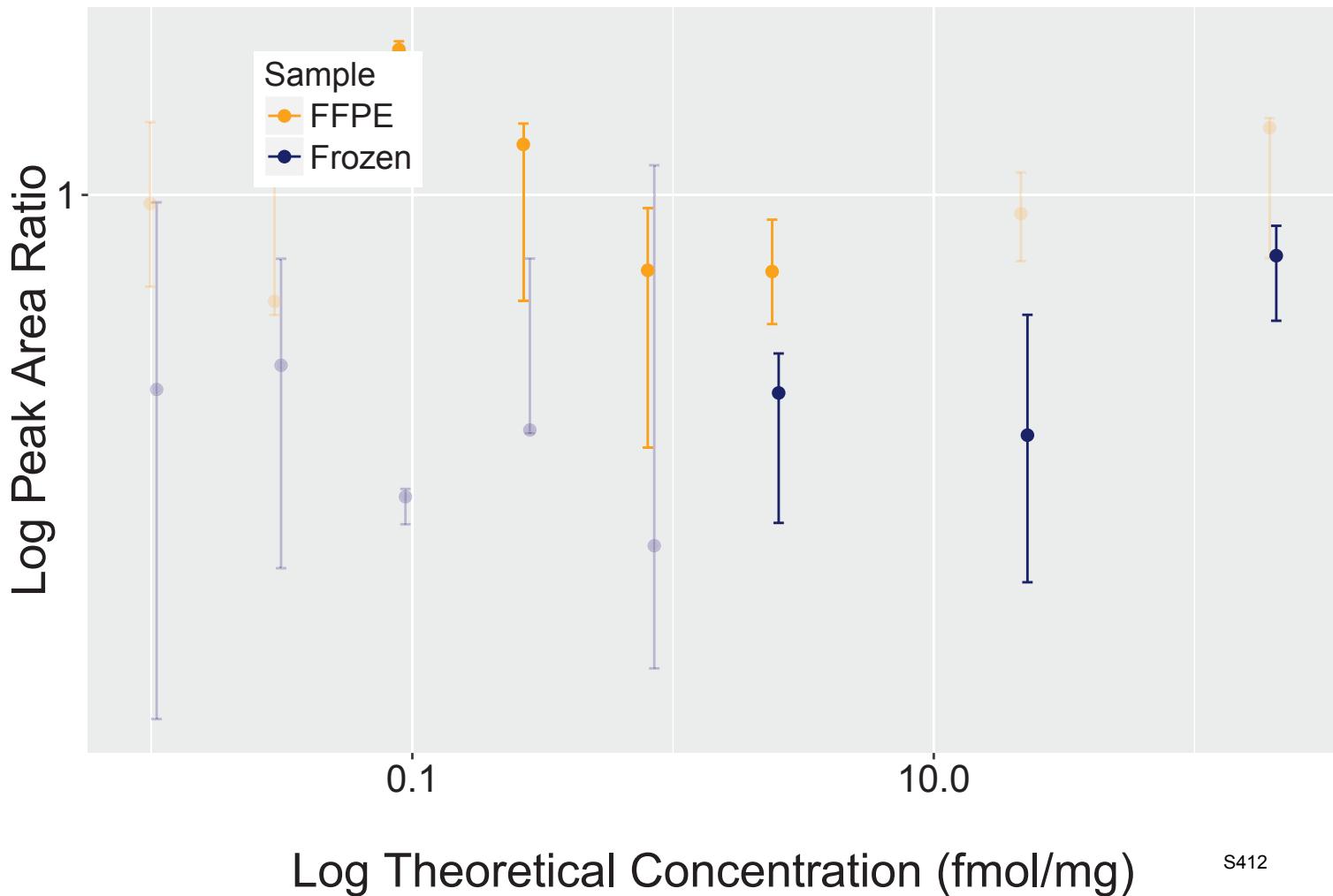
Analyte: PSMD3.LQLDSPEDAEFIVAK



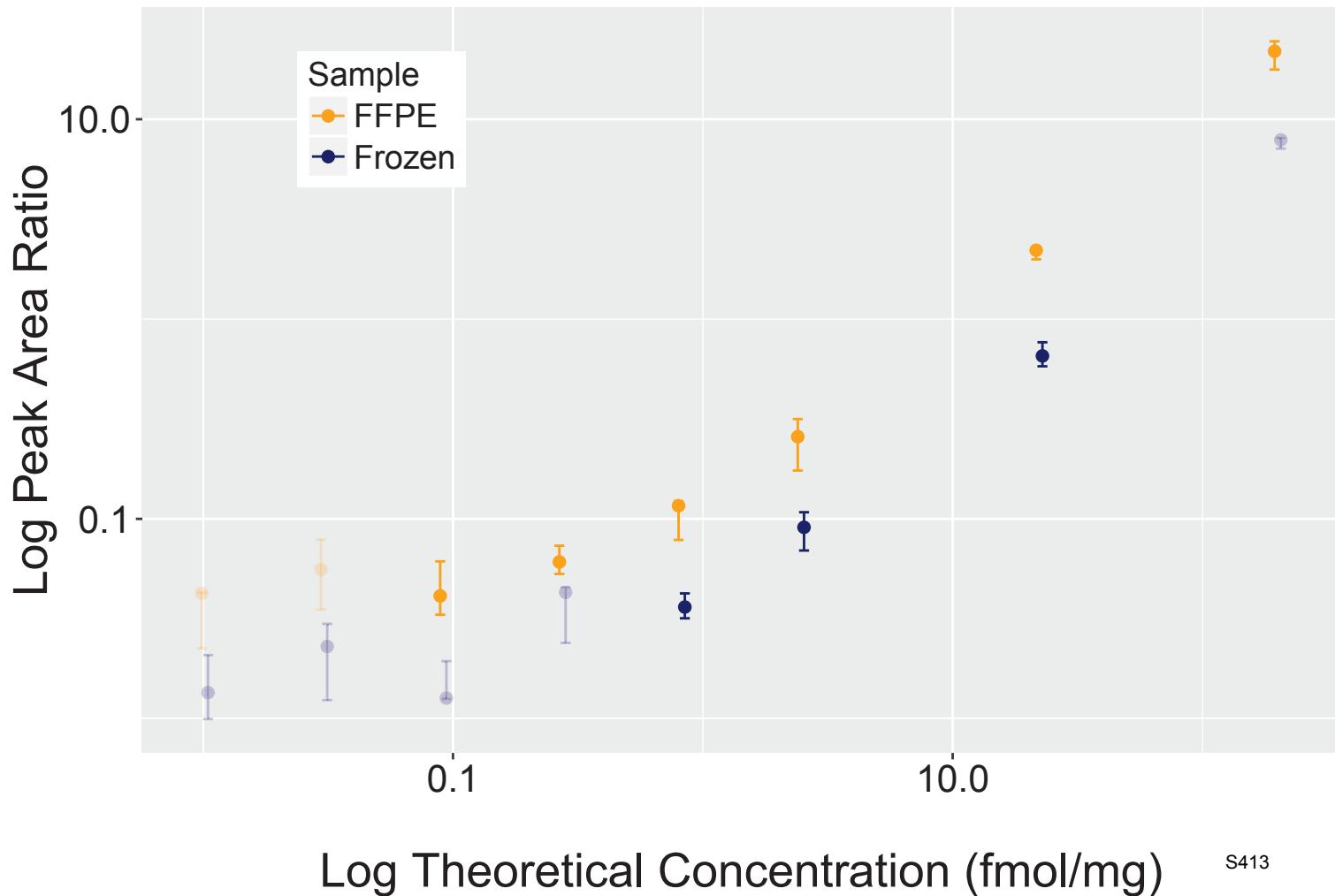
Analyte: PL0D1.LQLNYLGNYIPR



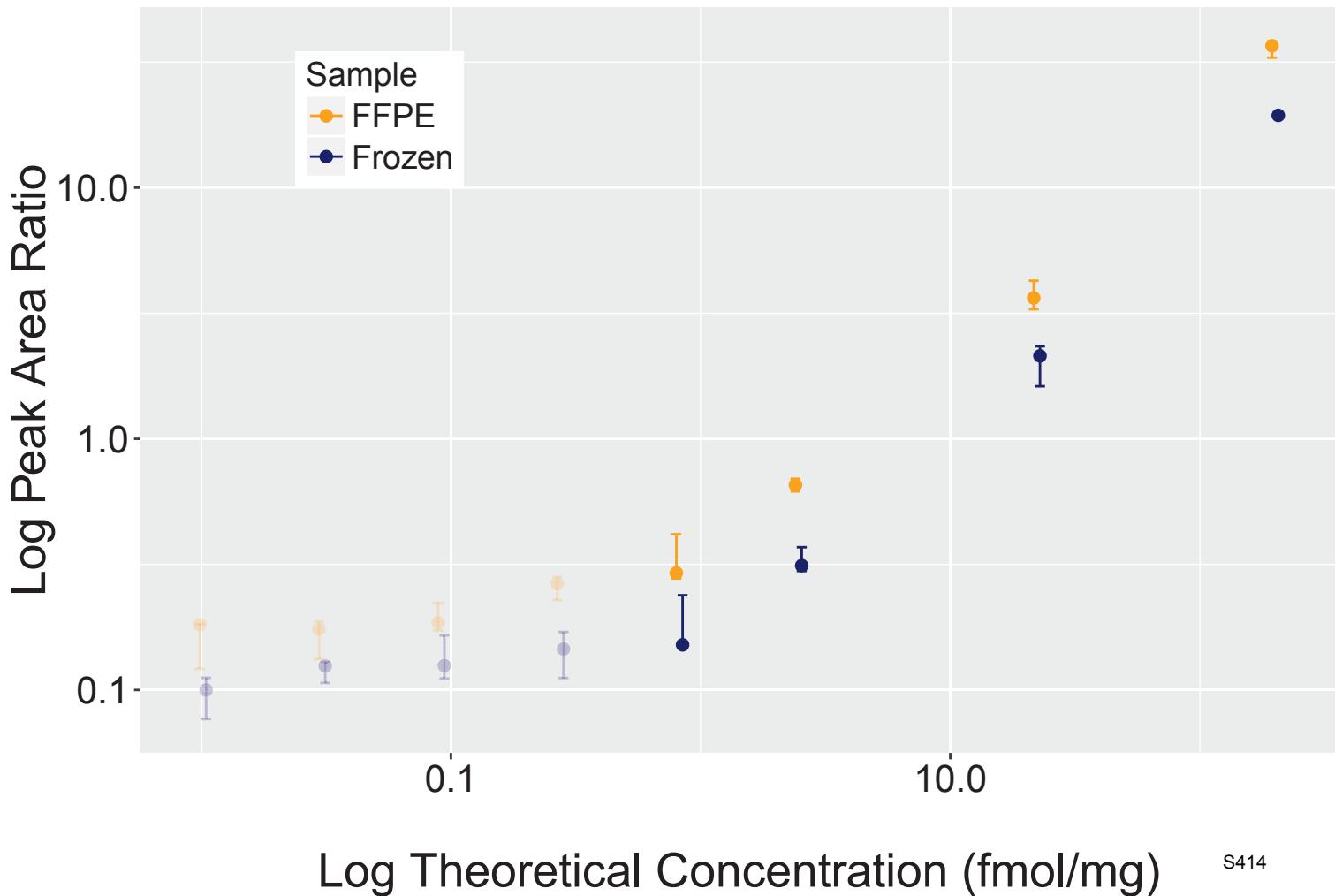
Analyte: FASN.LQVVDQPLPVR



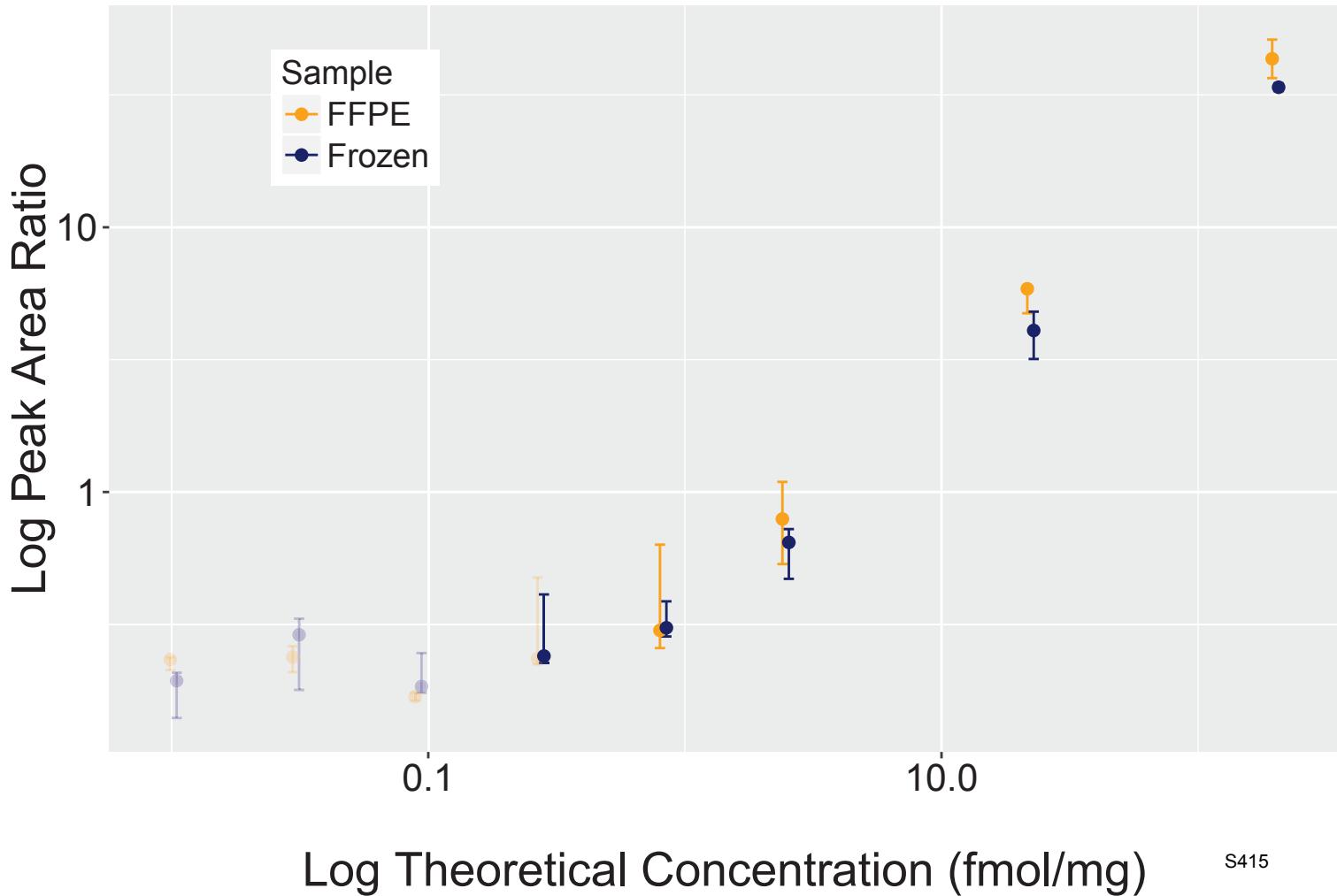
Analyte: CAP1.LSDLLAPISEQIK



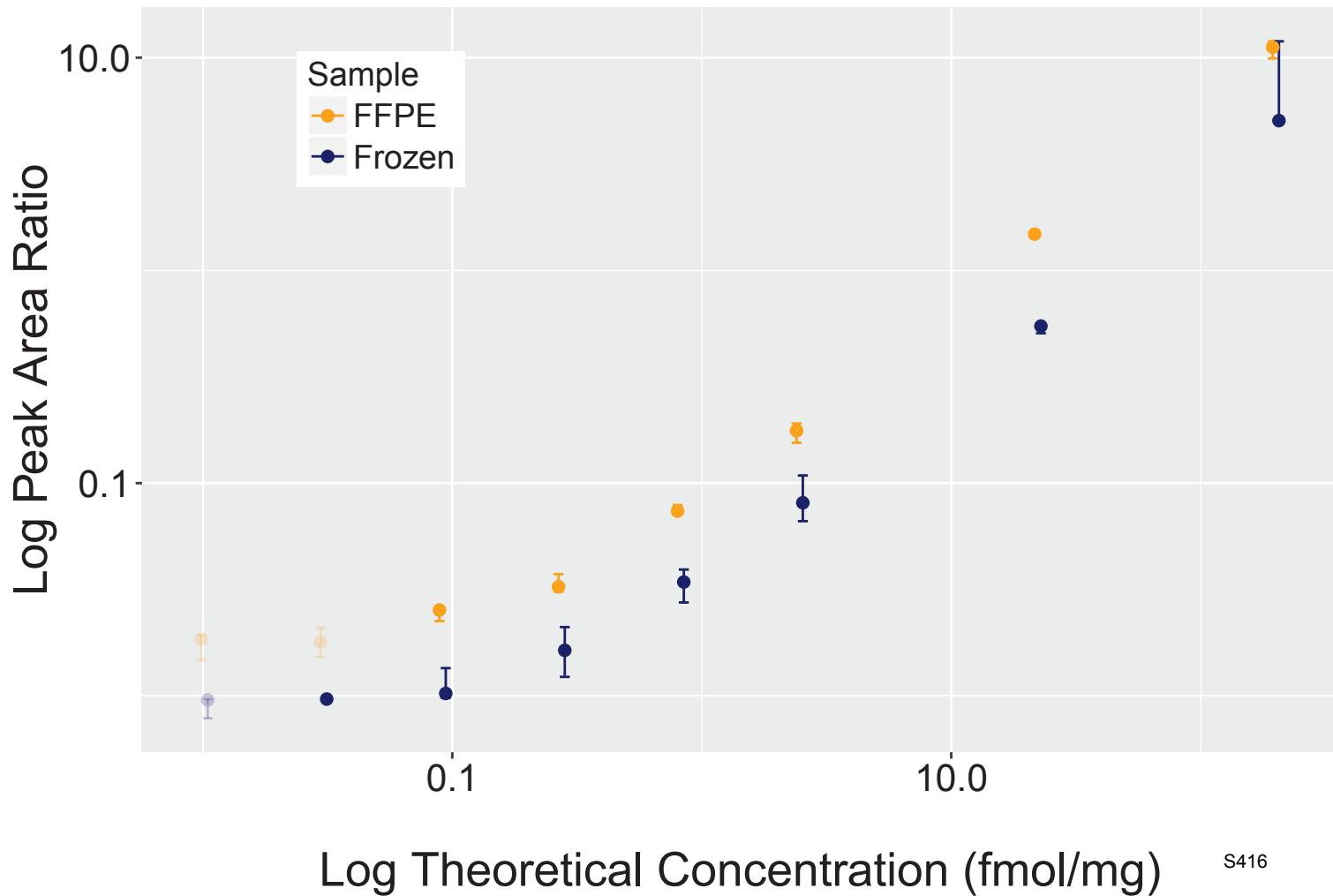
Analyte: ITGB1.LSEGVTISYK



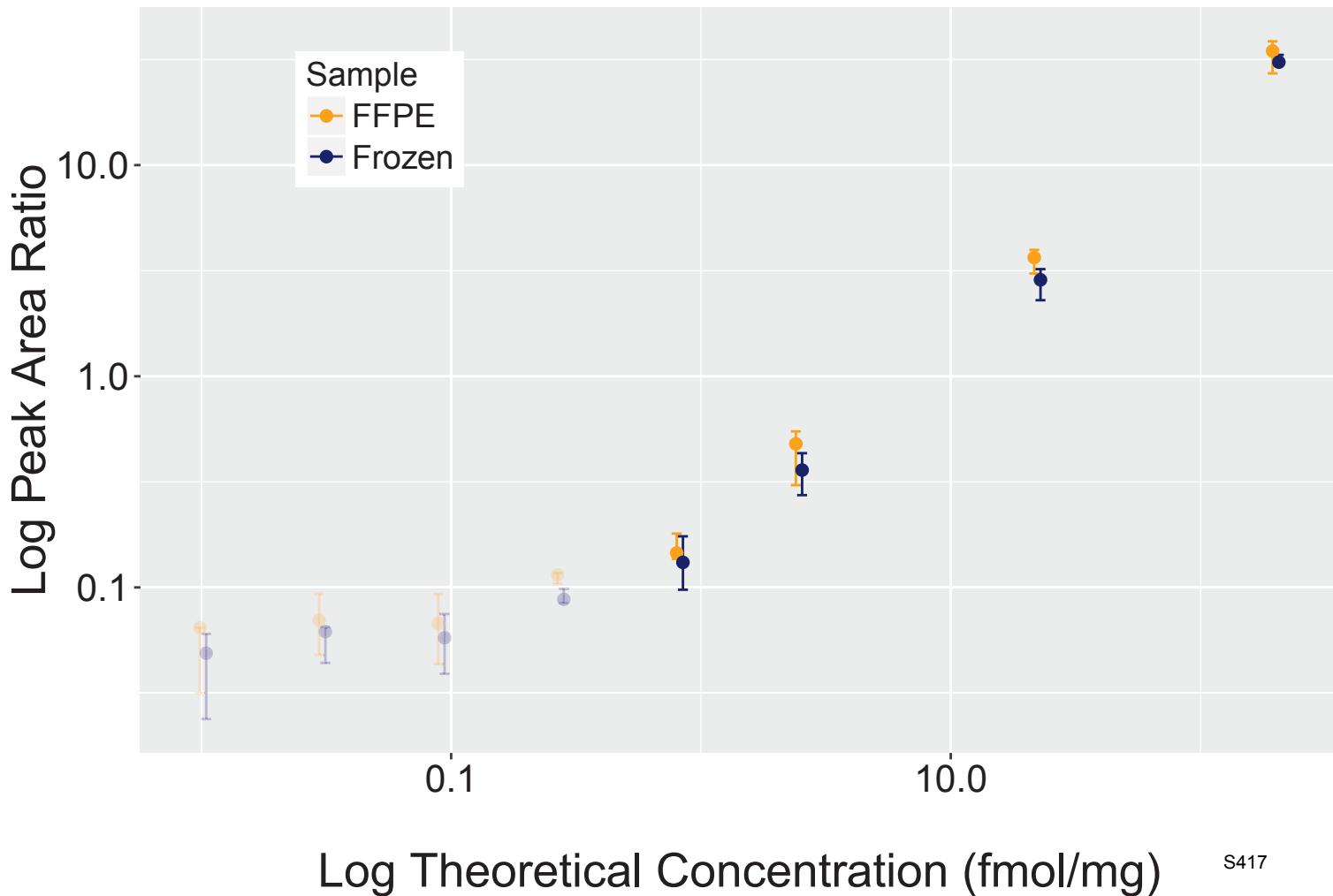
Analyte: ERLIN2.LSFGLEDEPLETATK



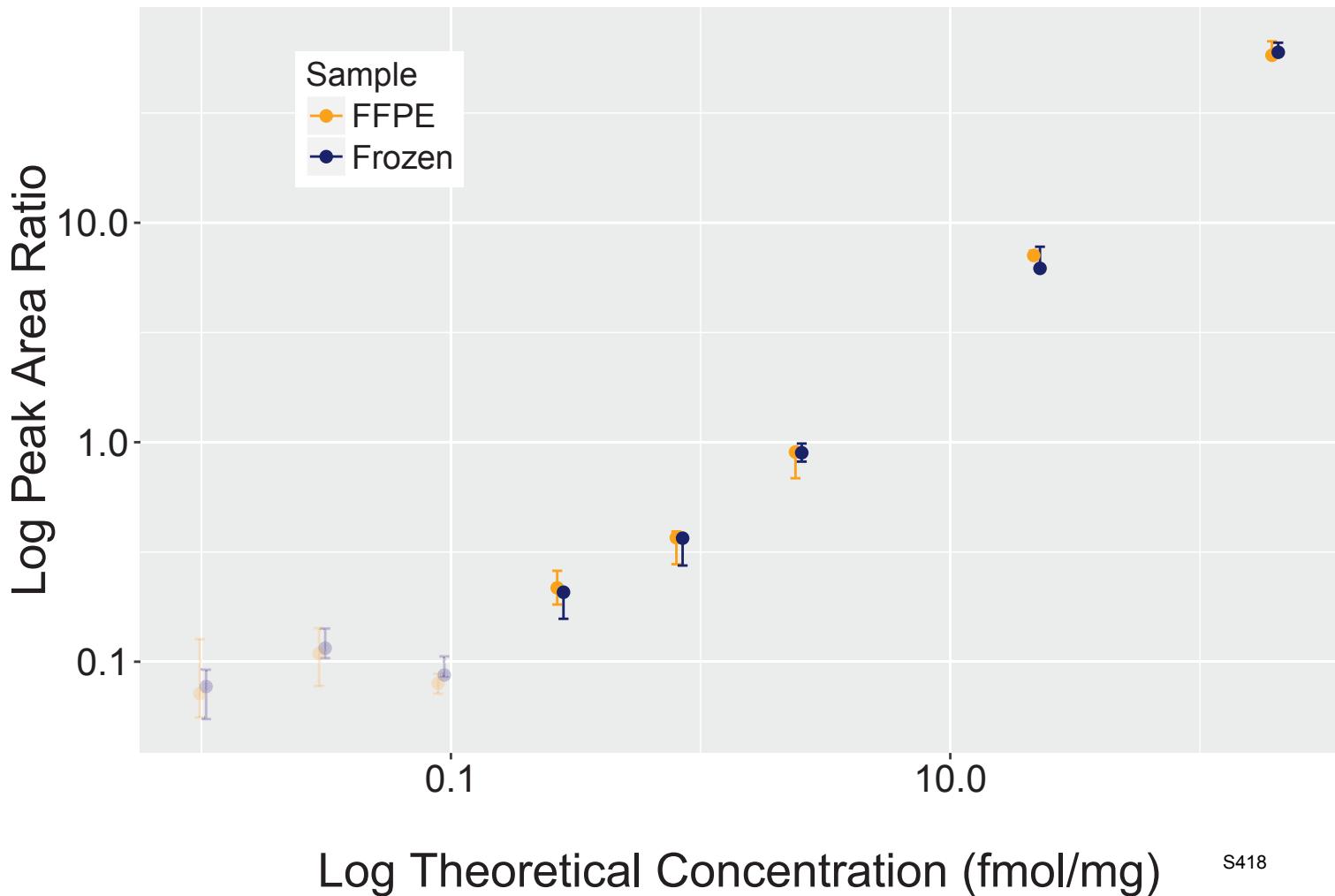
Analyte: CTSD.LSPEDYTLK



Analyte: TRIM28.LSPPYSSPQEFAQDVGR

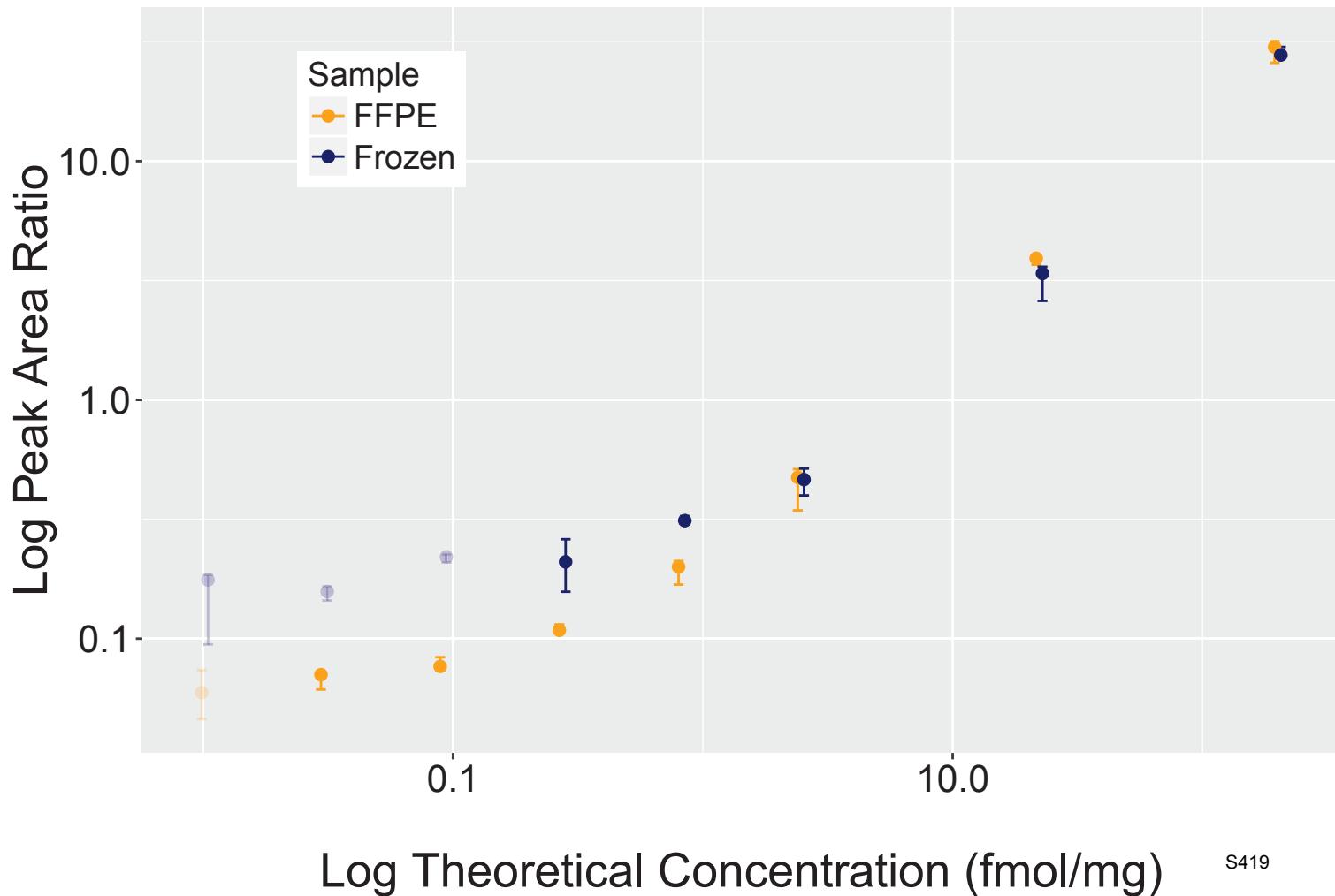


Analyte: NASP.LSVEESEAAGDGVDTK

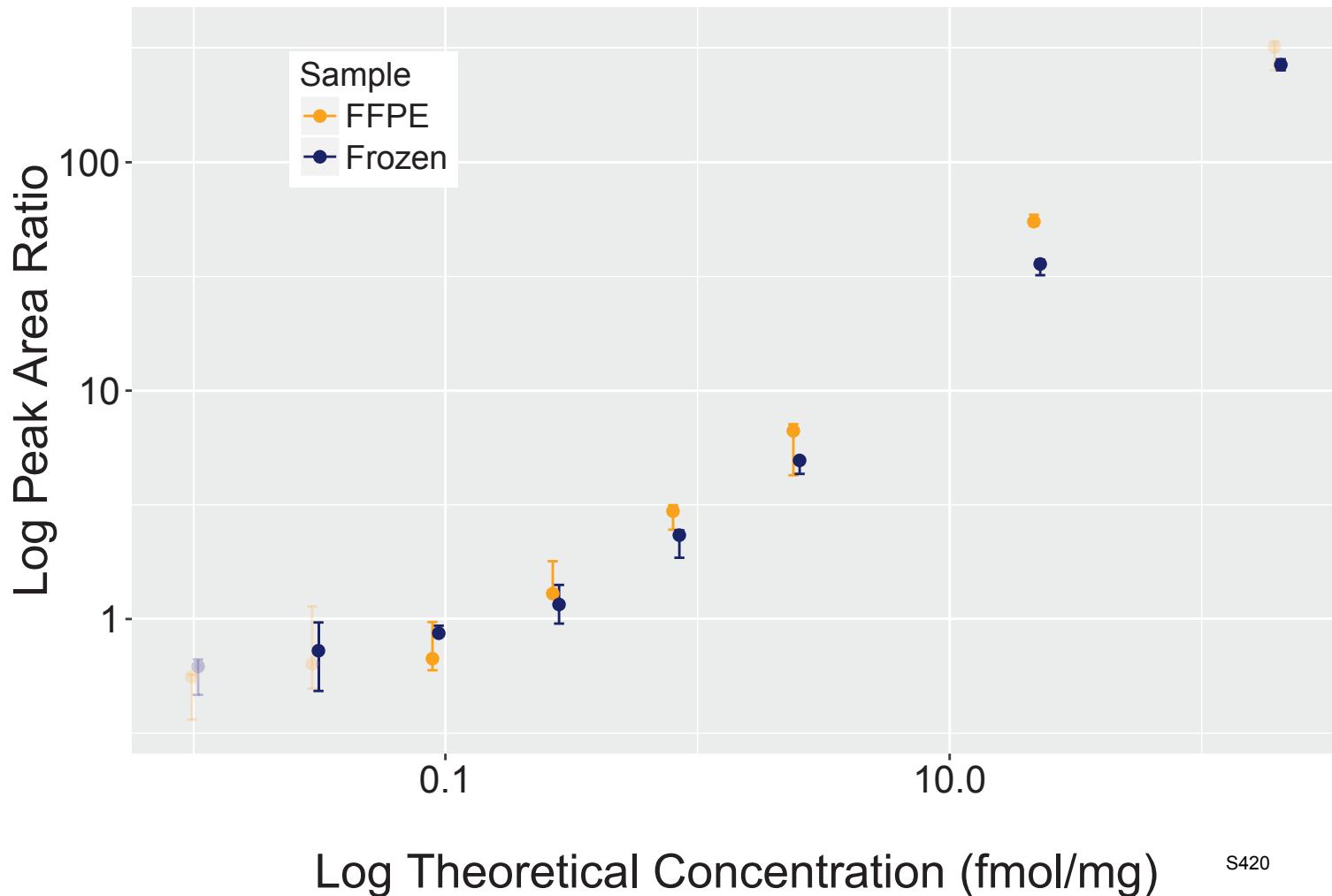


S418

Analyte: ETFB.LSVISVEDPPQR

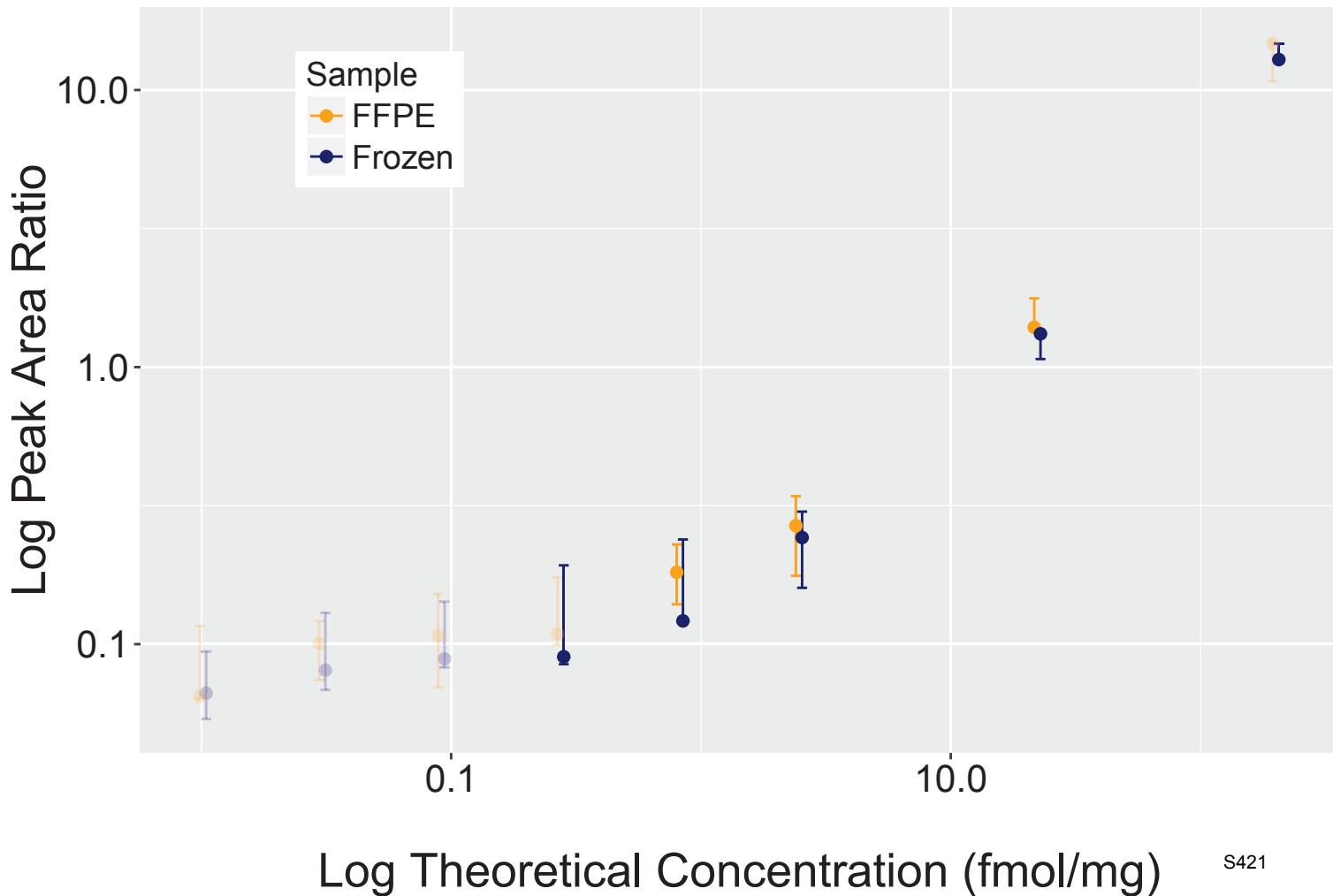


Analyte: ESYT1.LTHVDSPLEAPAGPLGQVK

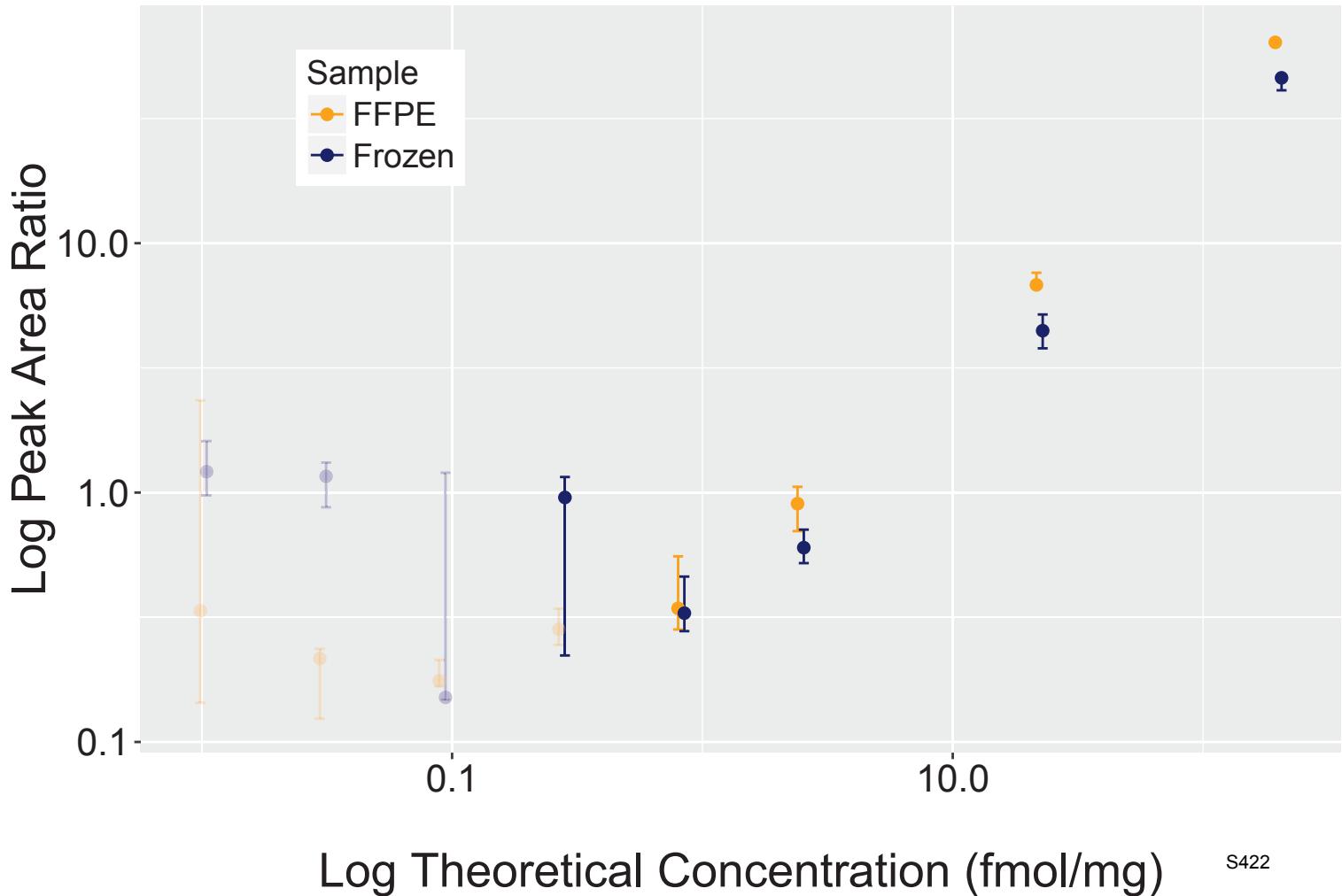


S420

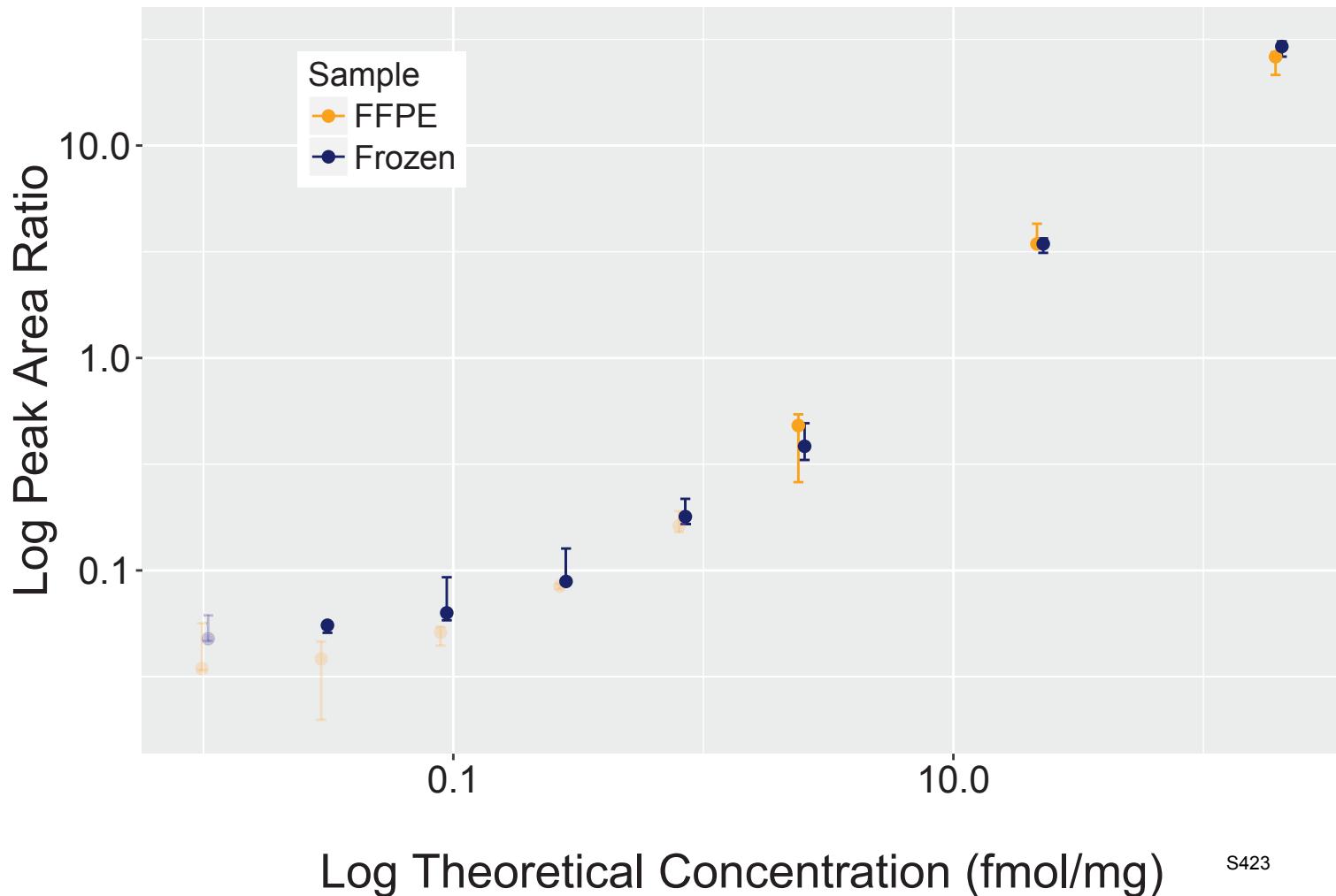
Analyte: XRCC5.LTIGSNLSIR



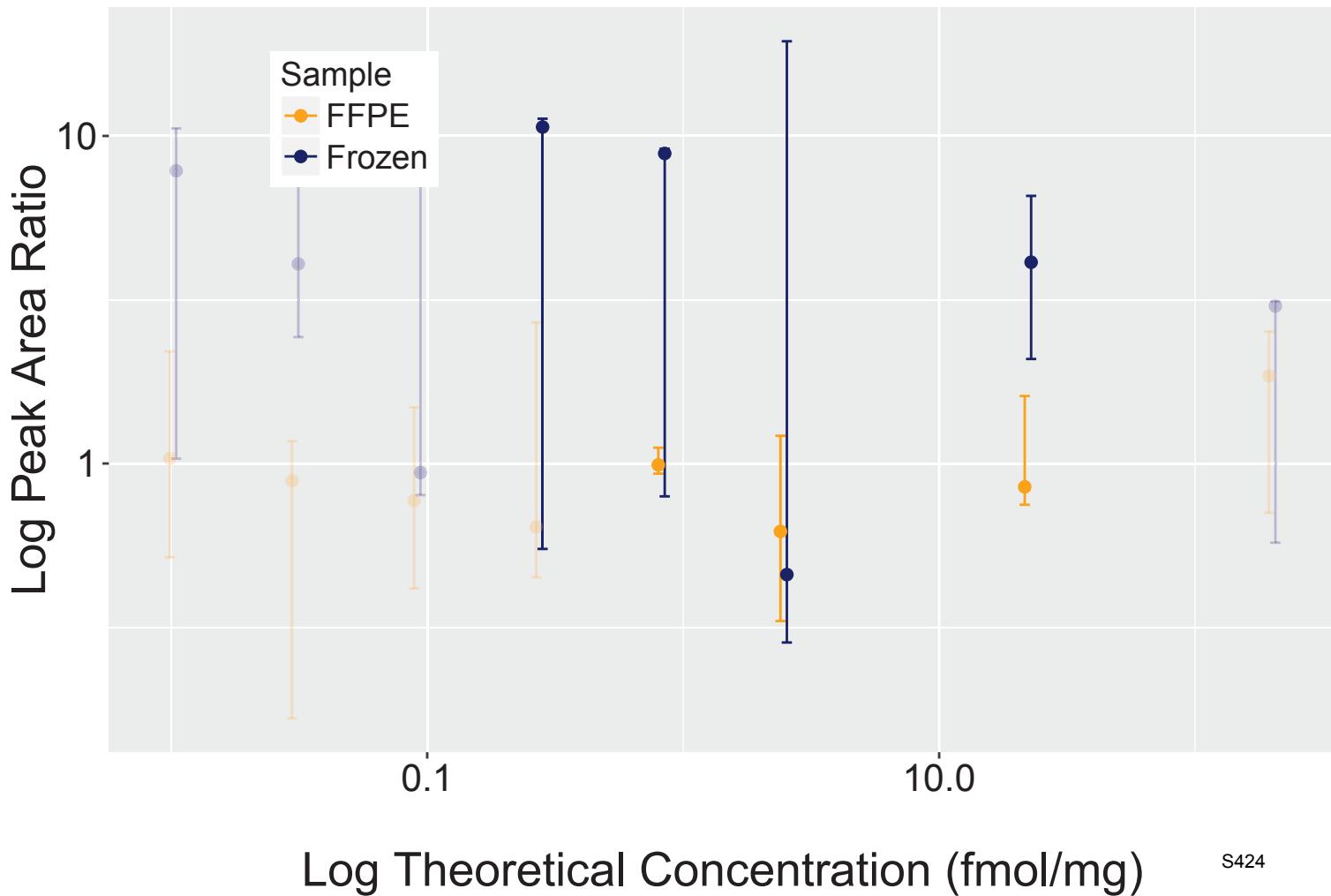
Analyte: VDAC3.LTLDTIFVPNTGK



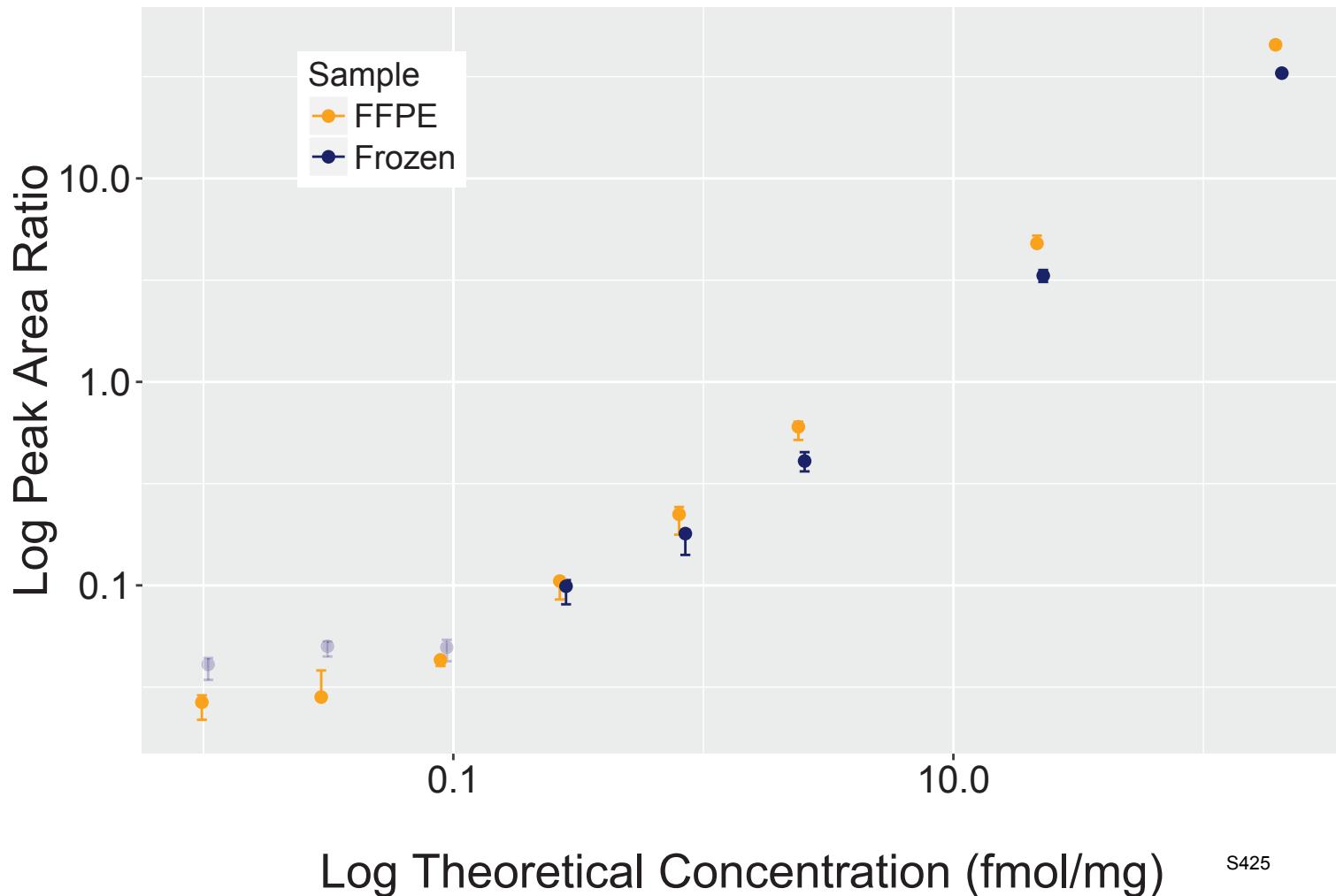
Analyte: PTPN1.LTLISEDIK



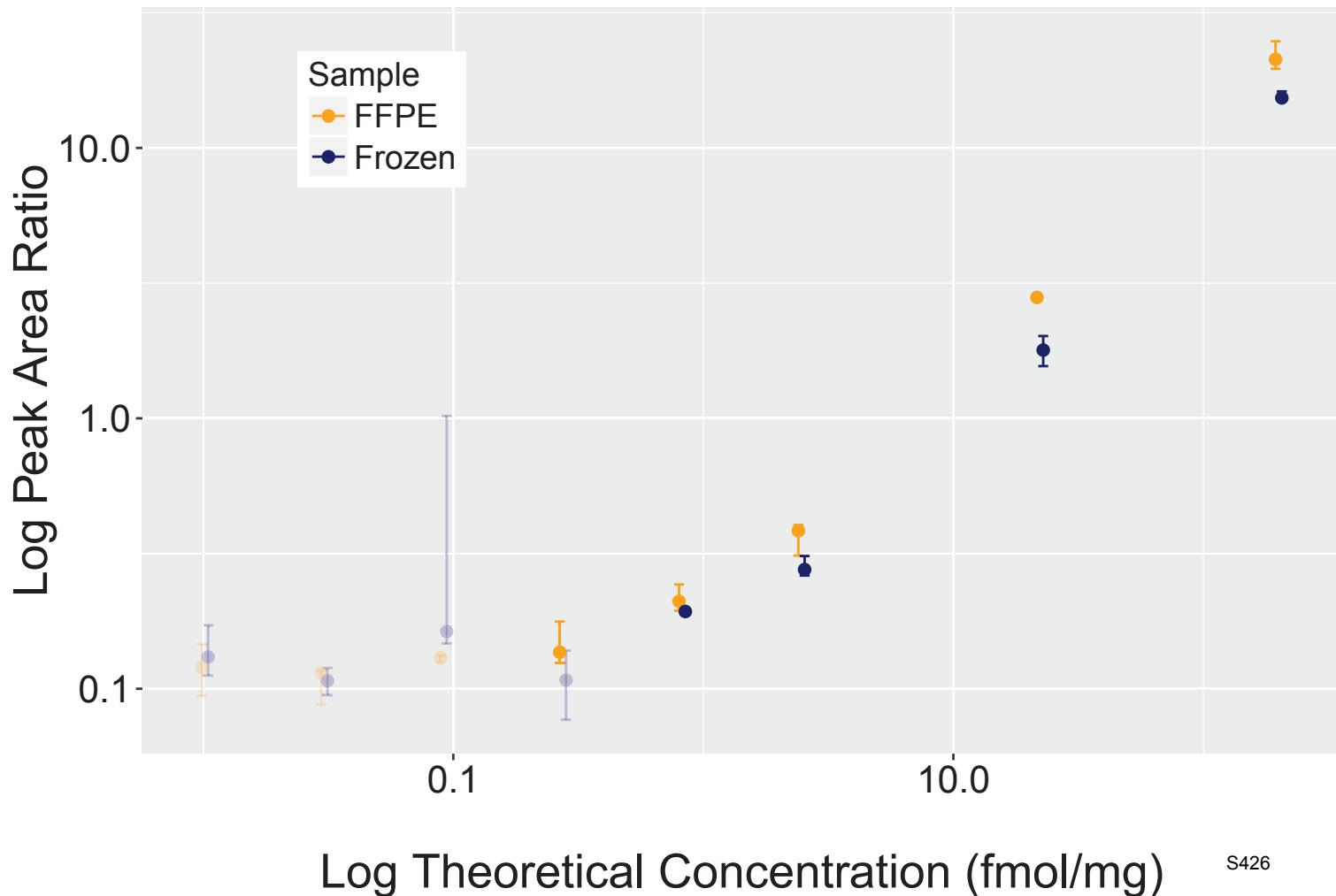
Analyte: STARD10.LTVNADVGYYSWR



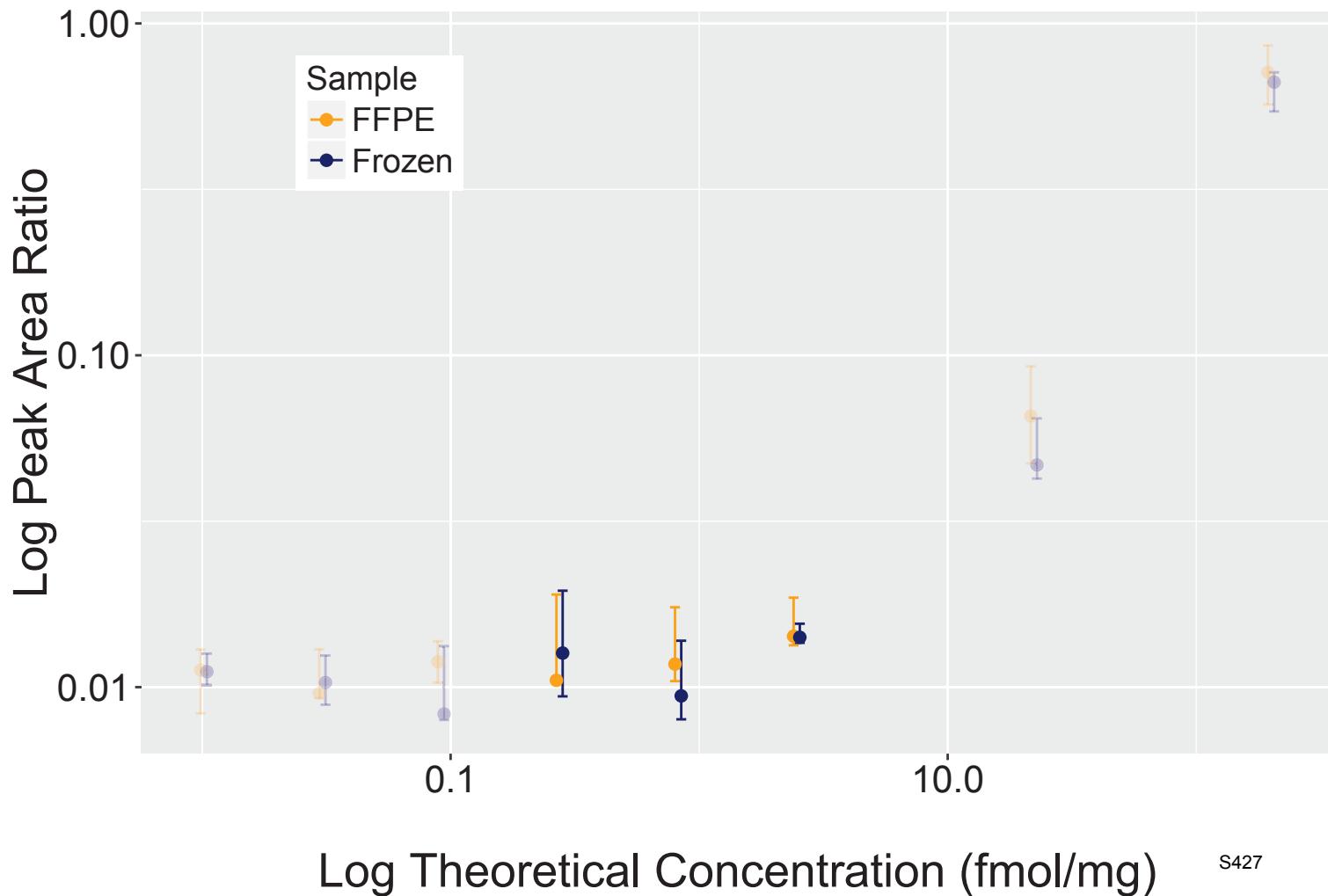
Analyte: PPP2R4.LVALLNTLDR



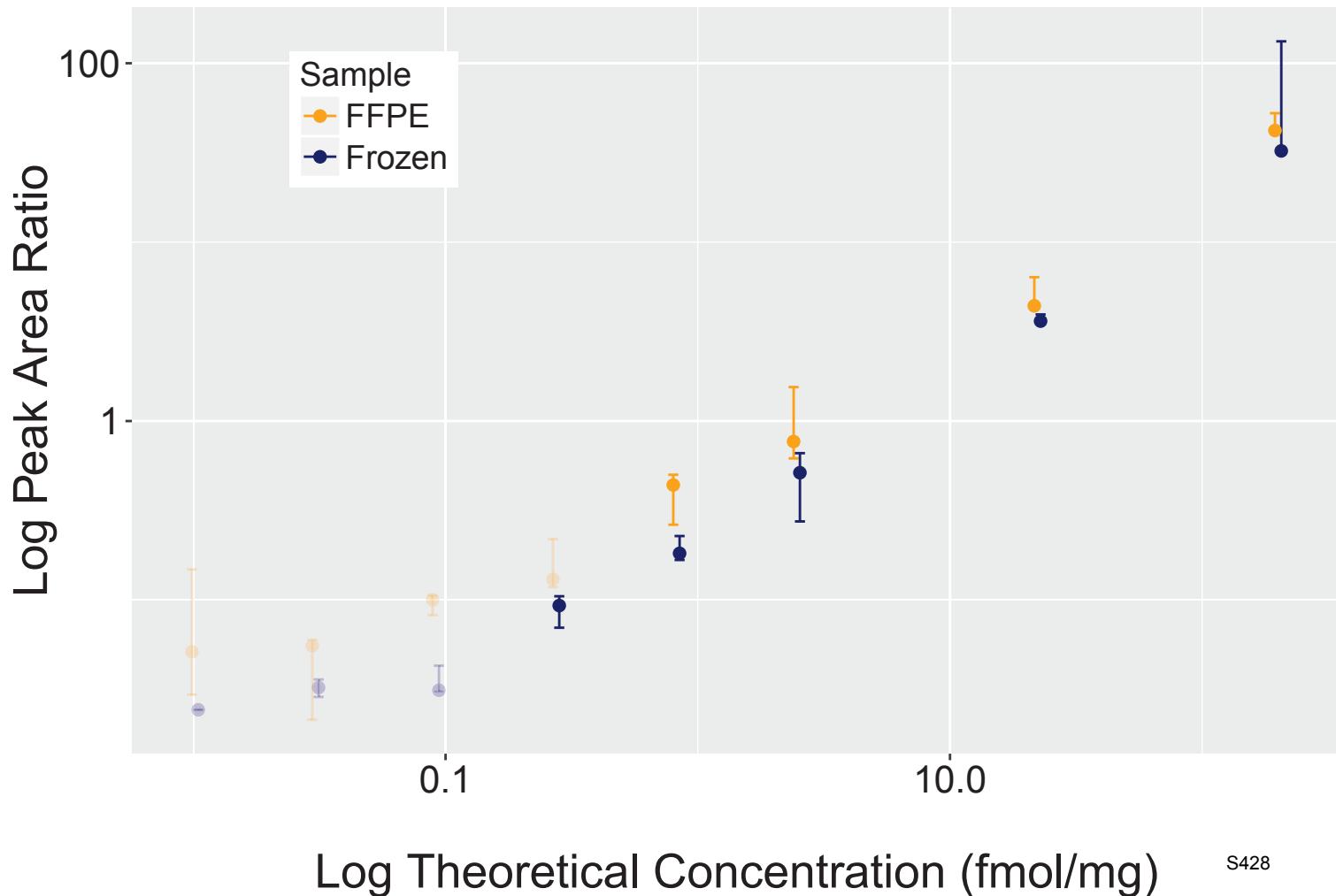
Analyte: FSCN1.LVARPEPATGYTLEFR



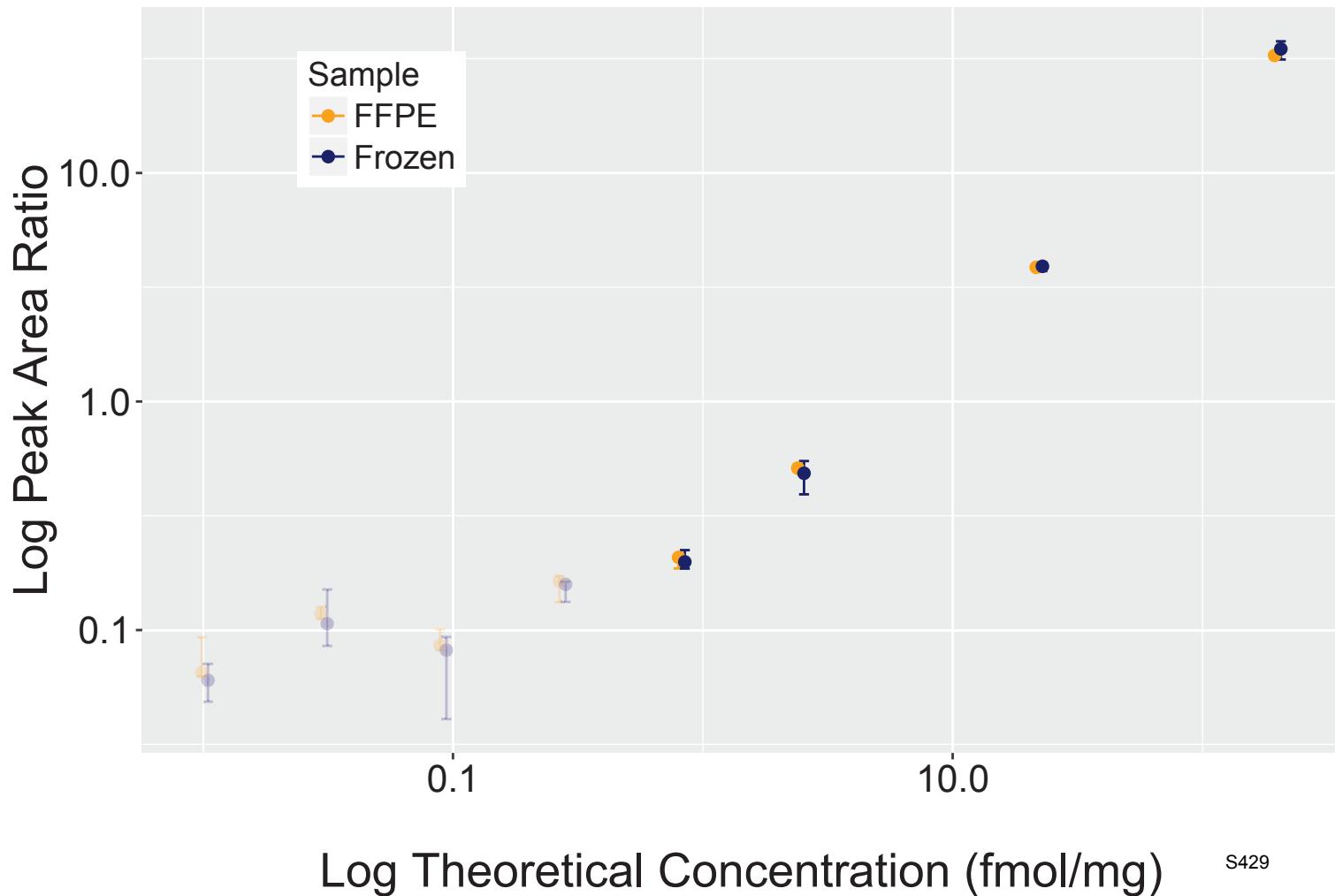
Analyte: CTSD.LVDQNIKFYLSR



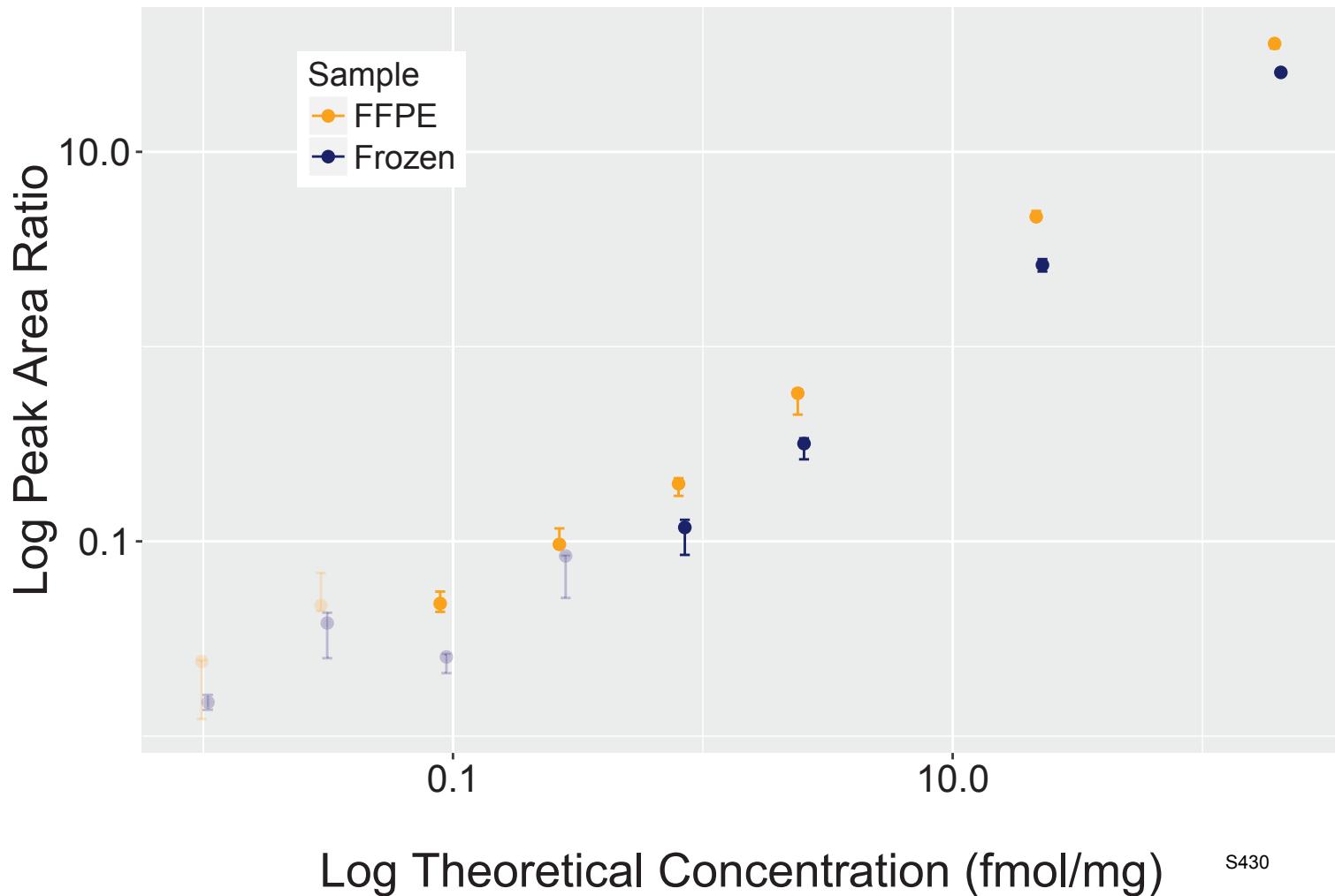
Analyte: SLC9A3R1.LVEVNGENVEK



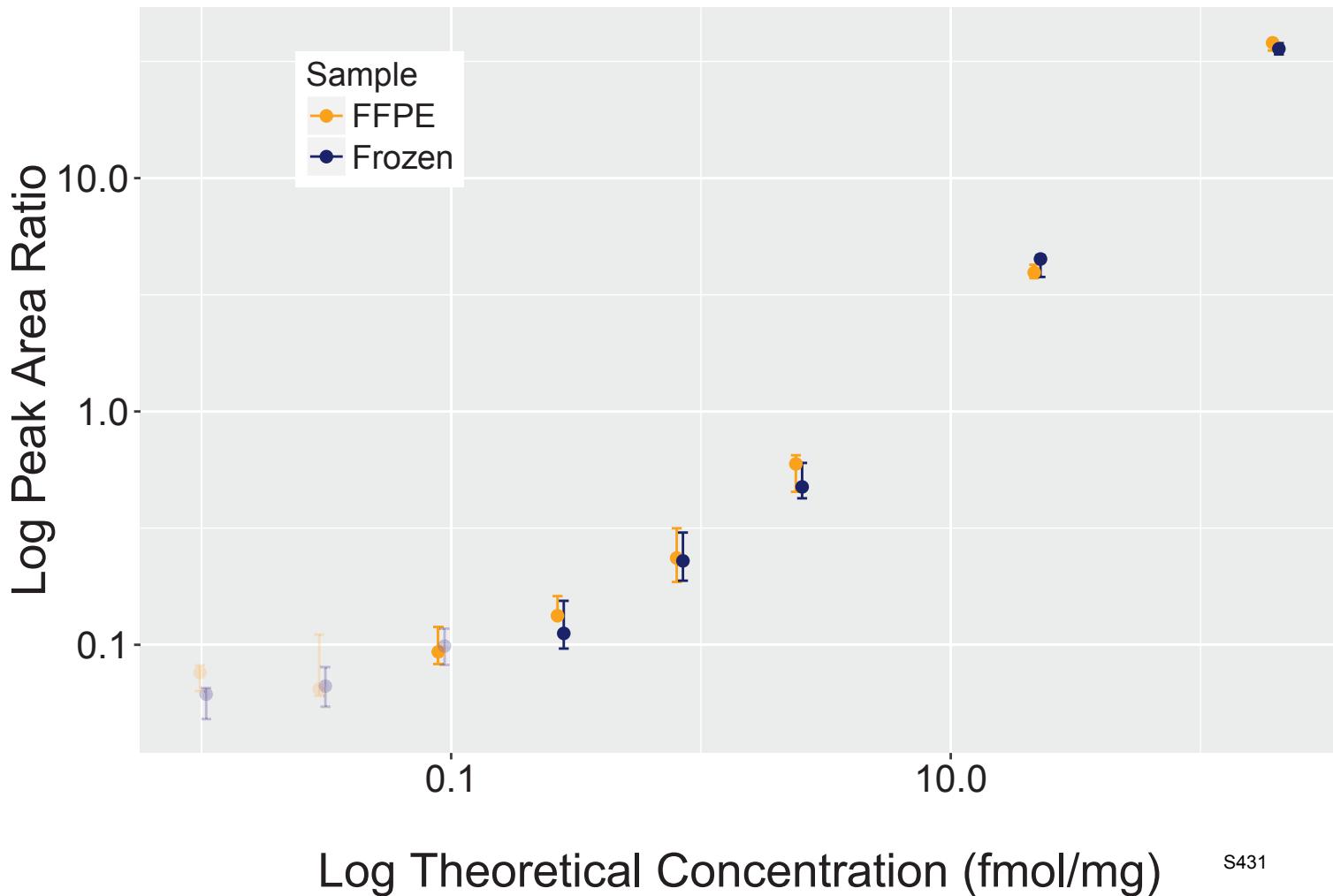
Analyte: PLOD3.LVGPEEALSPGEAR



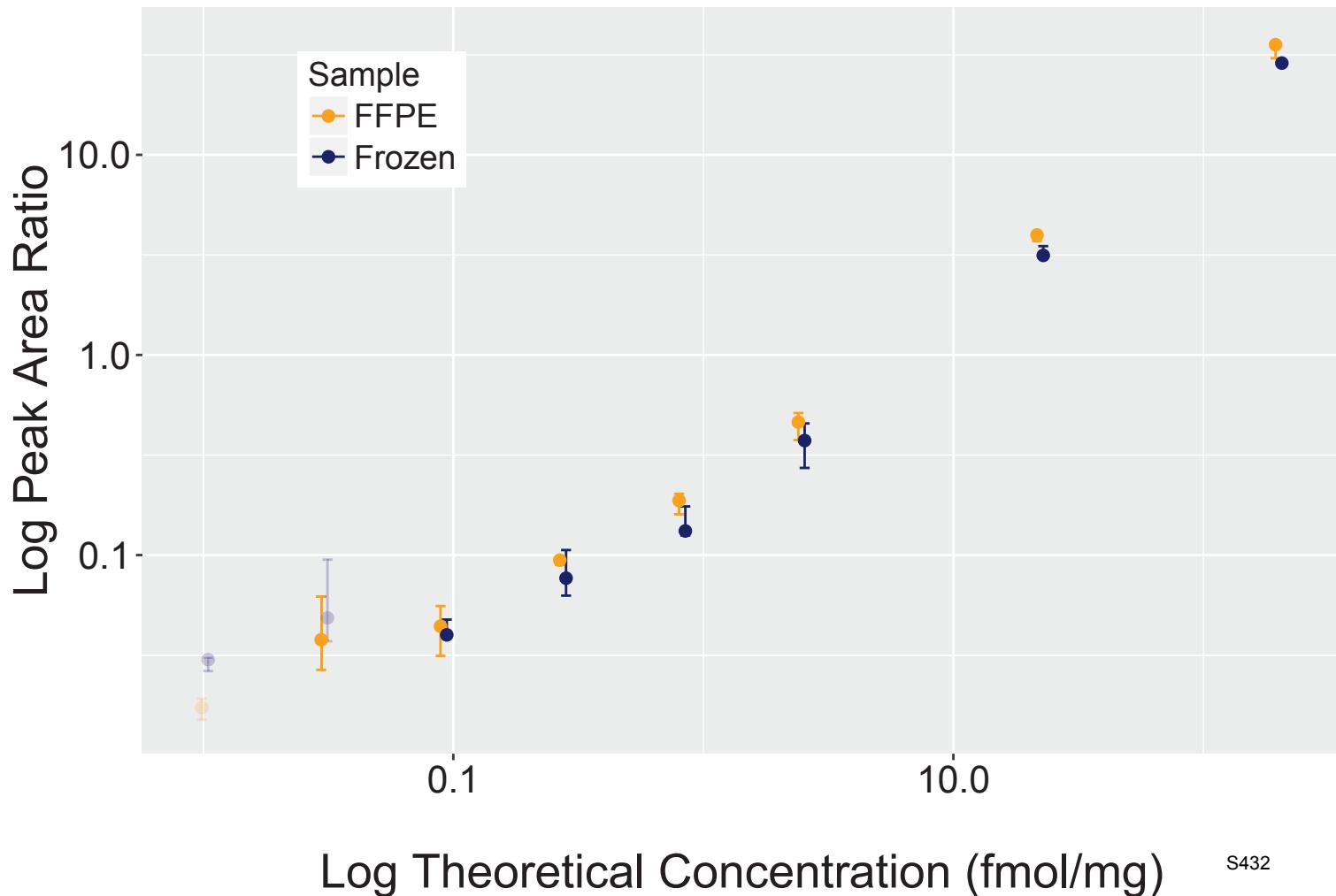
Analyte: RPL30.LVILANNC[+57]PALR



Analyte: BCAM.LVLAEAQVGDER

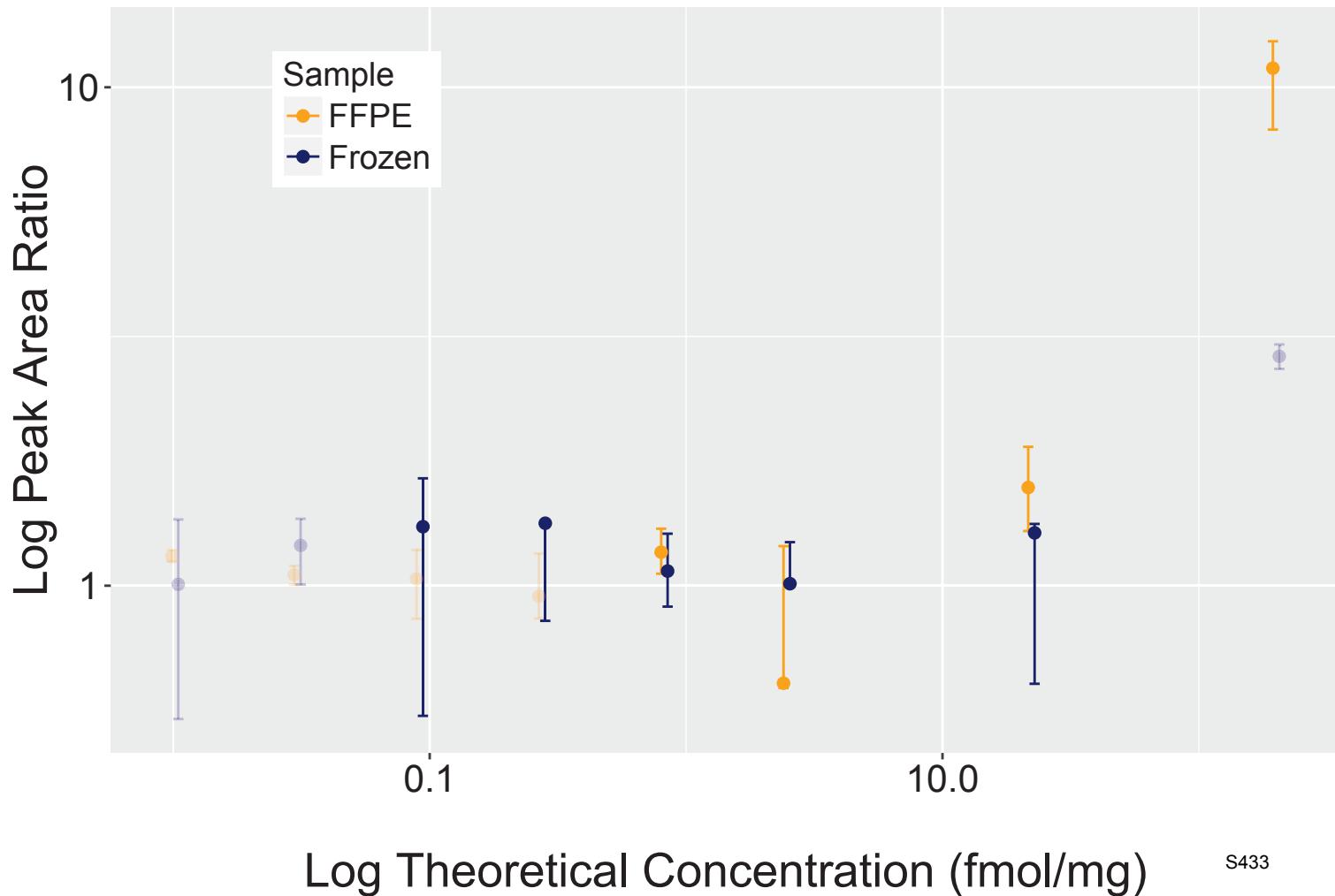


Analyte: LRRC59.LVNLQHLDLLNNK

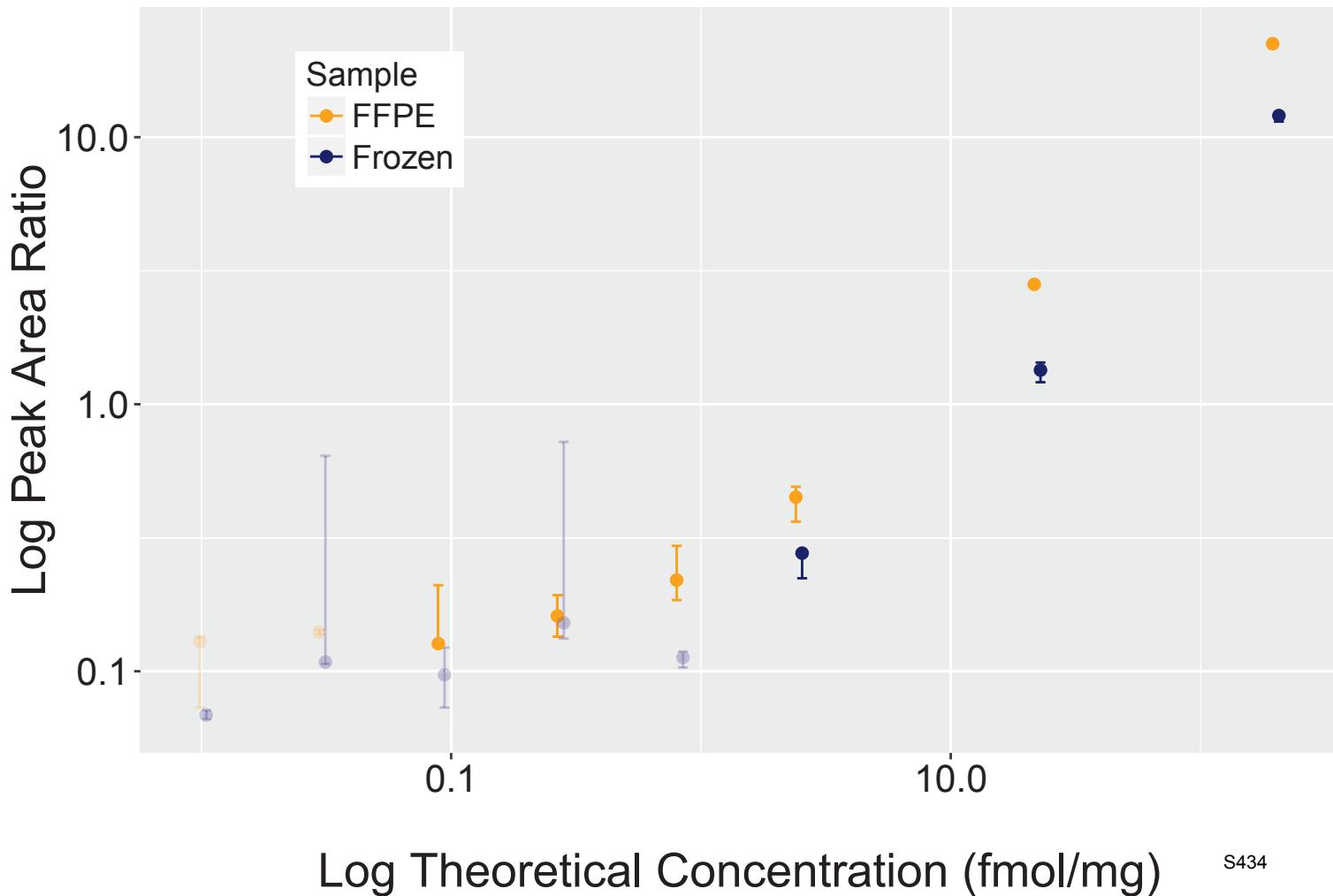


S432

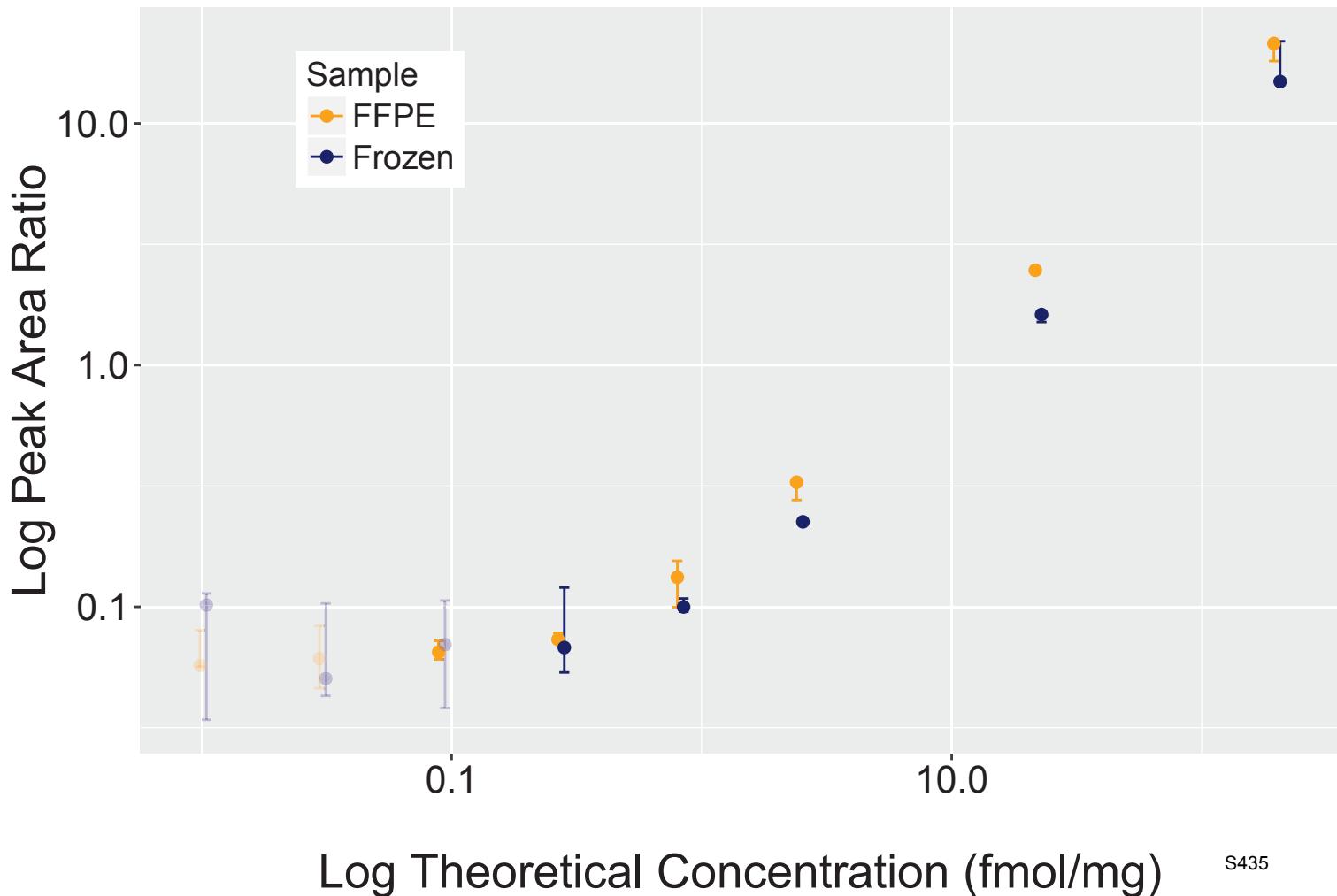
Analyte: PGD.LVPLLDTGDIIDGGNSEYR



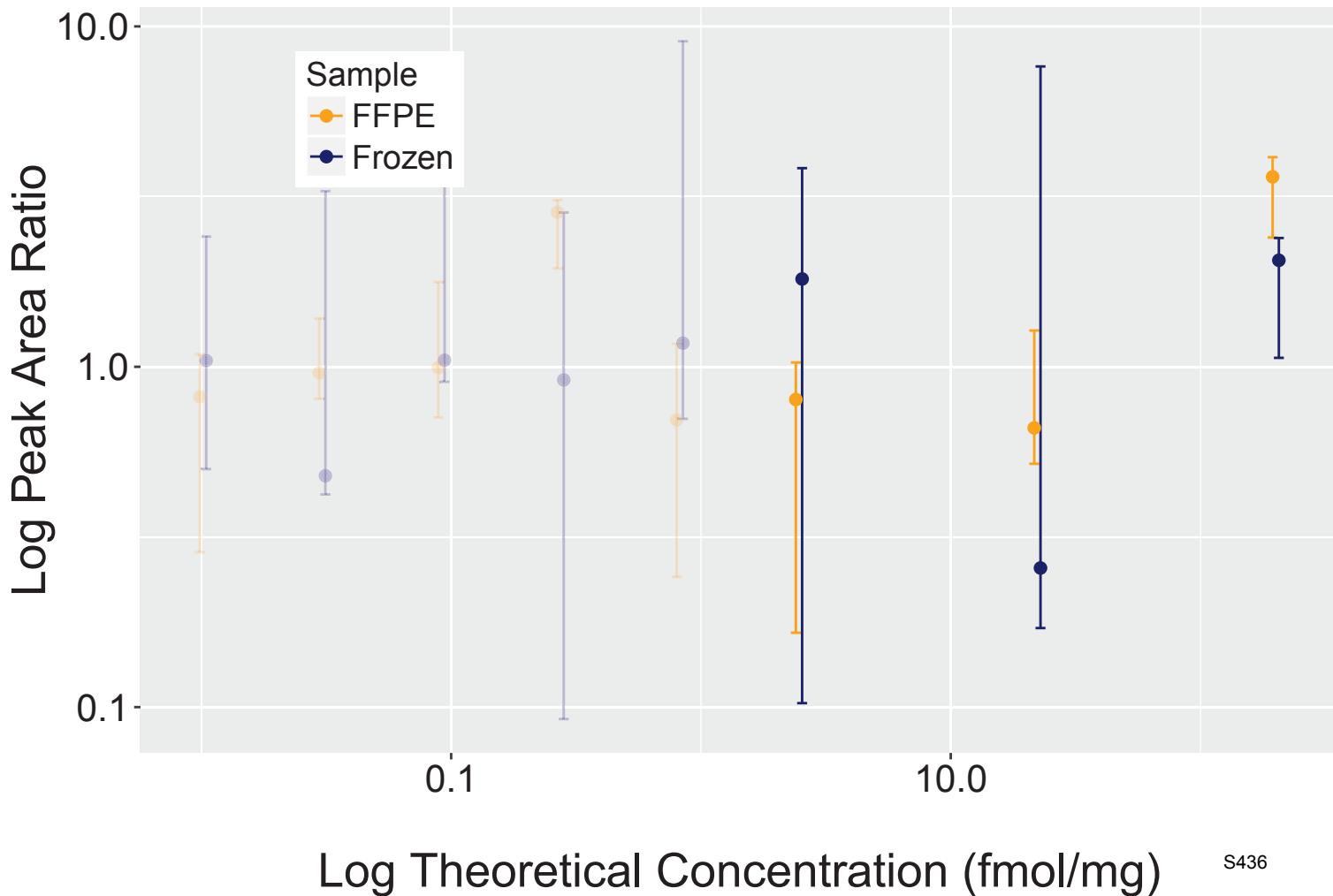
Analyte: EEF1B2.LVPVGYGIK



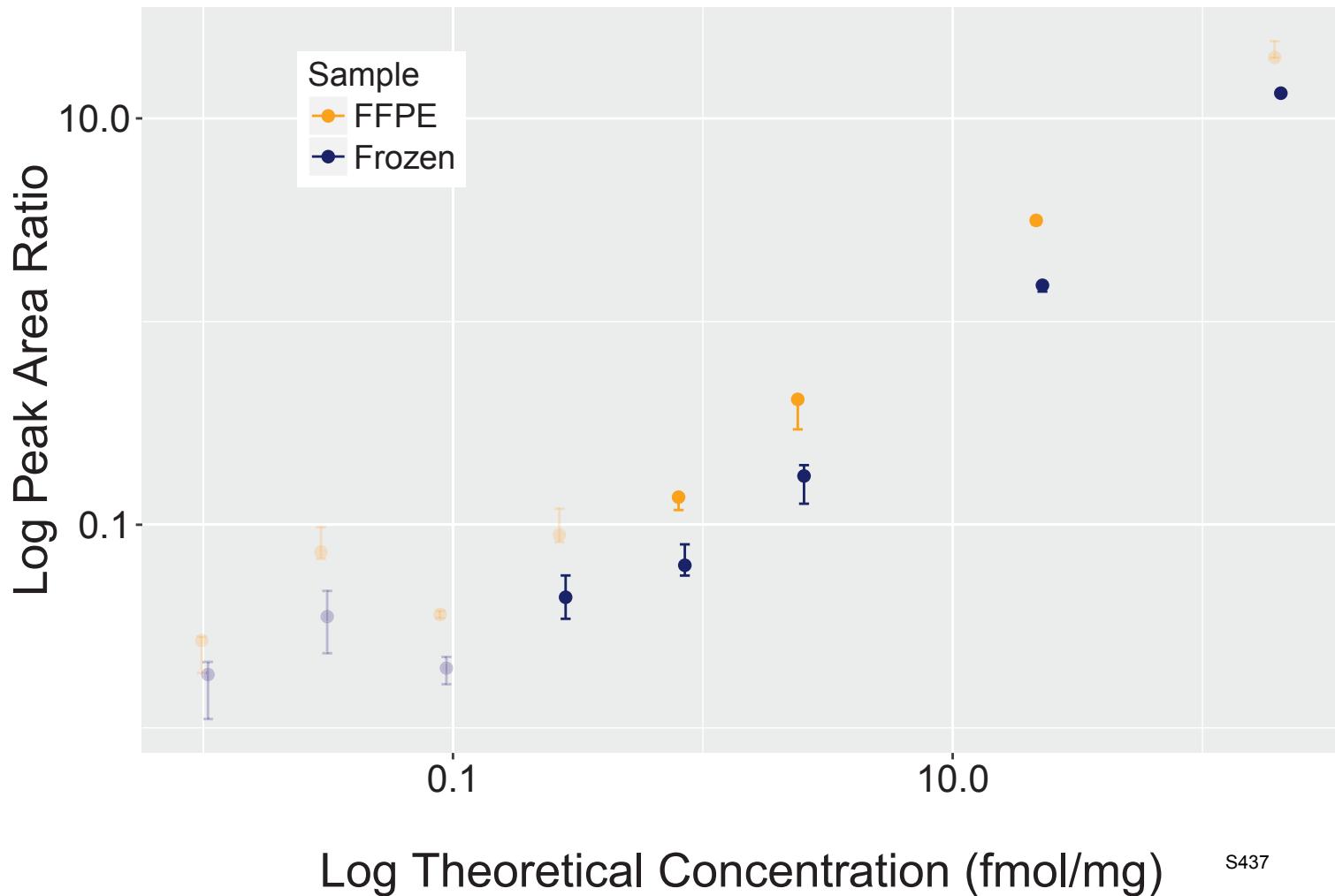
Analyte: EEF1D.LVPVGYGIR



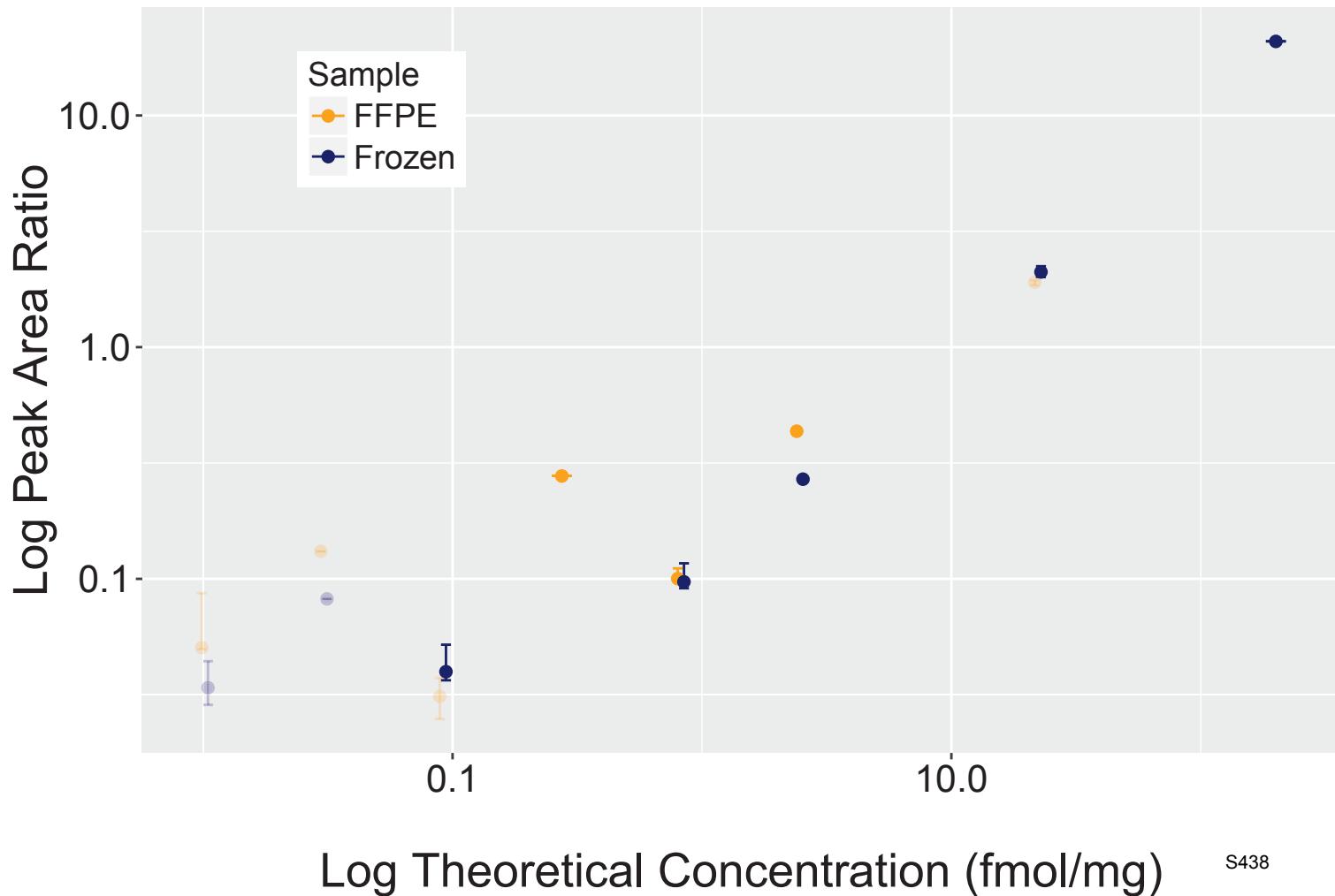
Analyte: HSPD1.LVQDVANNTNEEAGDGTTATVLAR



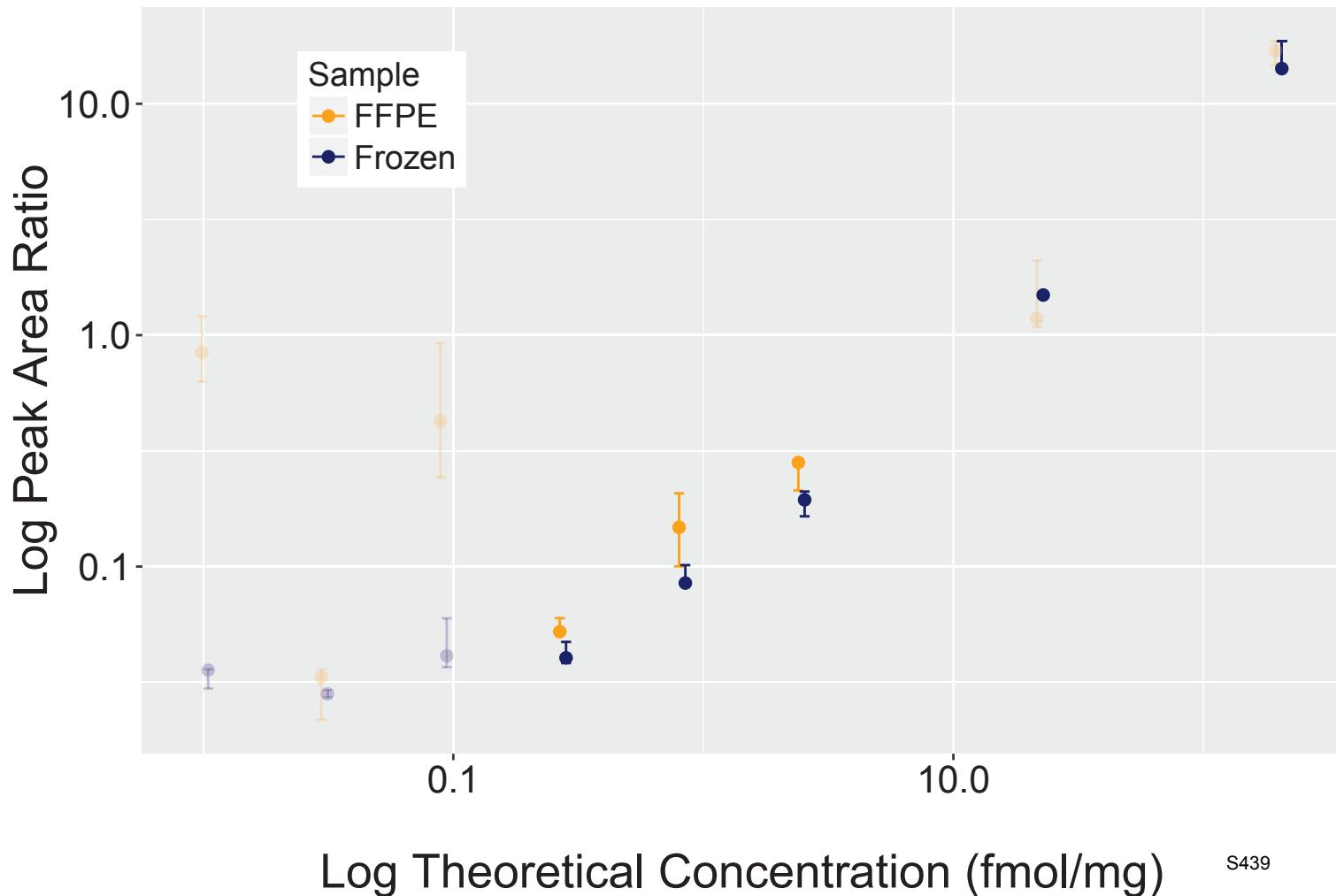
Analyte: PCBP1.LVVPATQC[+57]GSLIGK



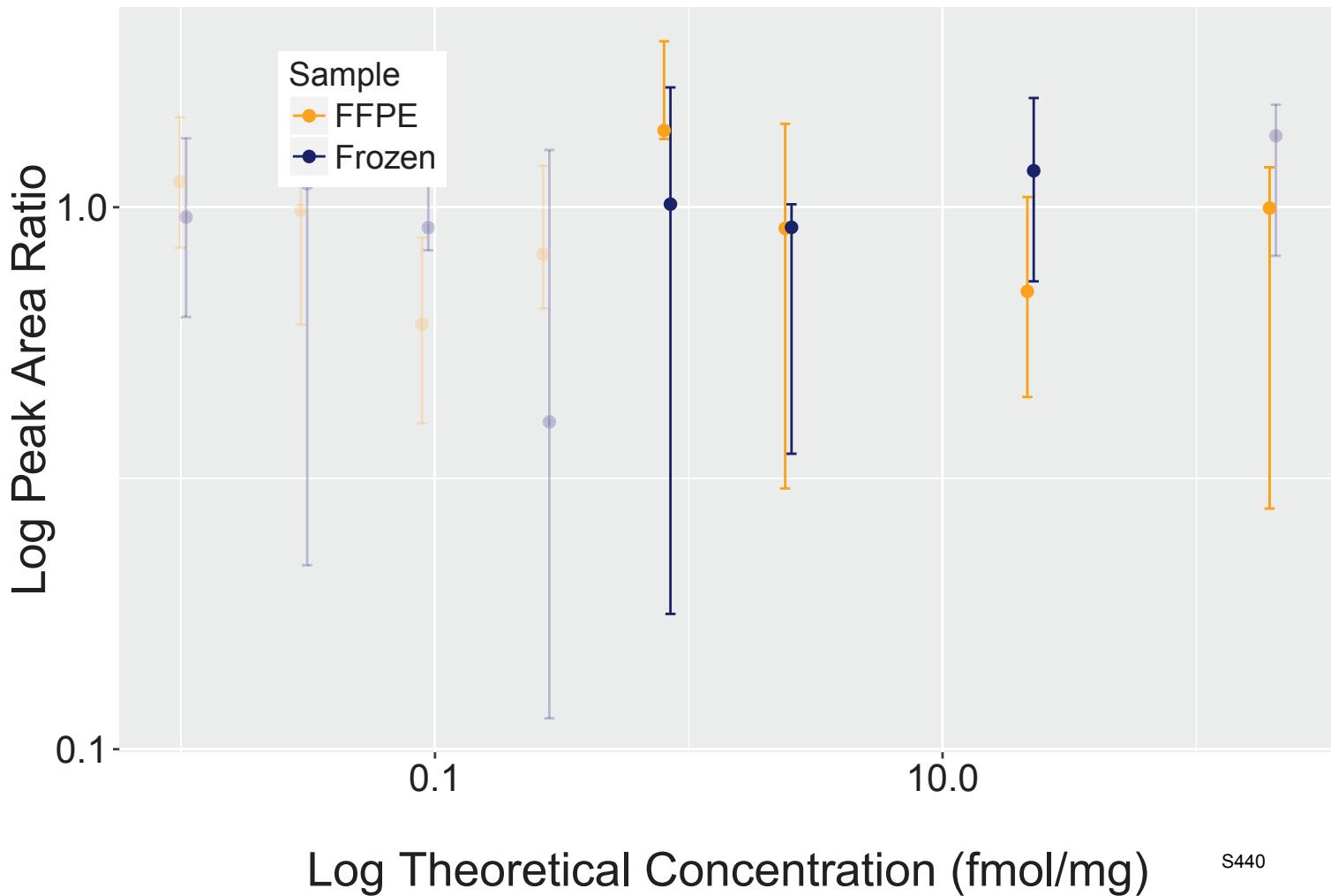
Analyte: GNB2L1.LWDLTTGTTTR



Analyte: PRKCSH.LWEEQLAAAK

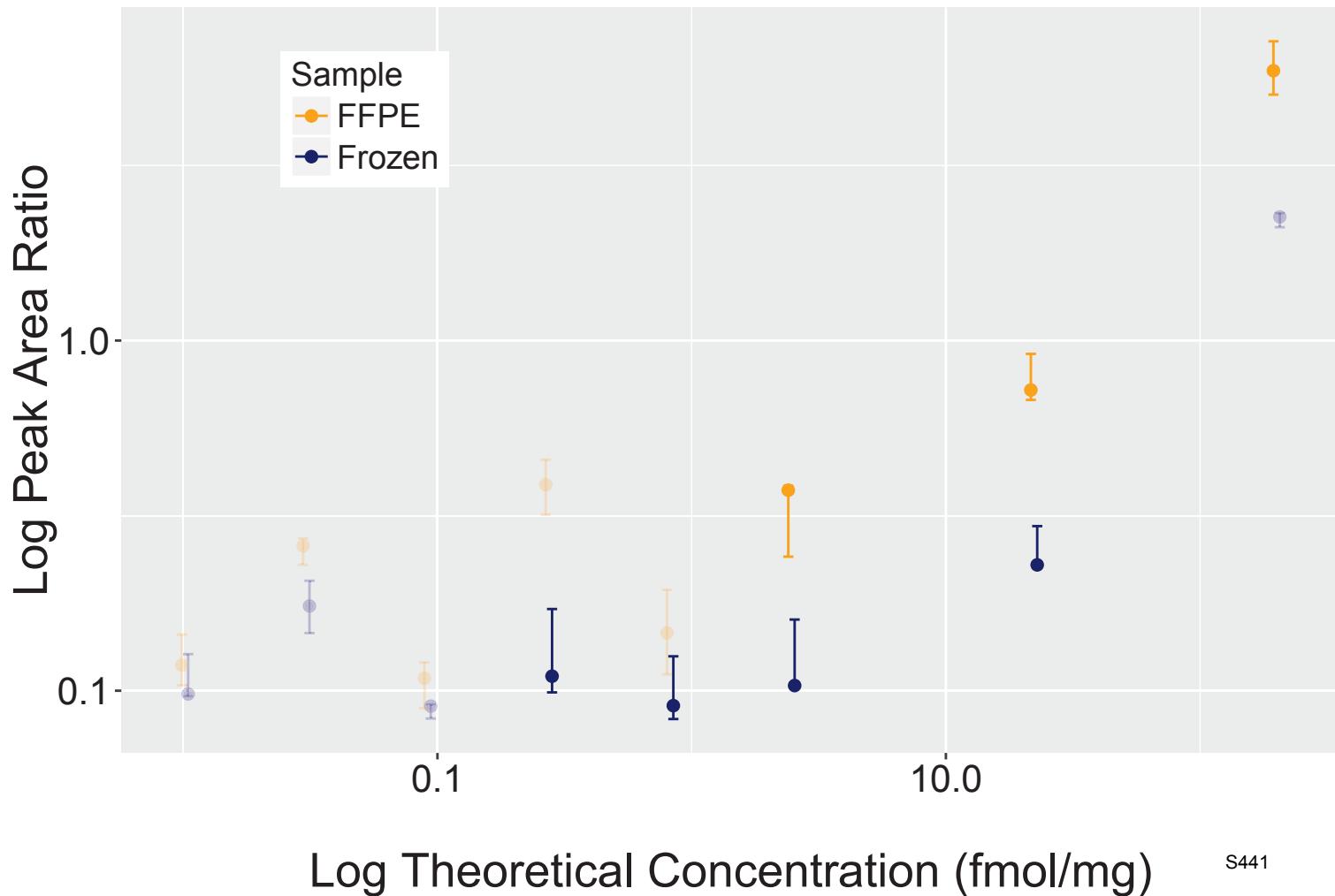


Analyte: PLOD3.LWSNFWGALSPDEYYAR

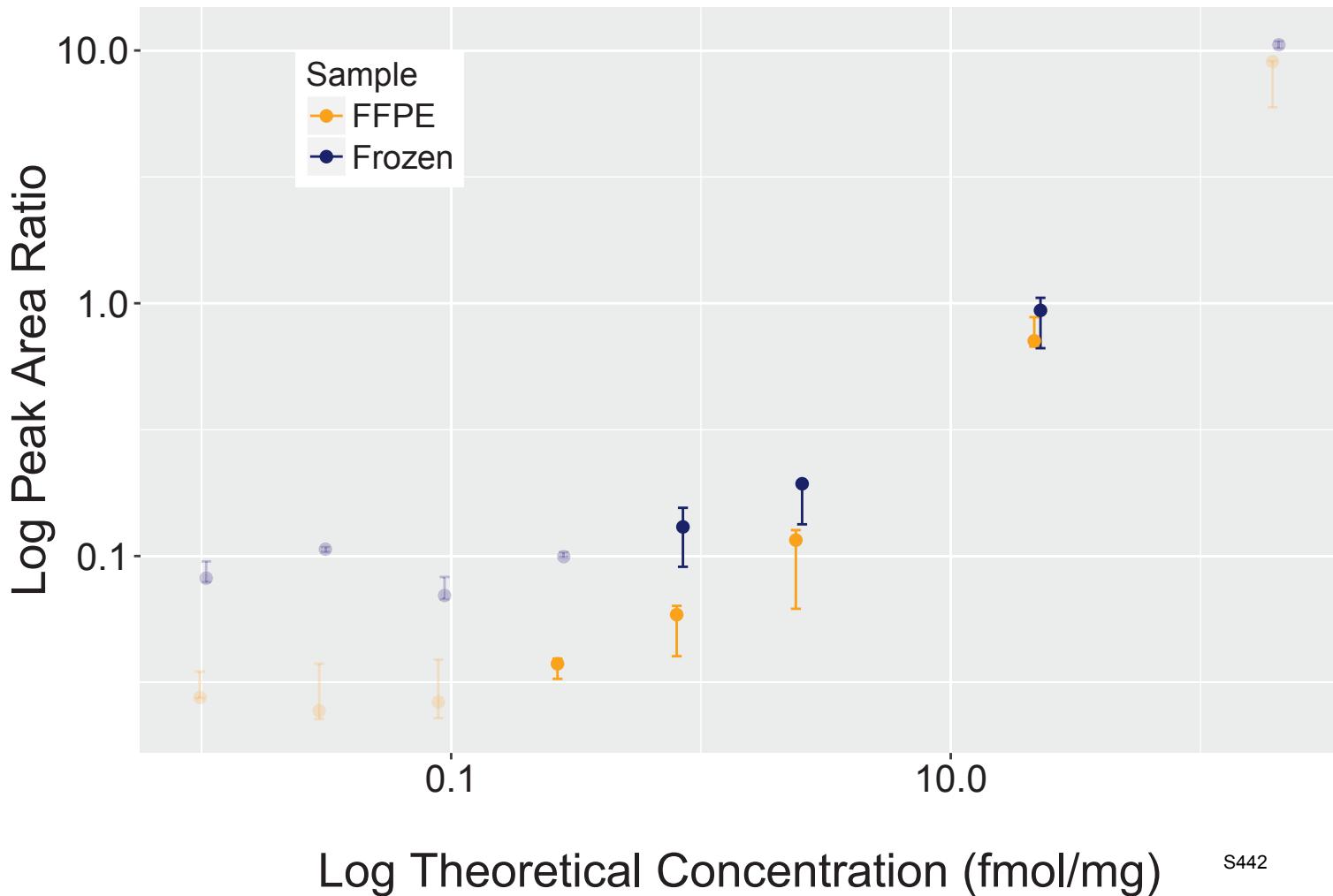


S440

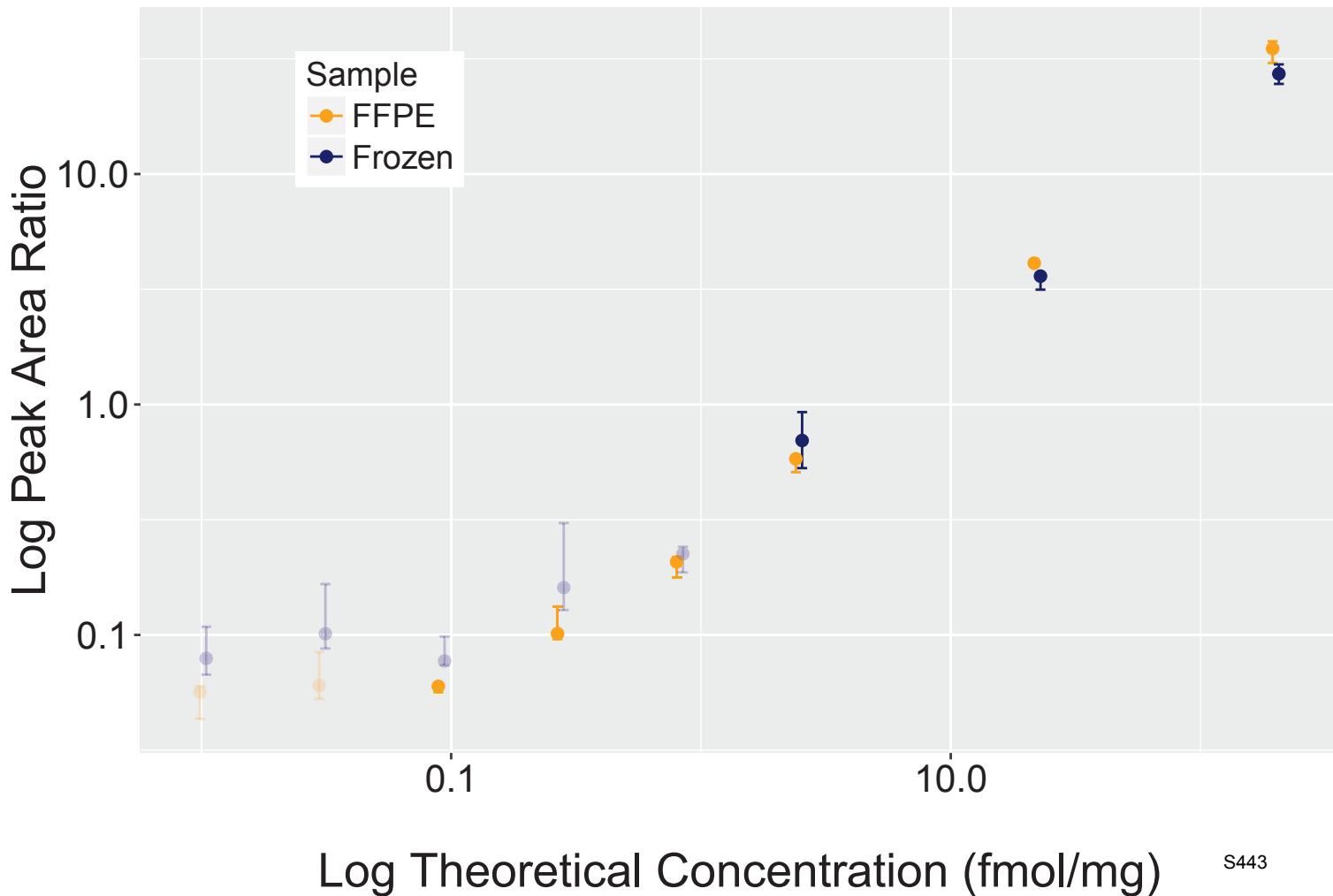
Analyte: CNDP2.LYDDIDFDIEEFAK



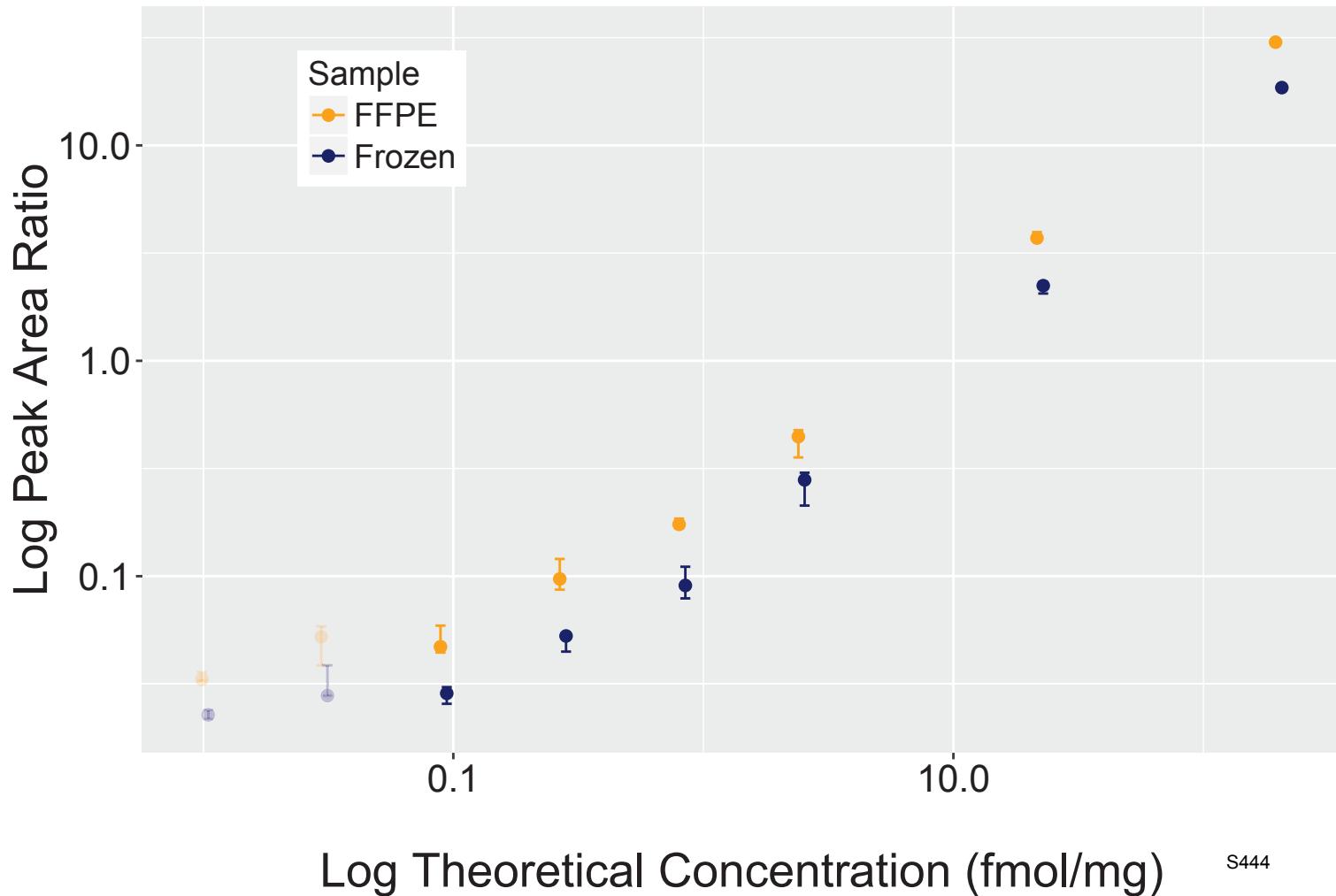
Analyte: SERPINH1.LYGPSSVSFADDFVR



Analyte: ALDH4A1.NAAGNFYINDK

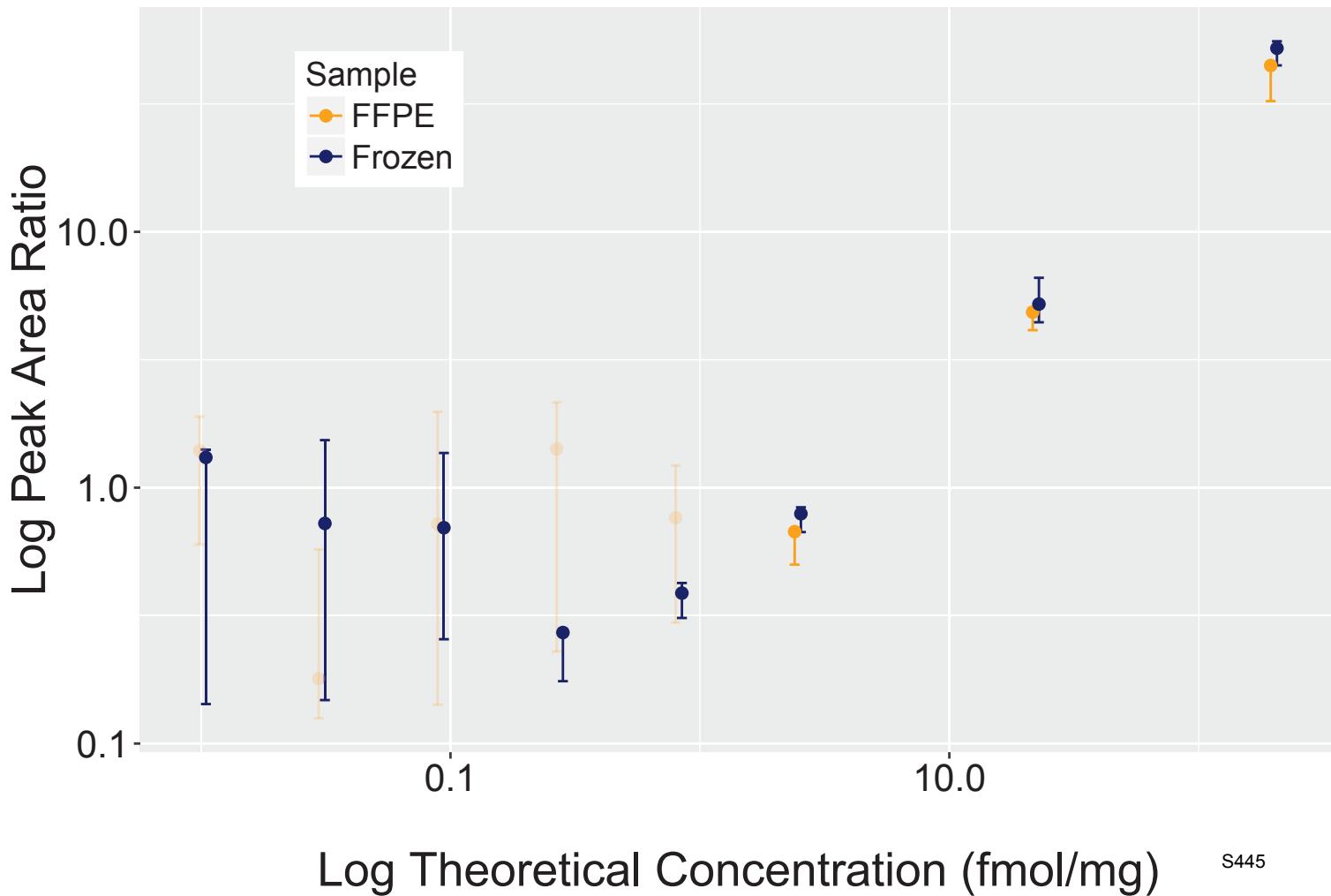


Analyte: ARPC2.NC[+57]FASVFEK

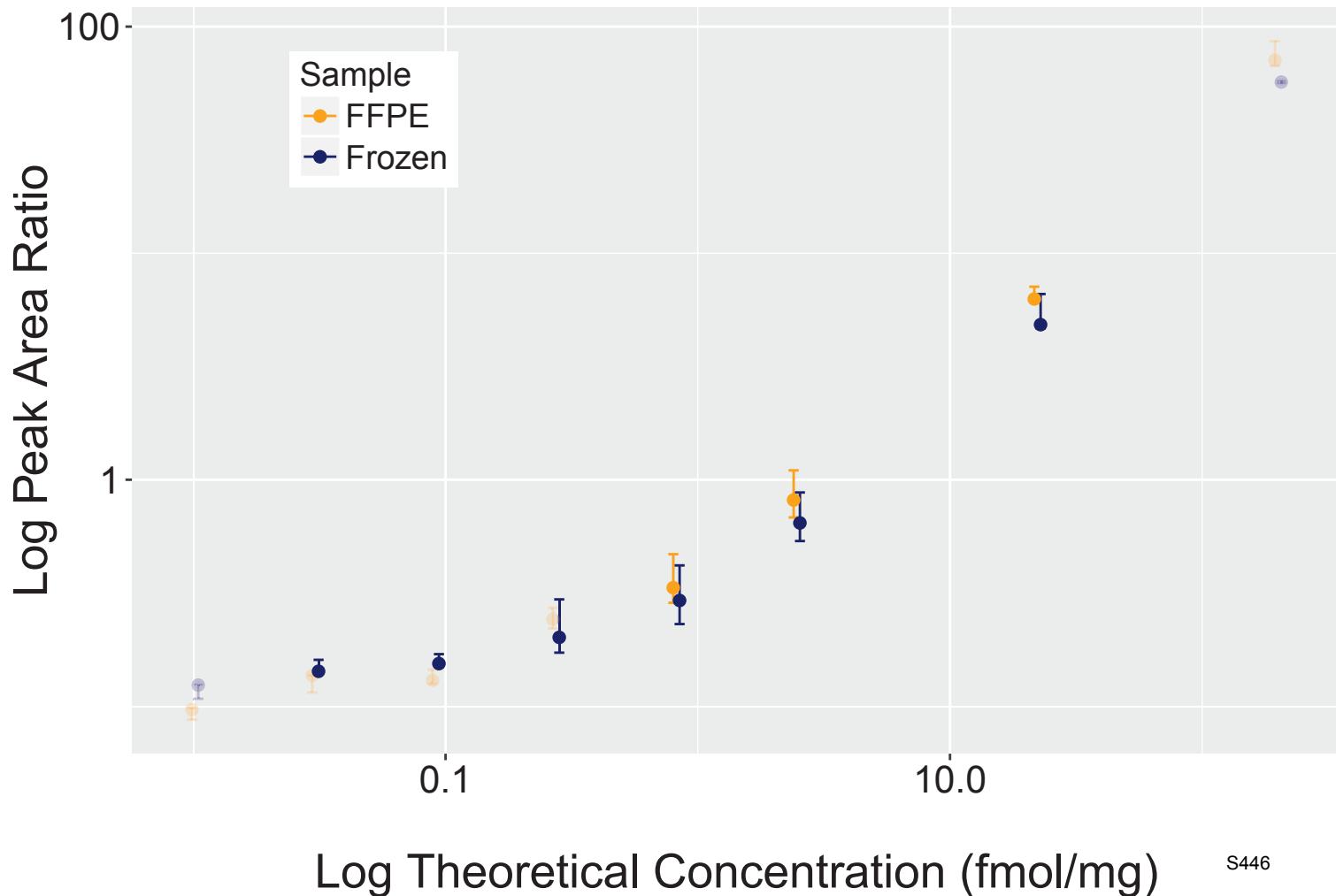


S444

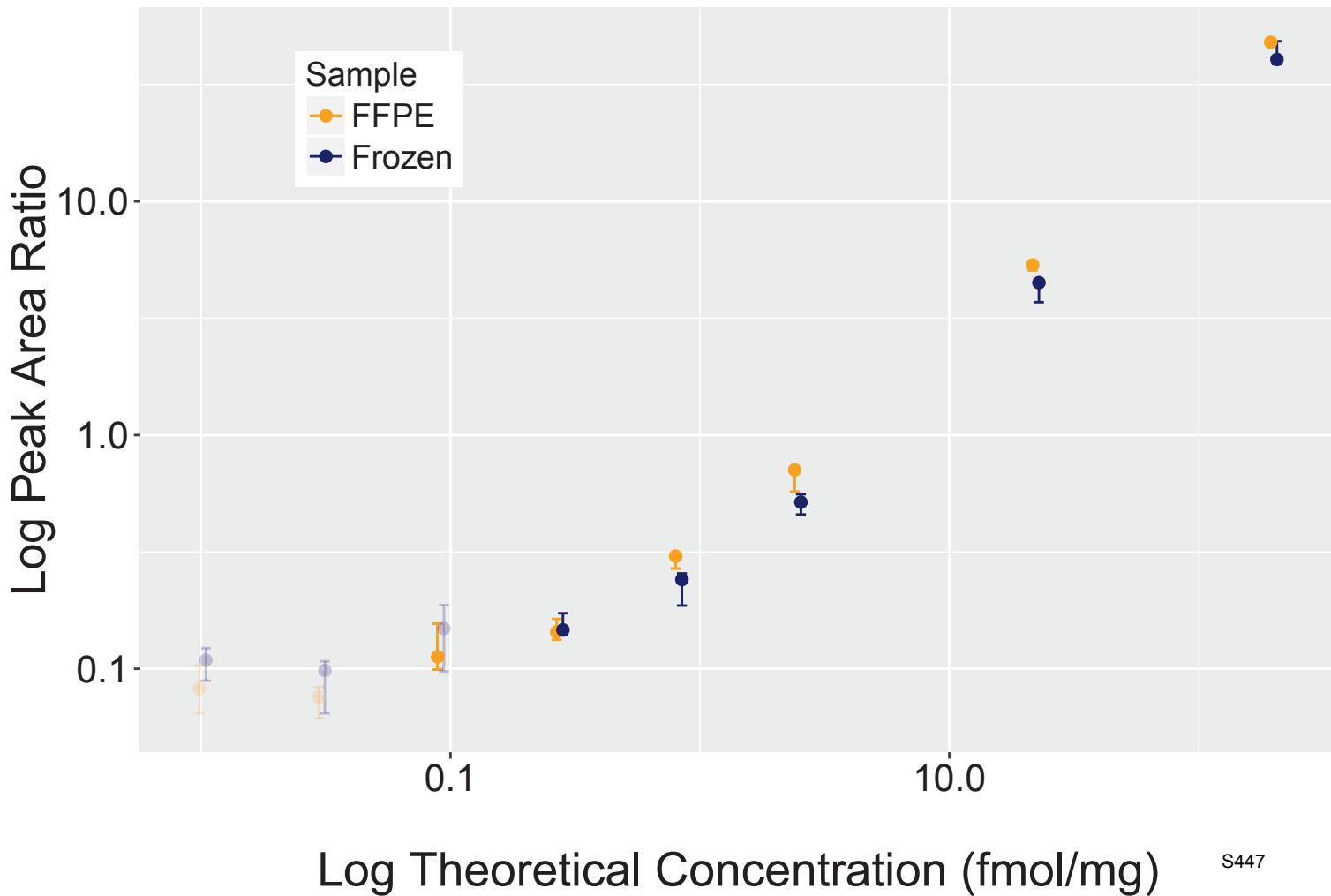
Analyte: RPS8.NC[+57]IVLIDSTPYR



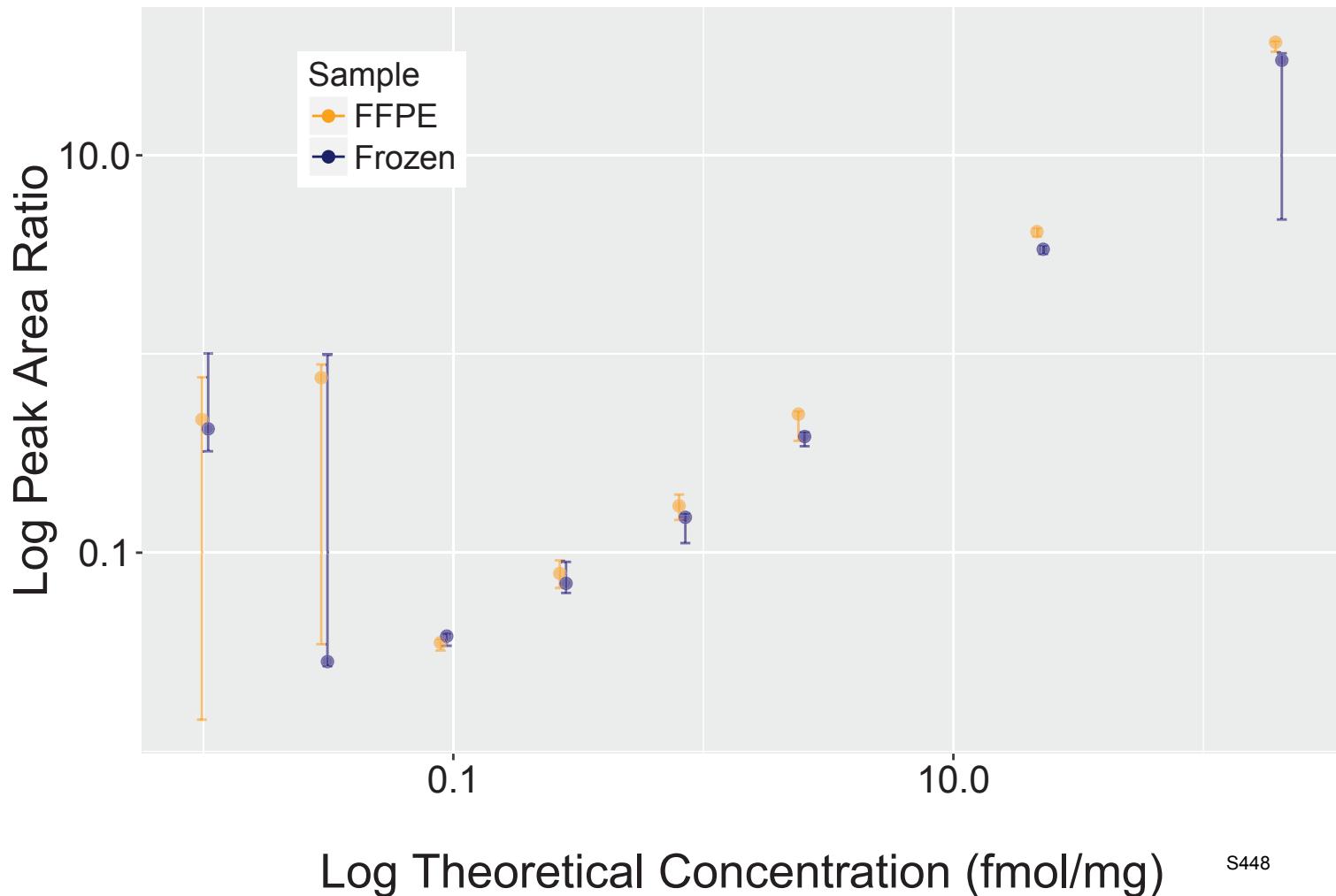
Analyte: USO1.NDGVL_{LL}QALTR



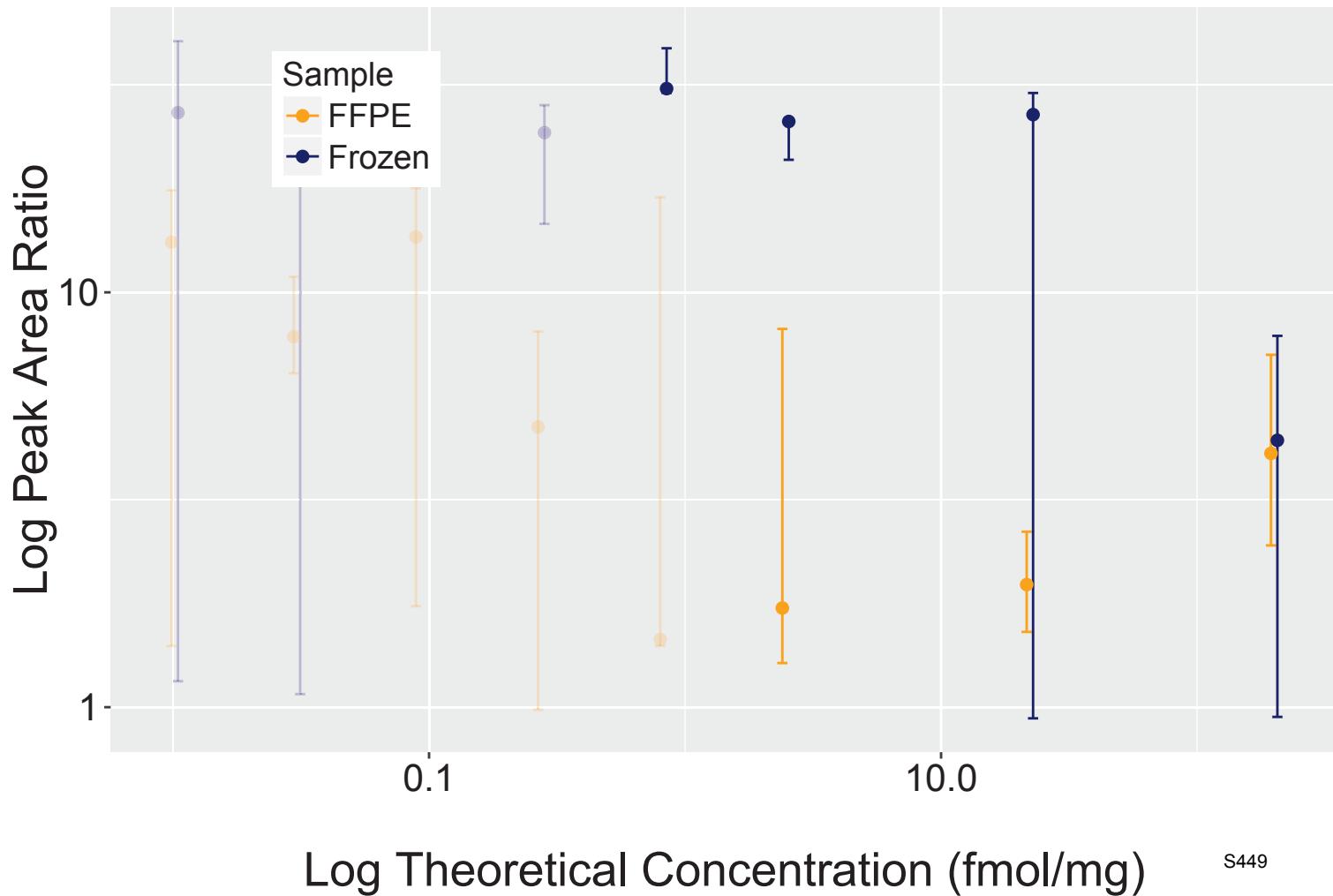
Analyte: UCHL1.NEAIQAAHDAVAQEGQC[+57]R



Analyte: TARS.NELSGALTGLTR

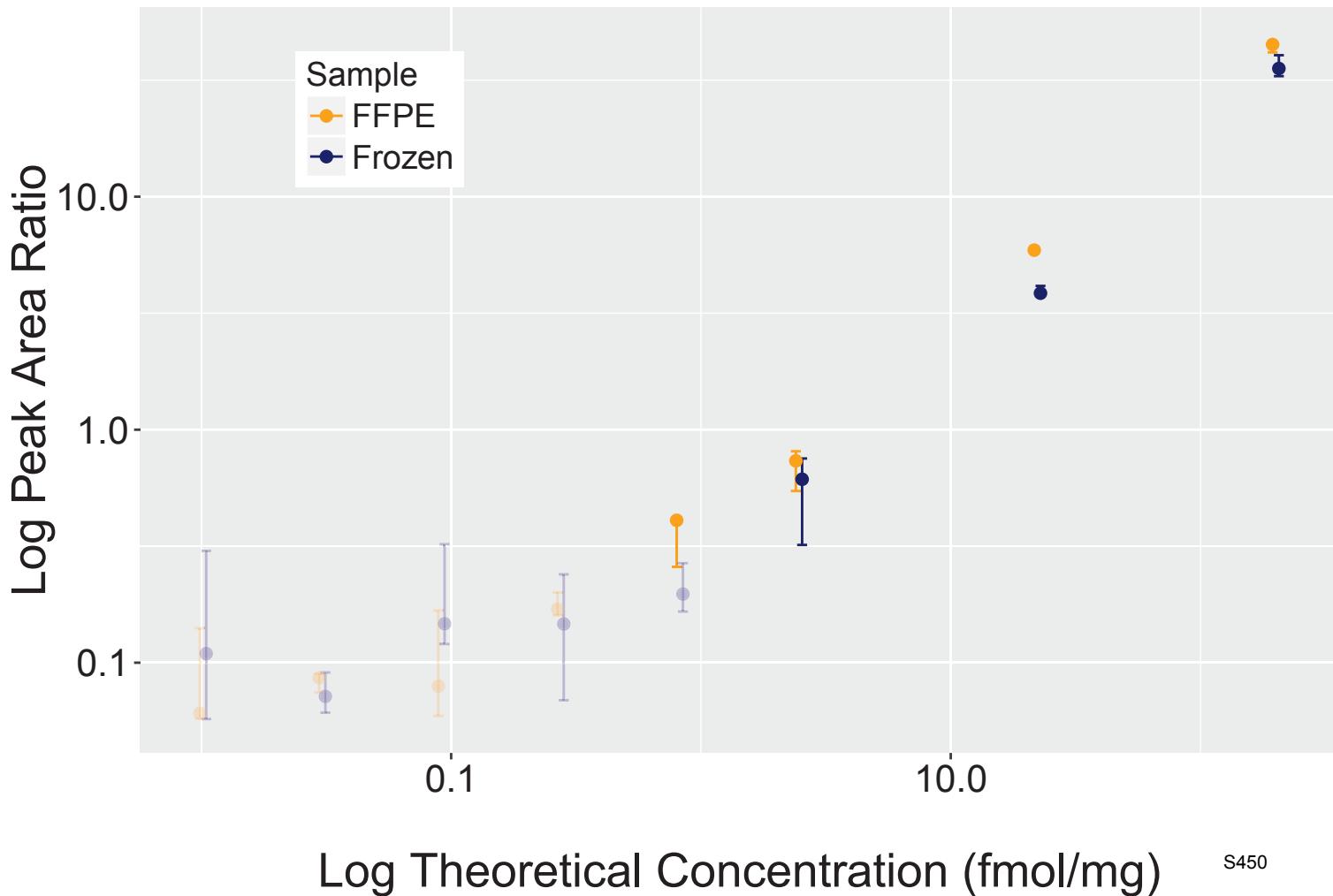


Analyte: CTSB.NGPVEGAFSVYSDFLLYK



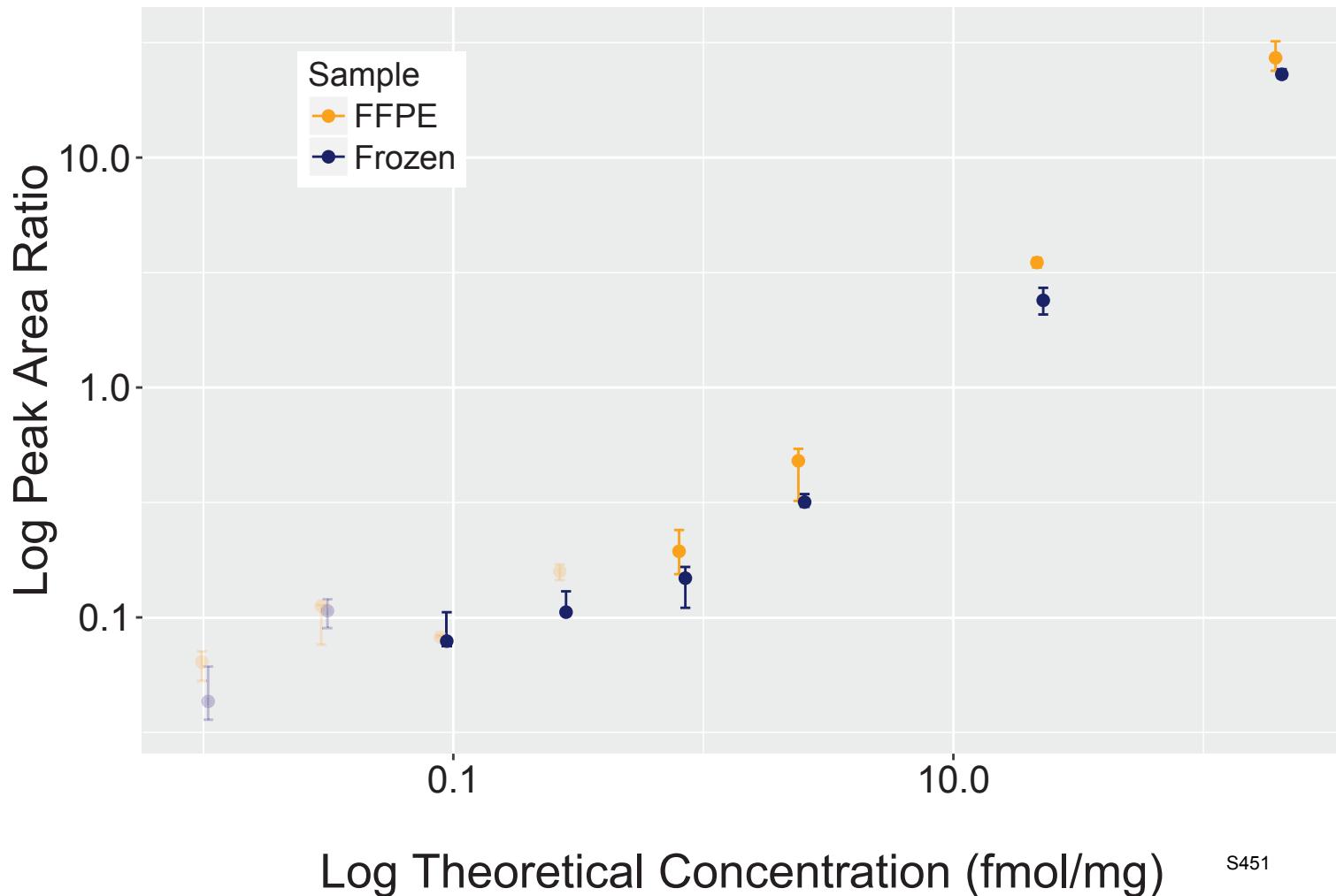
S449

Analyte: UBA1.NGSEADIDEGLYSR

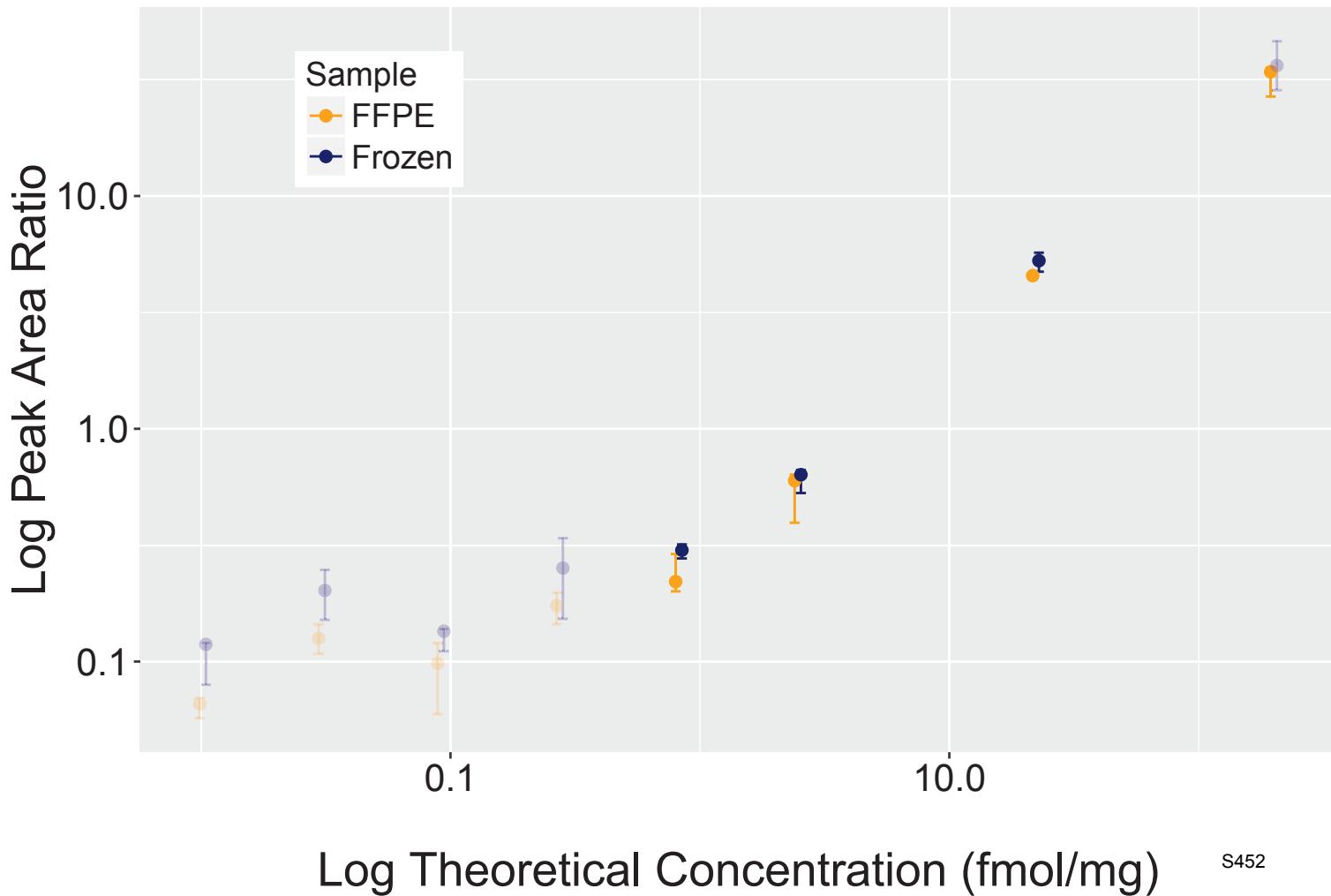


S450

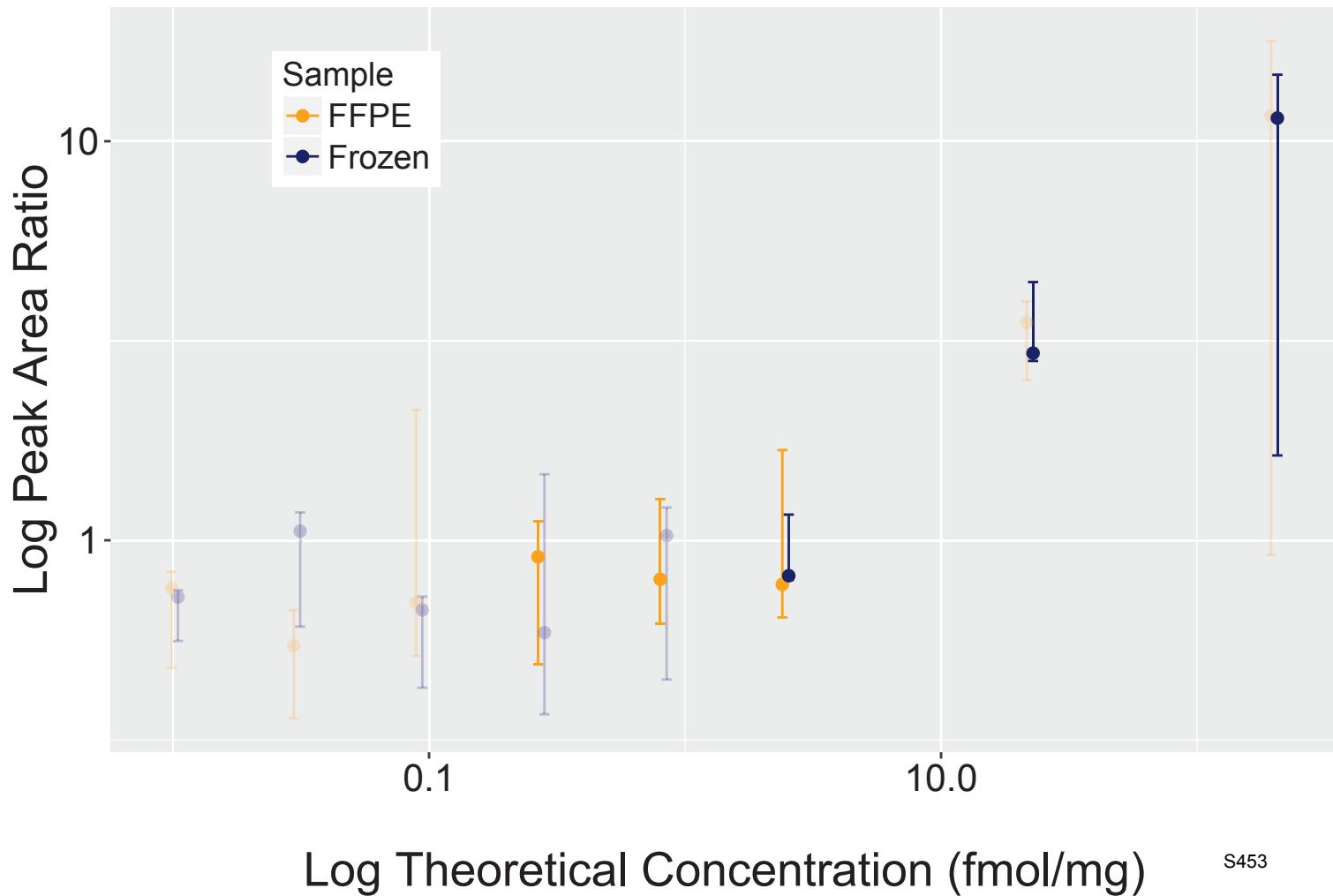
Analyte: RPN1.NIEIDSPYEISR



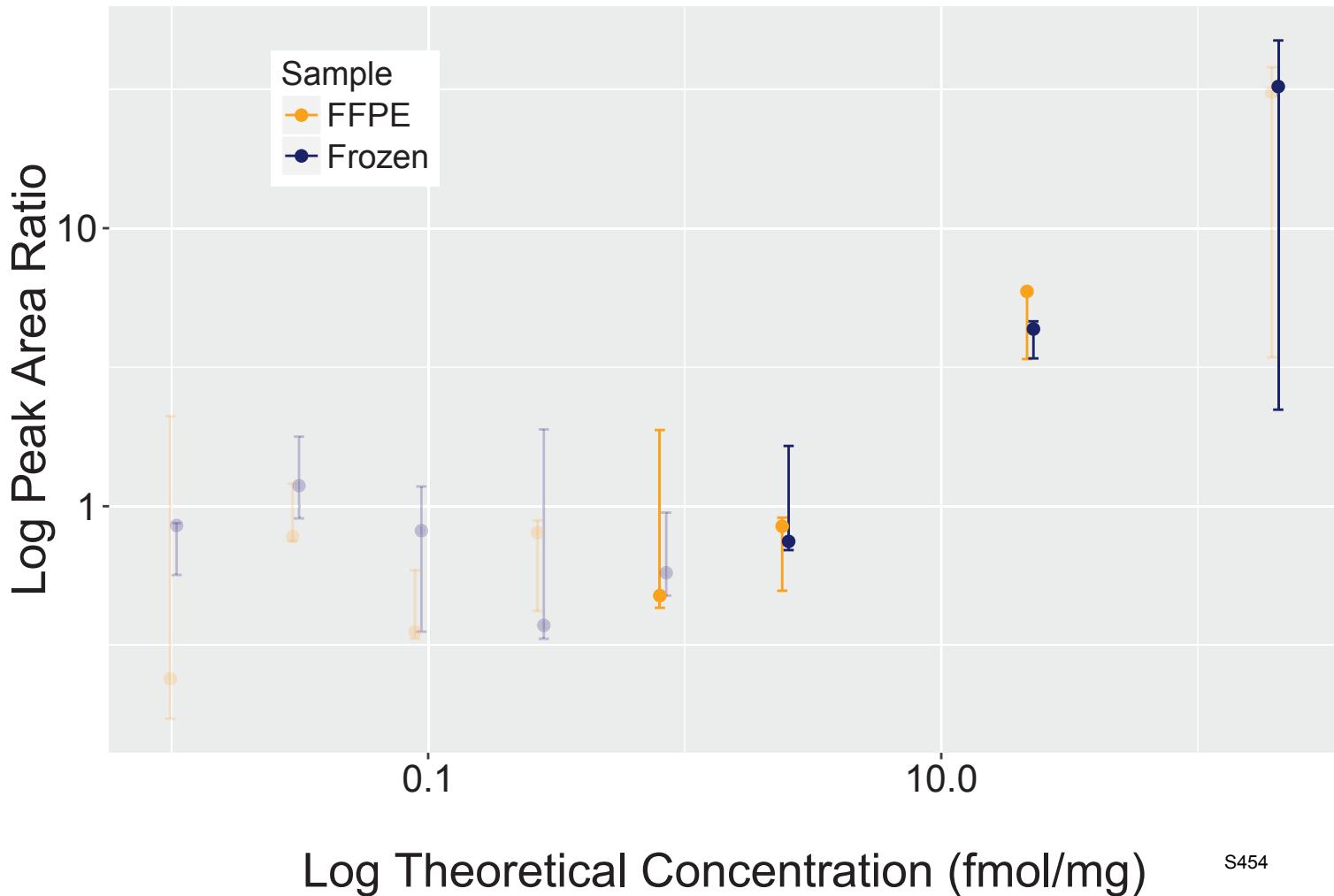
Analyte: SEC22B.NLGSINTELQDVQR



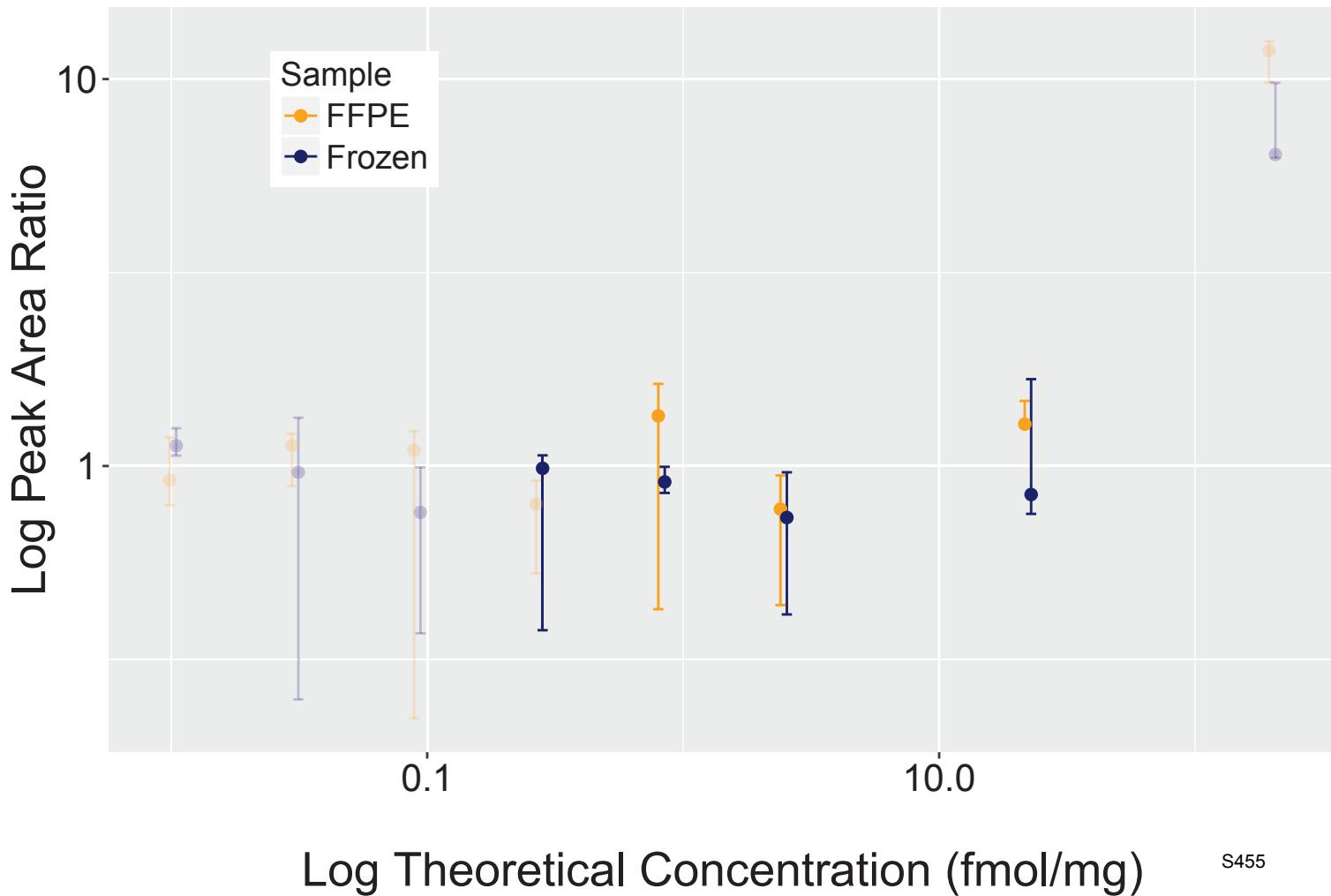
Analyte: IPO5.NLIDEDGNNQWPEGLK



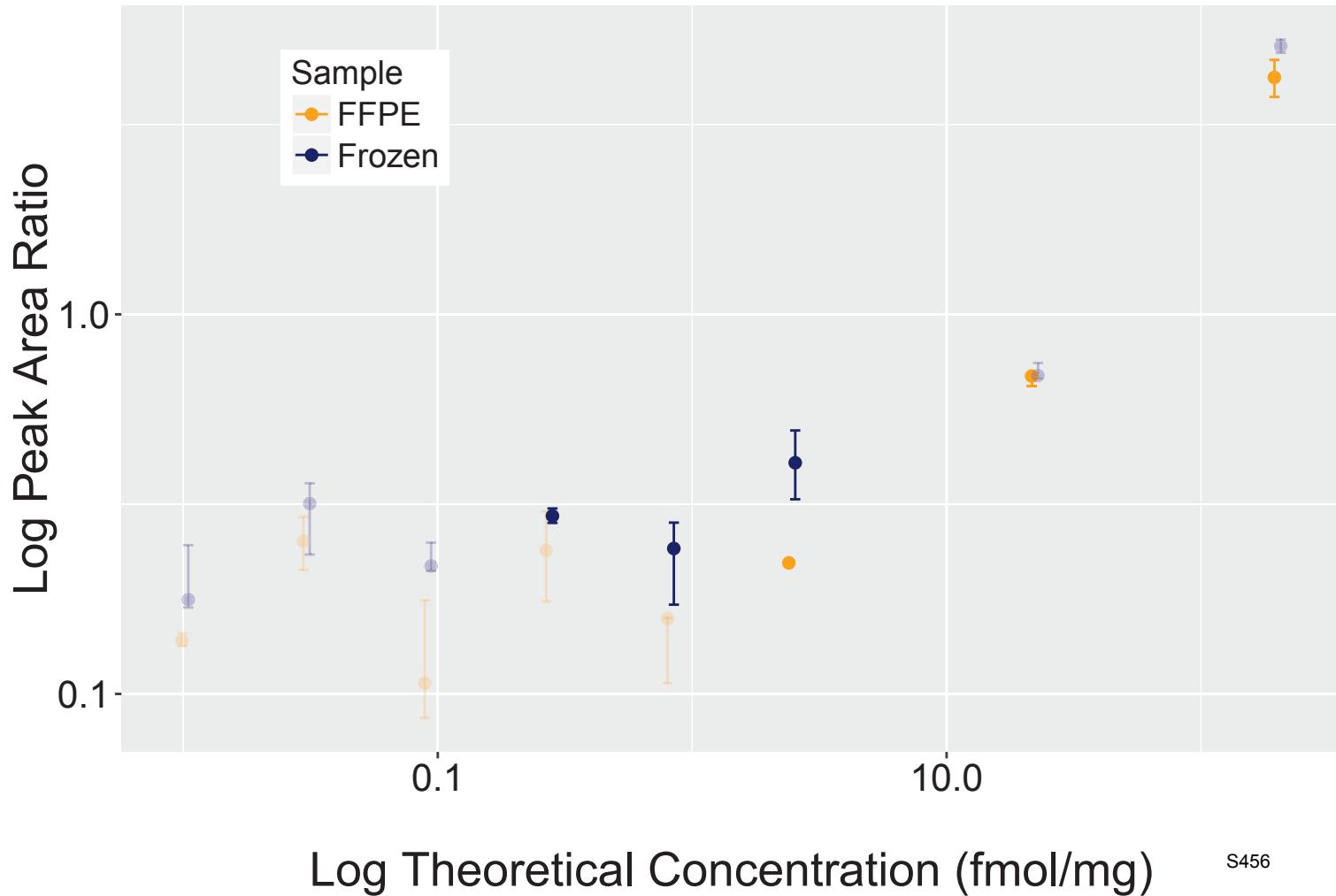
Analyte: KPNA2.NNQGTVNWSVDDIVK



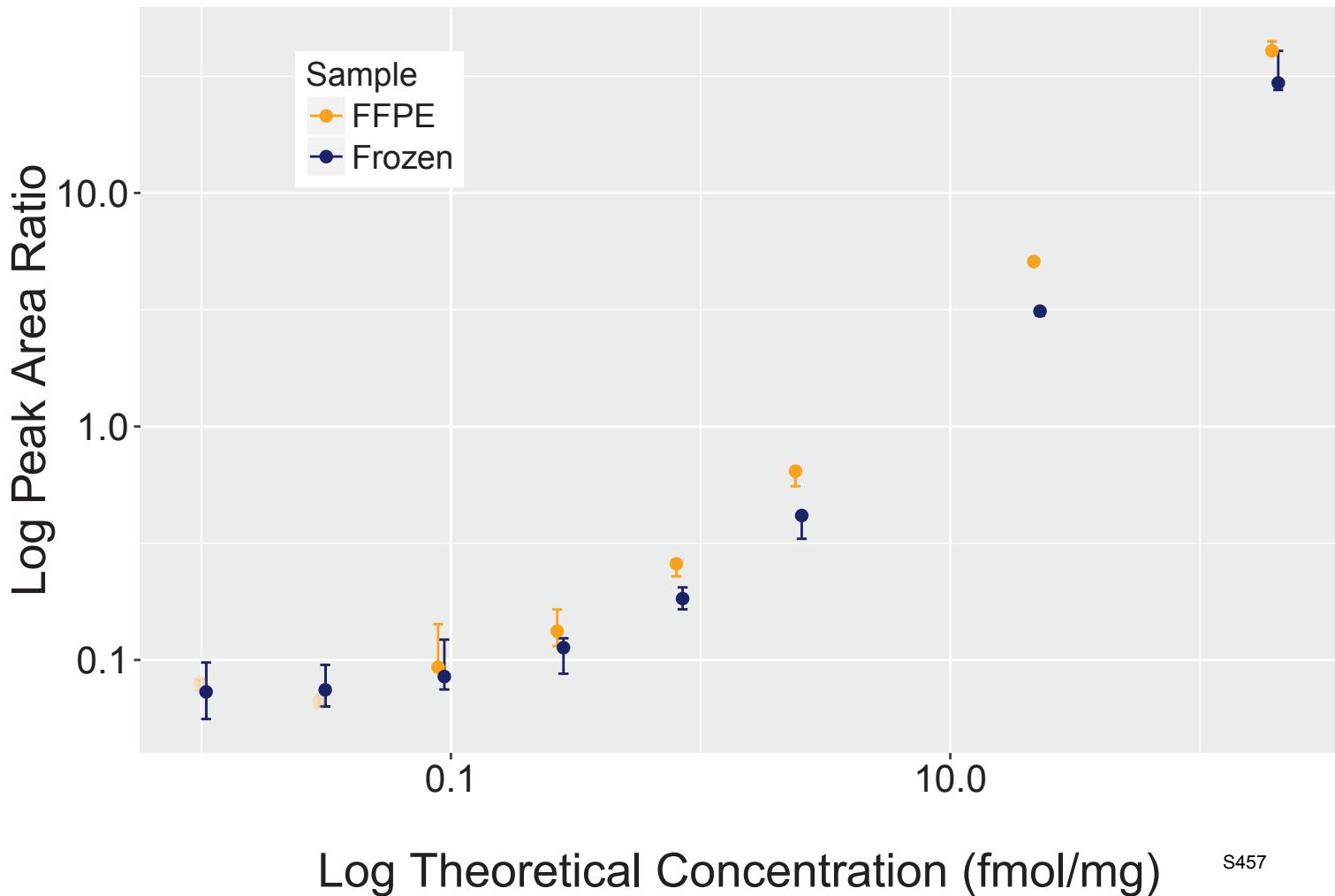
Analyte: PGD.NPELQNL₂DDFFK



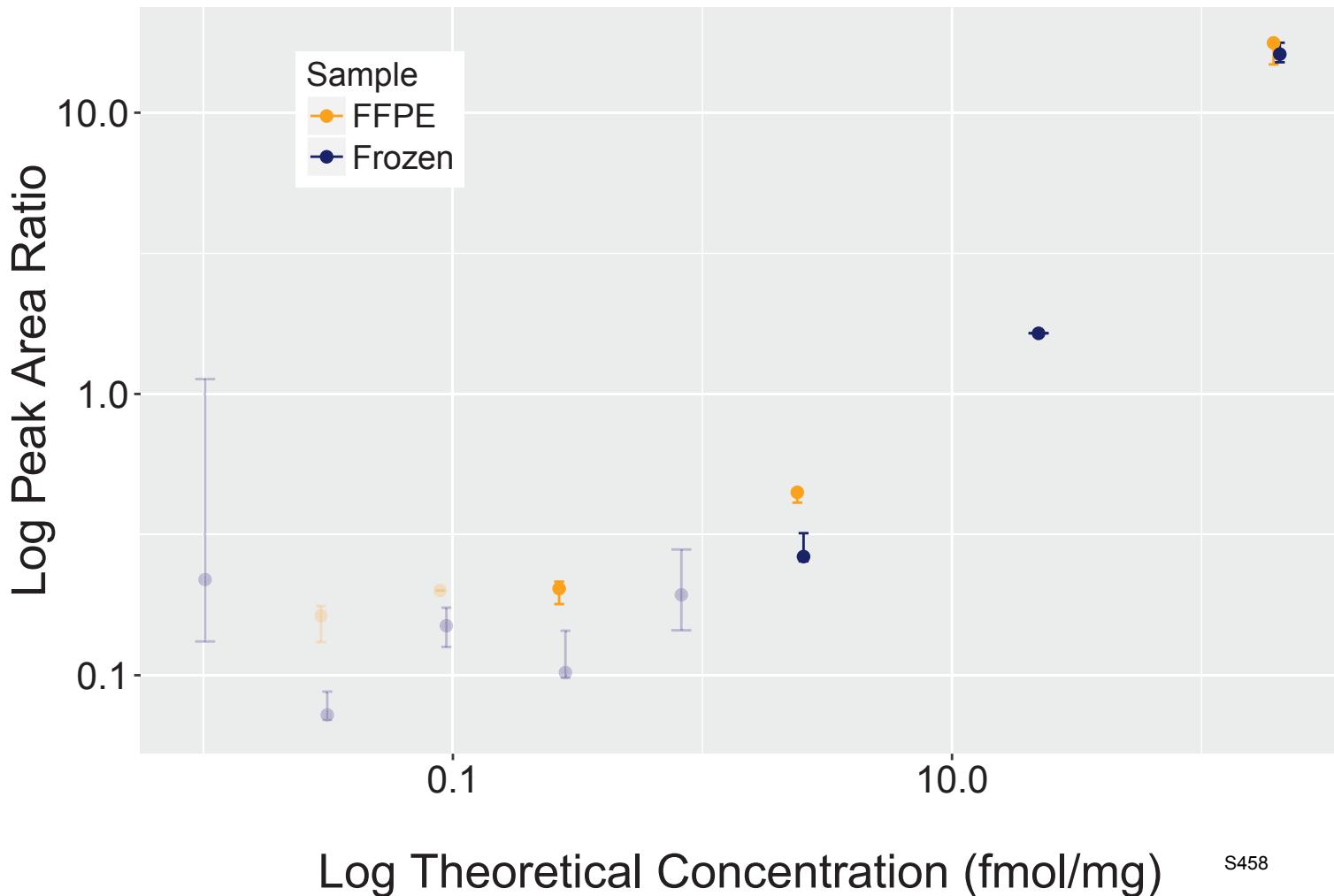
Analyte: ERBB2.NPQLC[+57]YQDTILWK



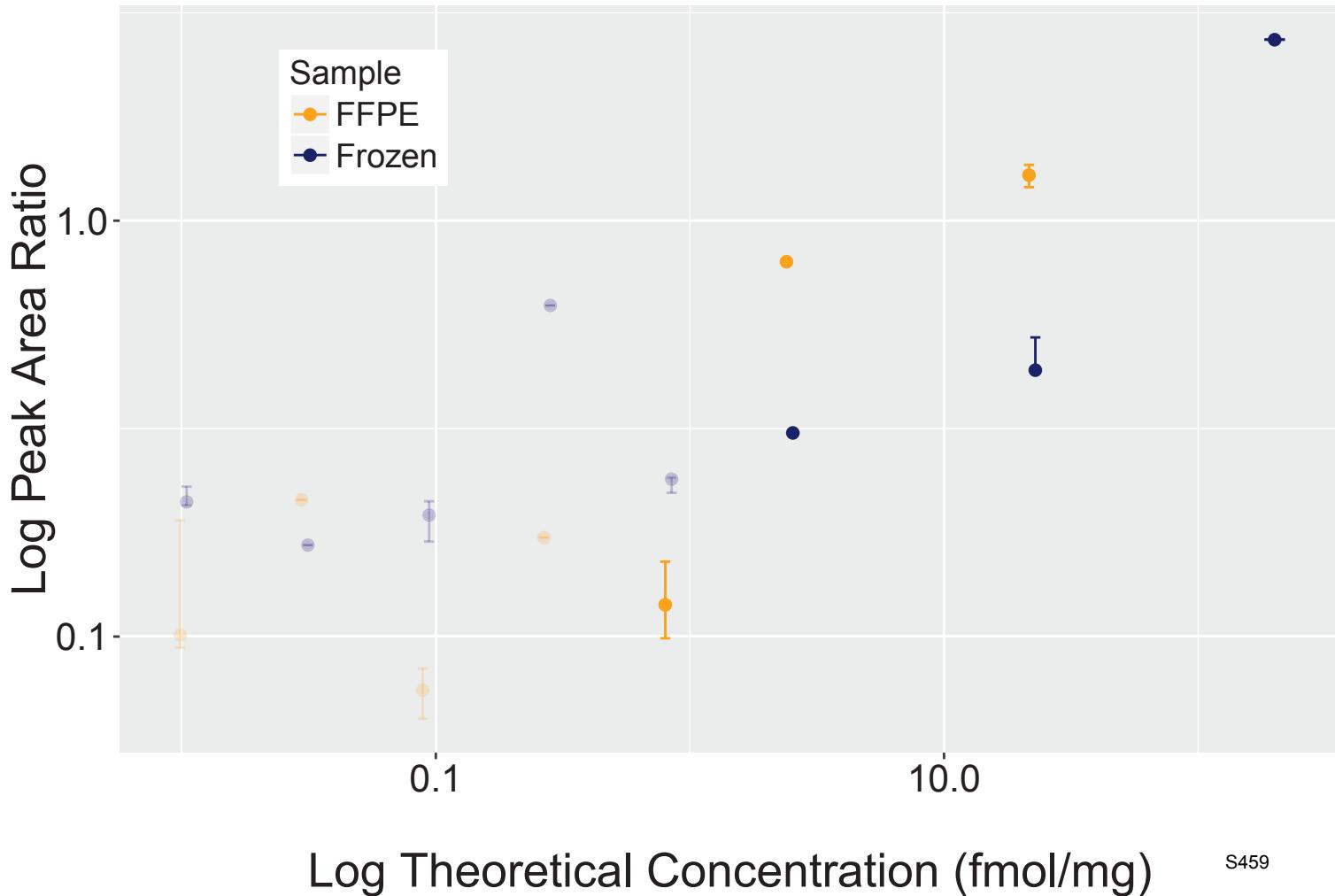
Analyte: GGCT.NPSAAFFC[+57]VAR



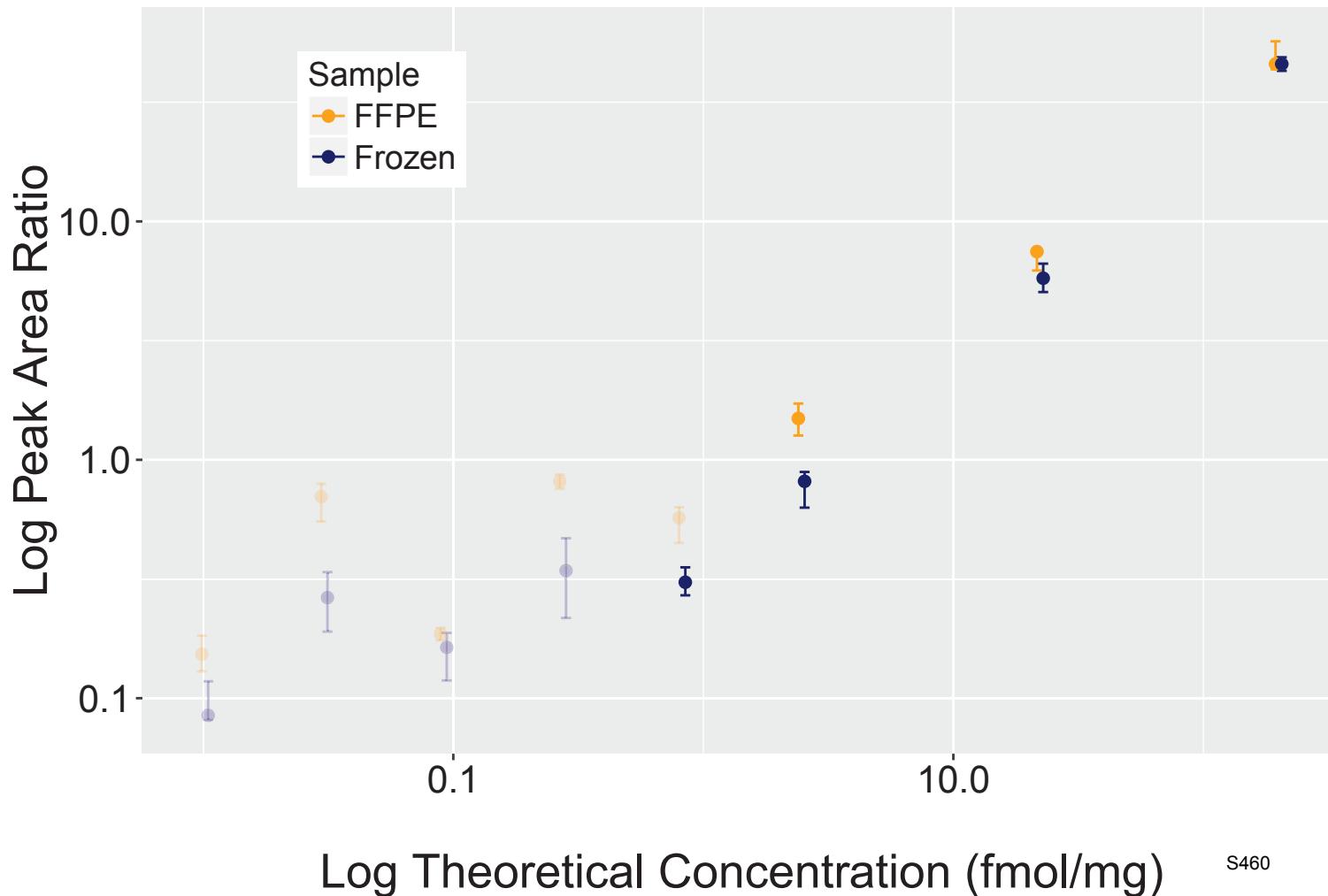
Analyte: CAPN2.NPWGEVEWTGR



Analyte: PEBP1.NRPTSIDWDGLDSGK

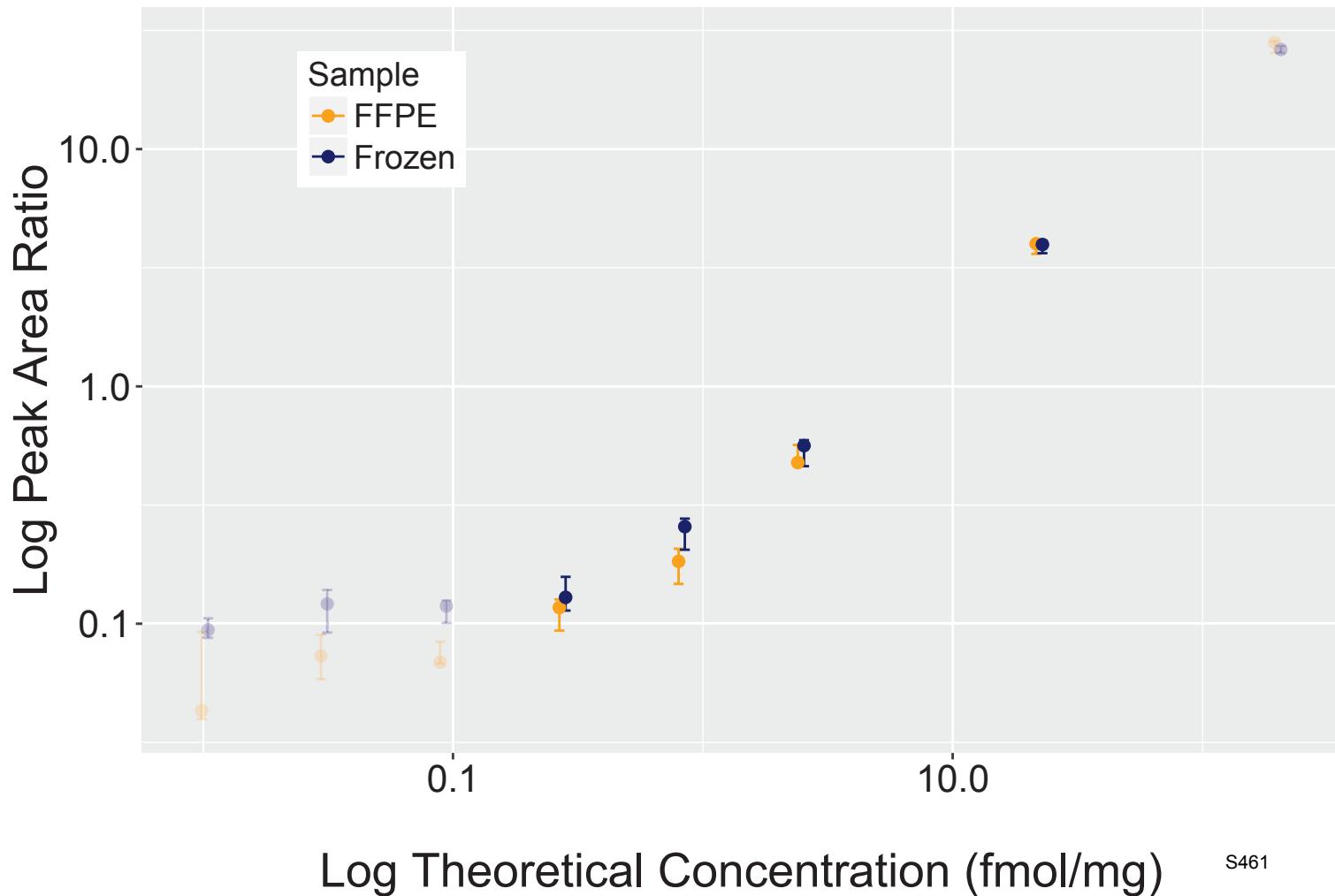


Analyte: G3BP1.NSSYVHGLDSNGKPADAVYGQK

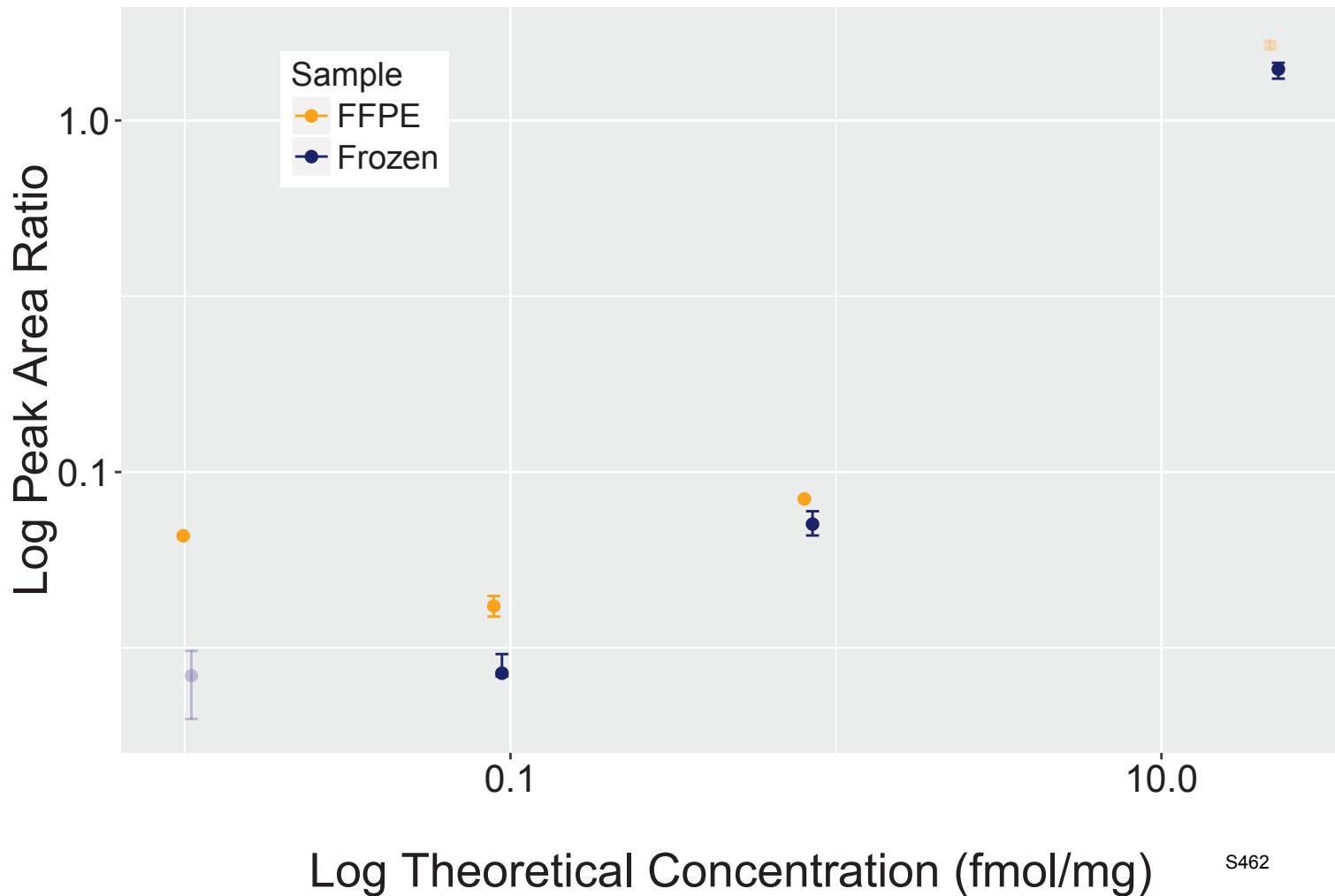


S460

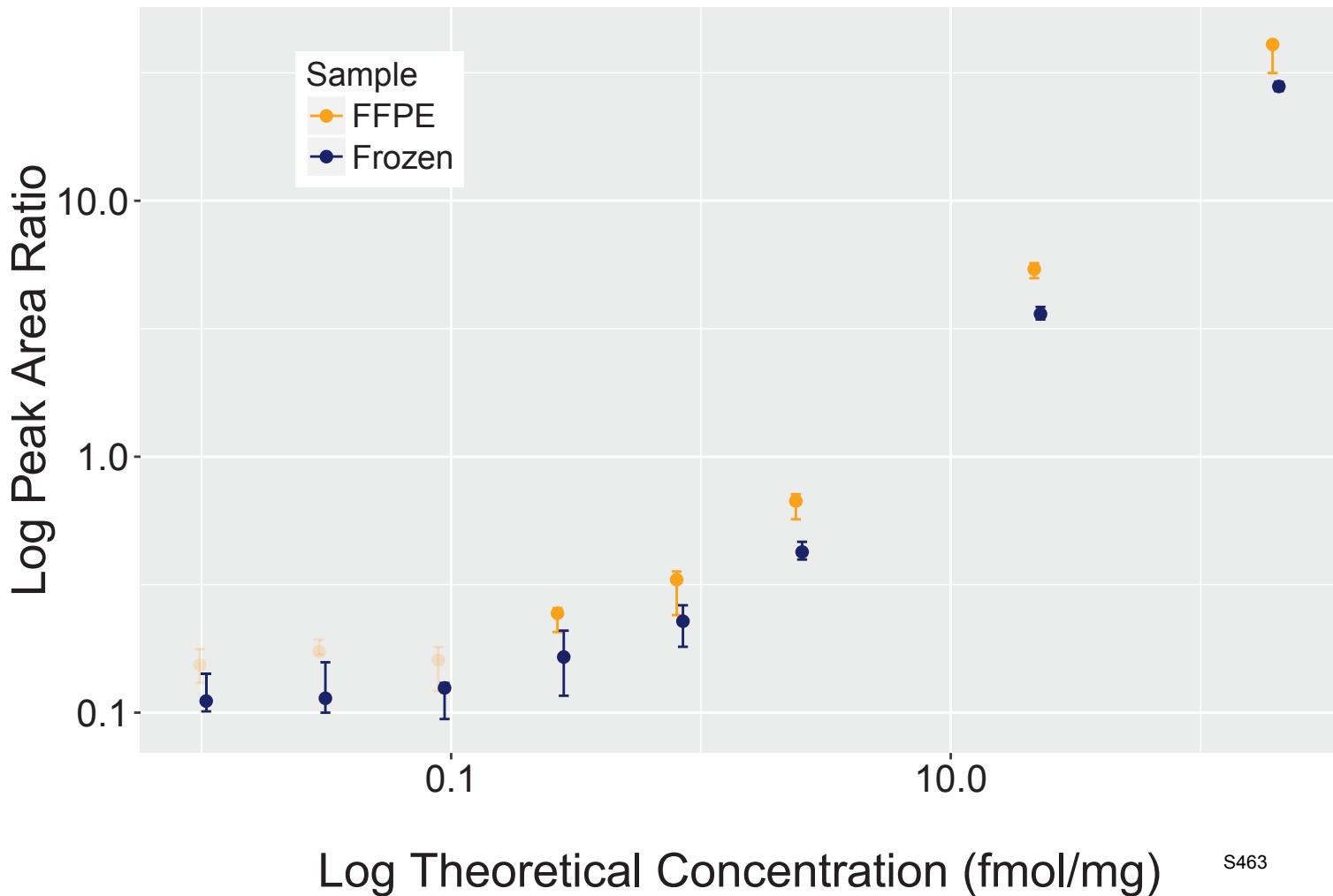
Analyte: TOM1L1.NSTVTLVPEQIGK



Analyte: CTSZ.NSWGEPWGER

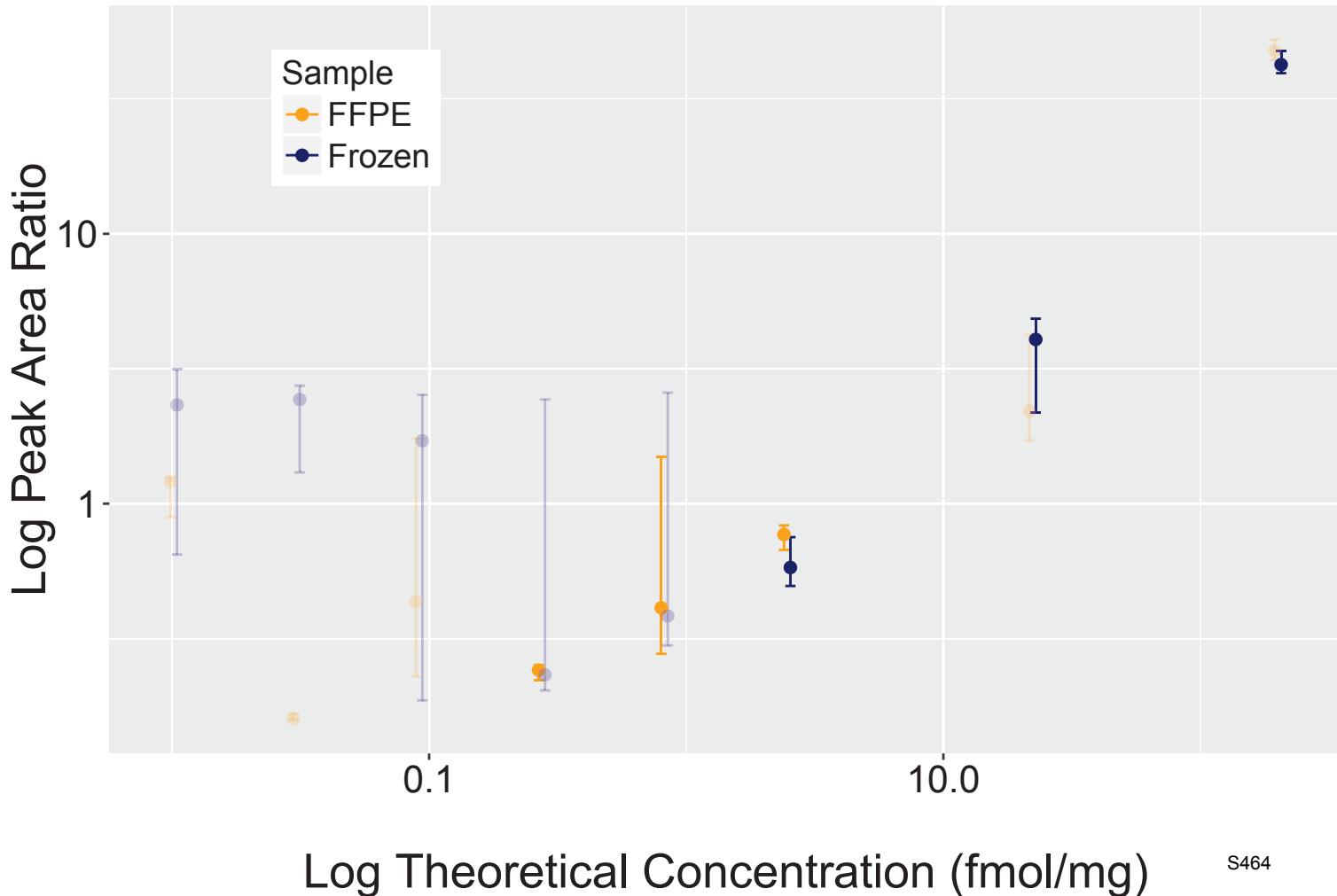


Analyte: G6PD.NSYVAGQYDDAASYQR

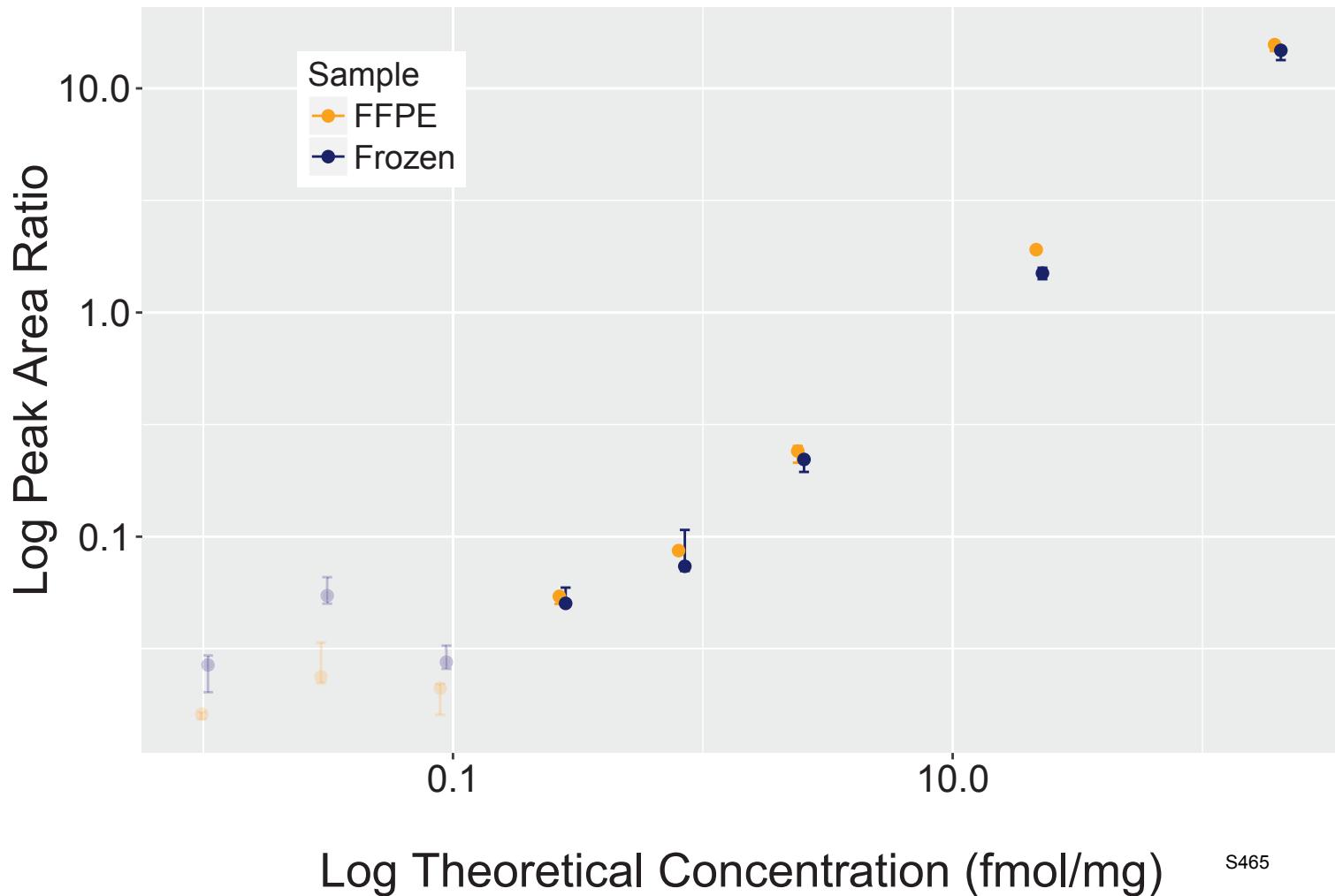


S463

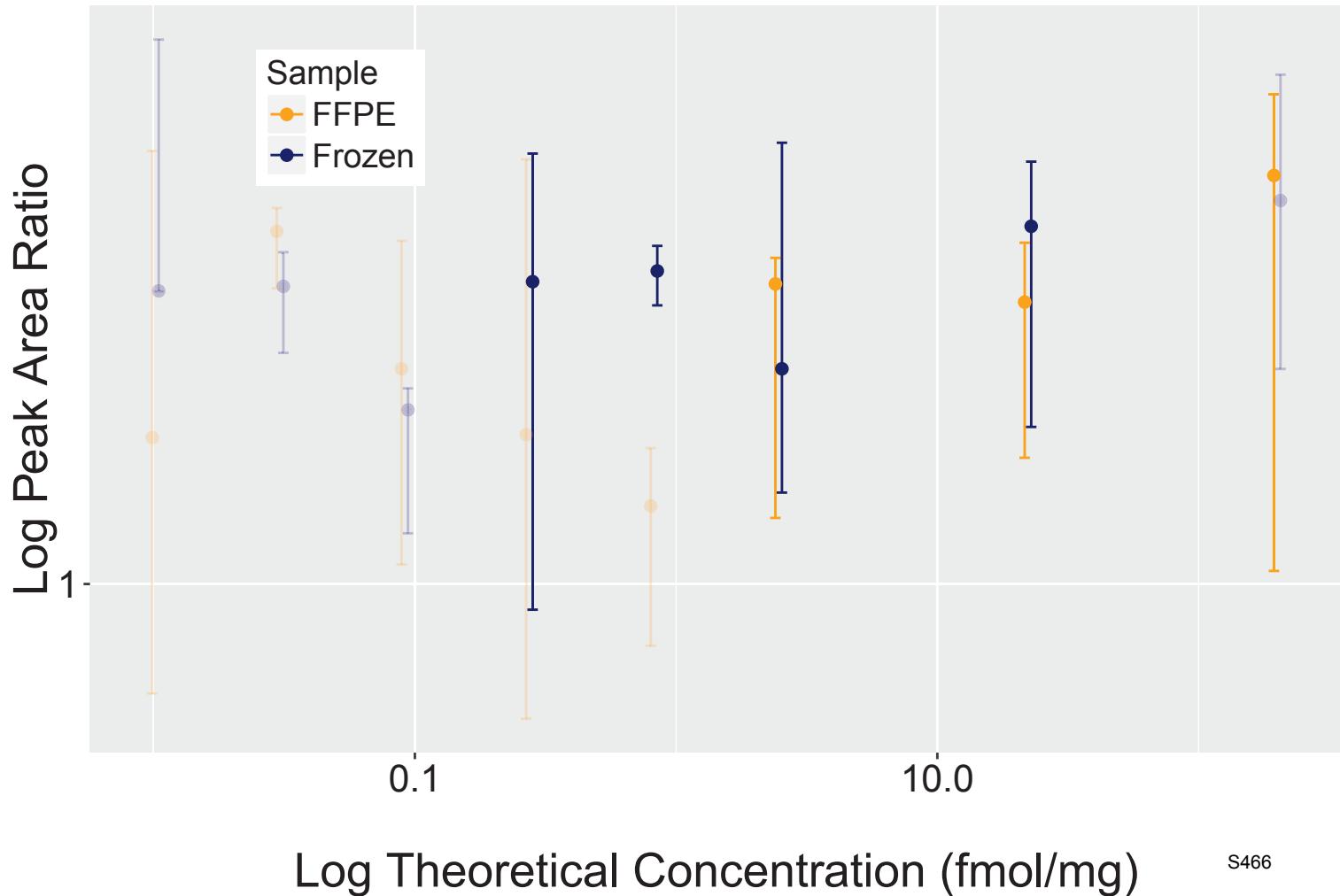
Analyte: SLC25A1.NTWDC[+57]GLQILK



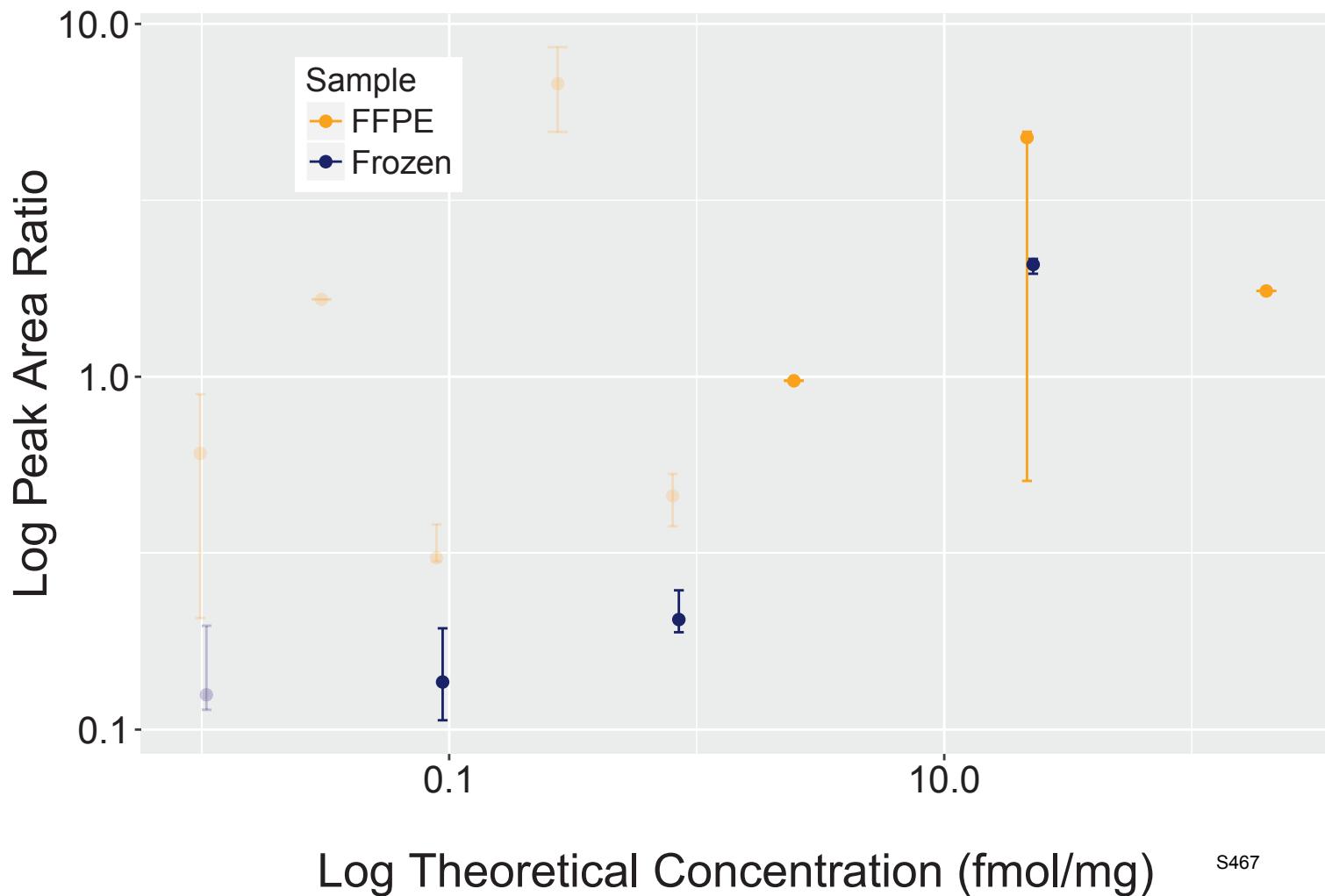
Analyte: CTSZ.NVDGVNYASITR



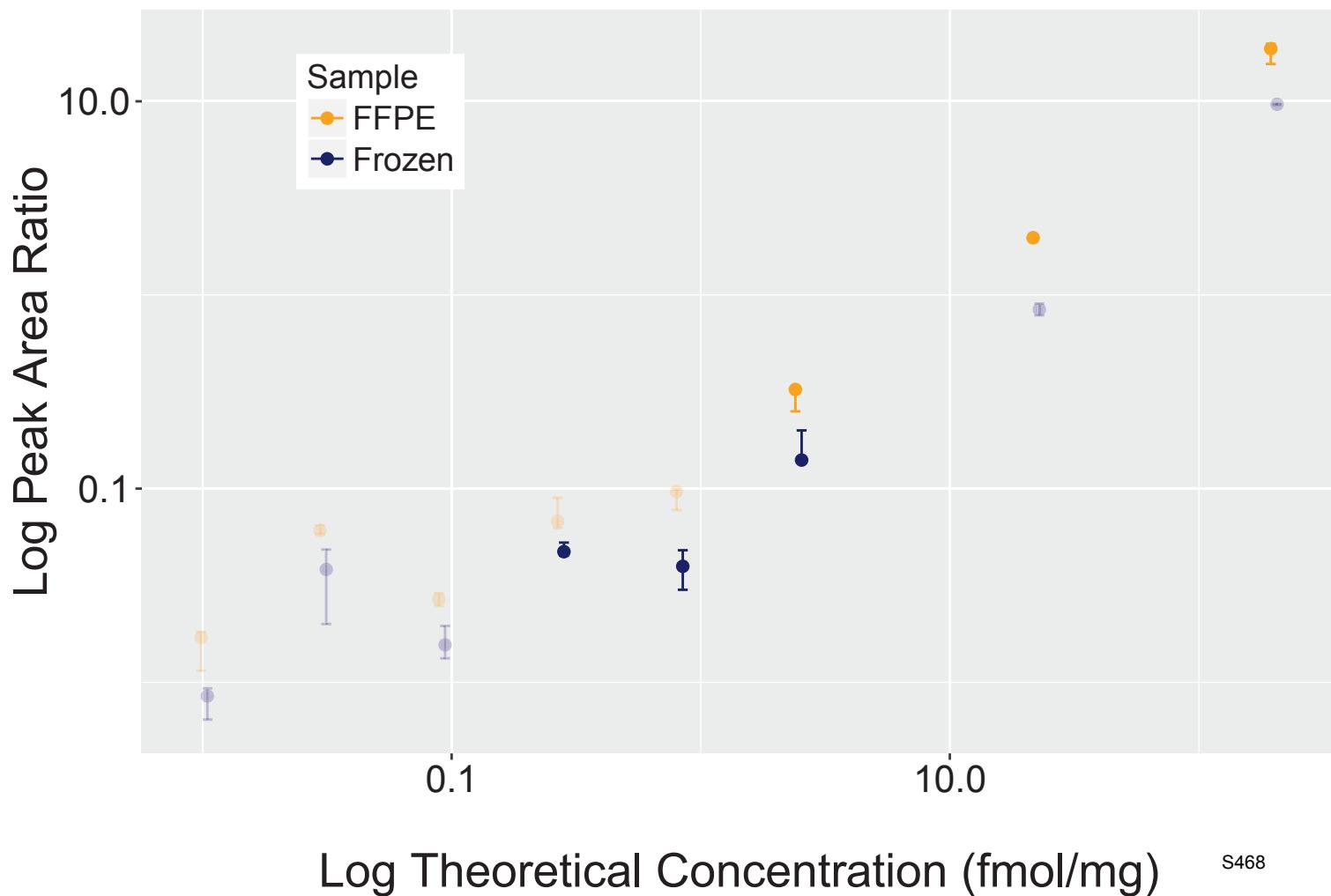
Analyte: HPRT1.NVLIVEDIIDTGK



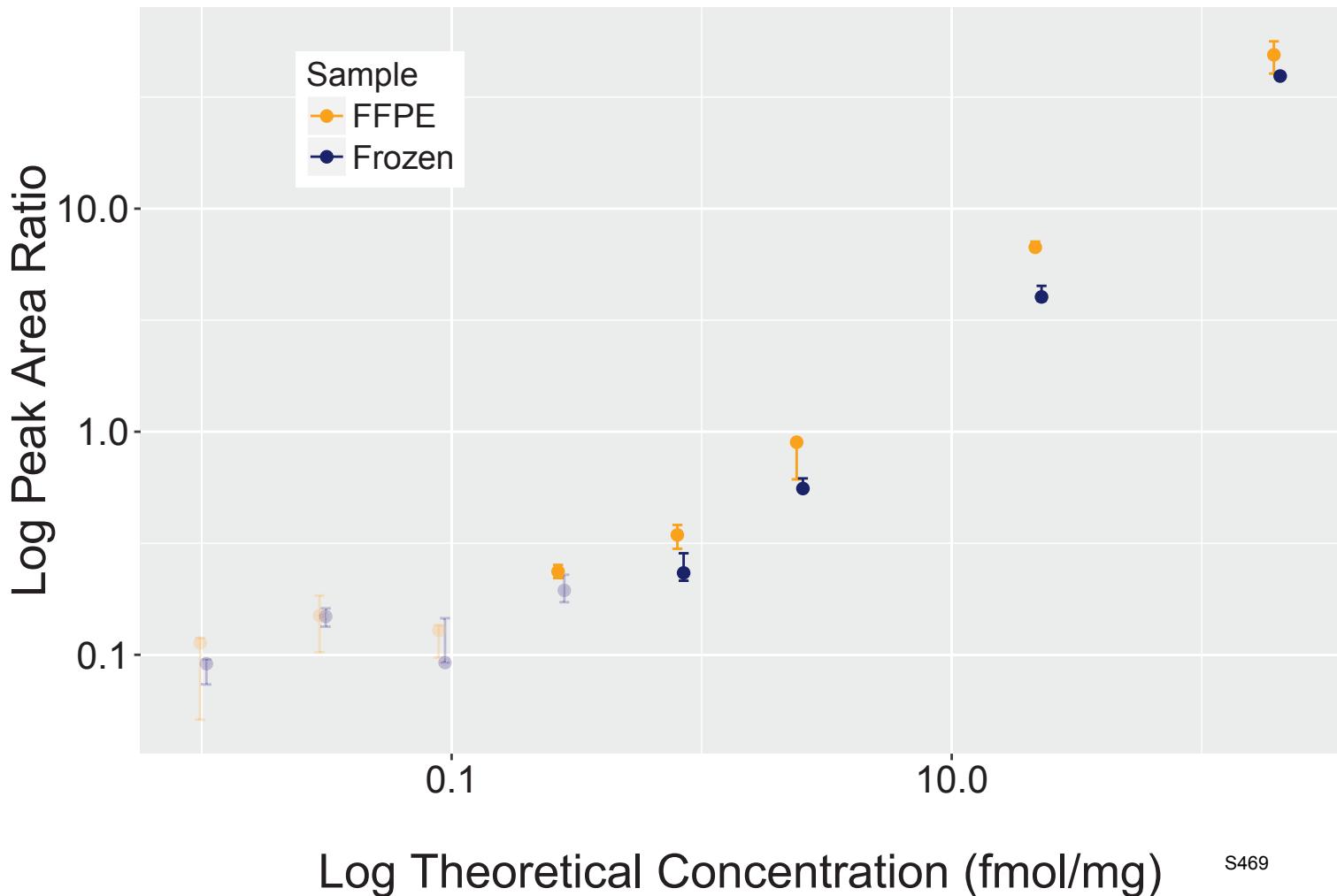
Analyte: ACTN4.NVNVQNFHISWK



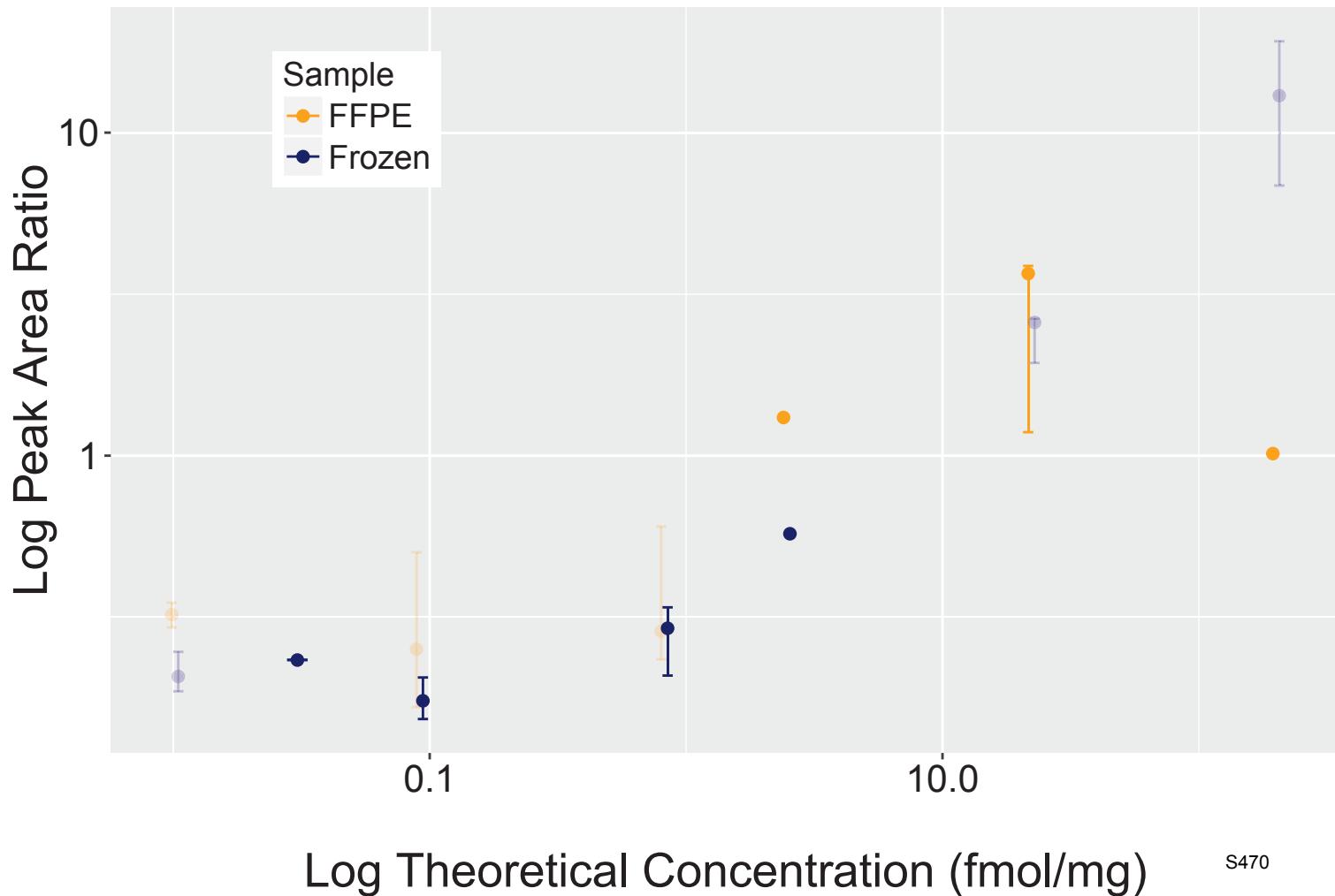
Analyte: YWHAG.NVTELNEPLSNEER



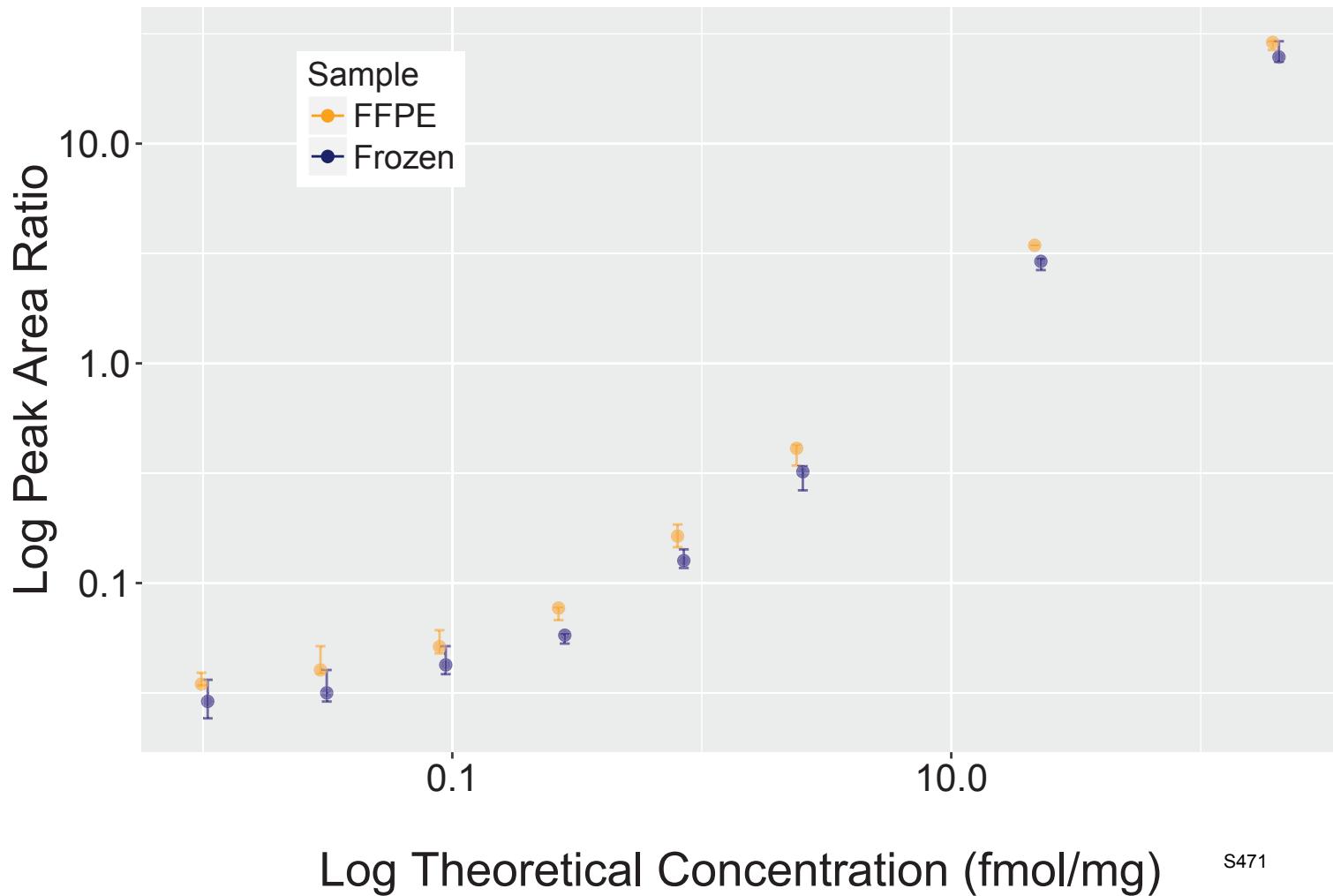
Analyte: MUC1.NYGQLDIFPAR



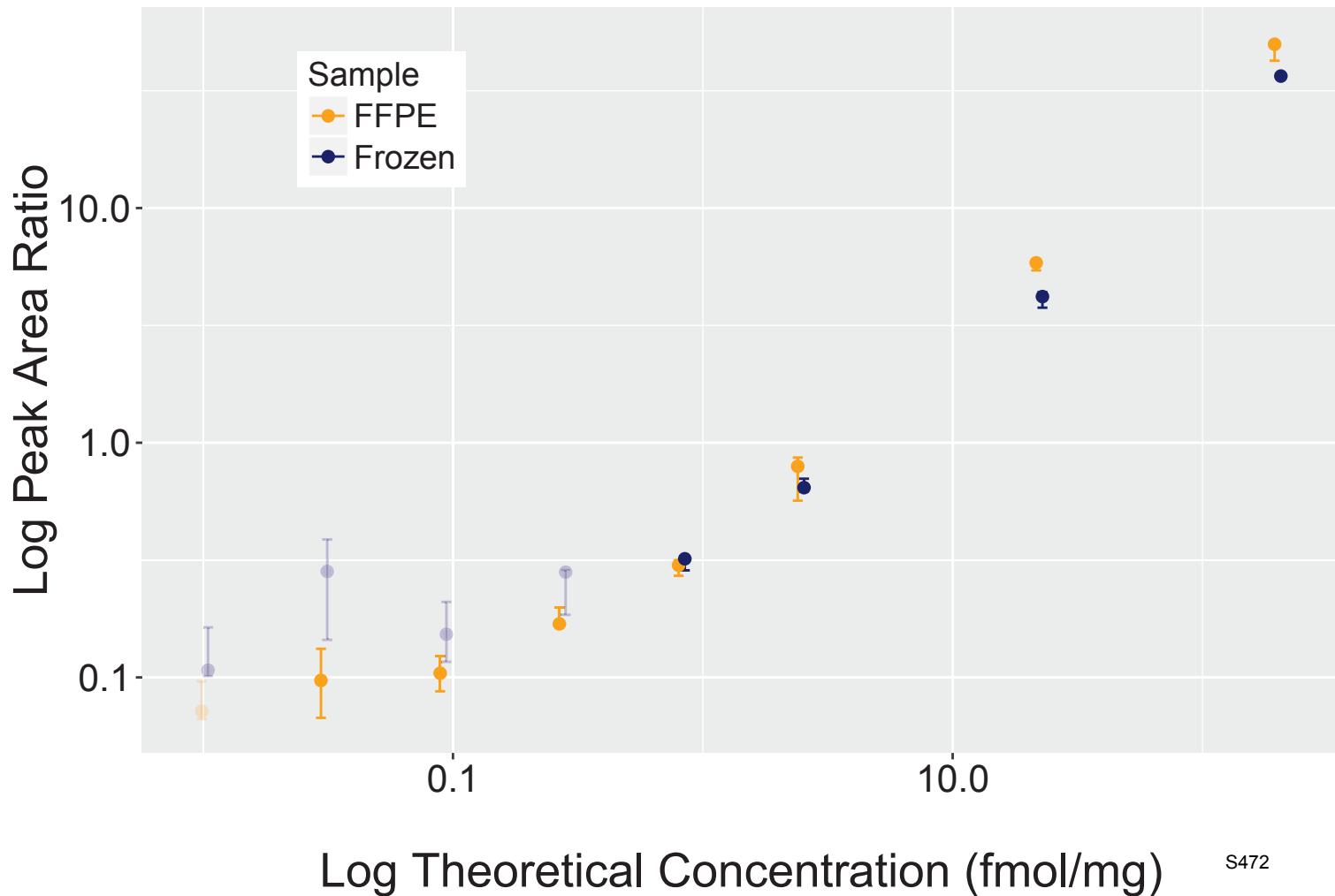
Analyte: CAPN1.NYPATFWVNPQFK



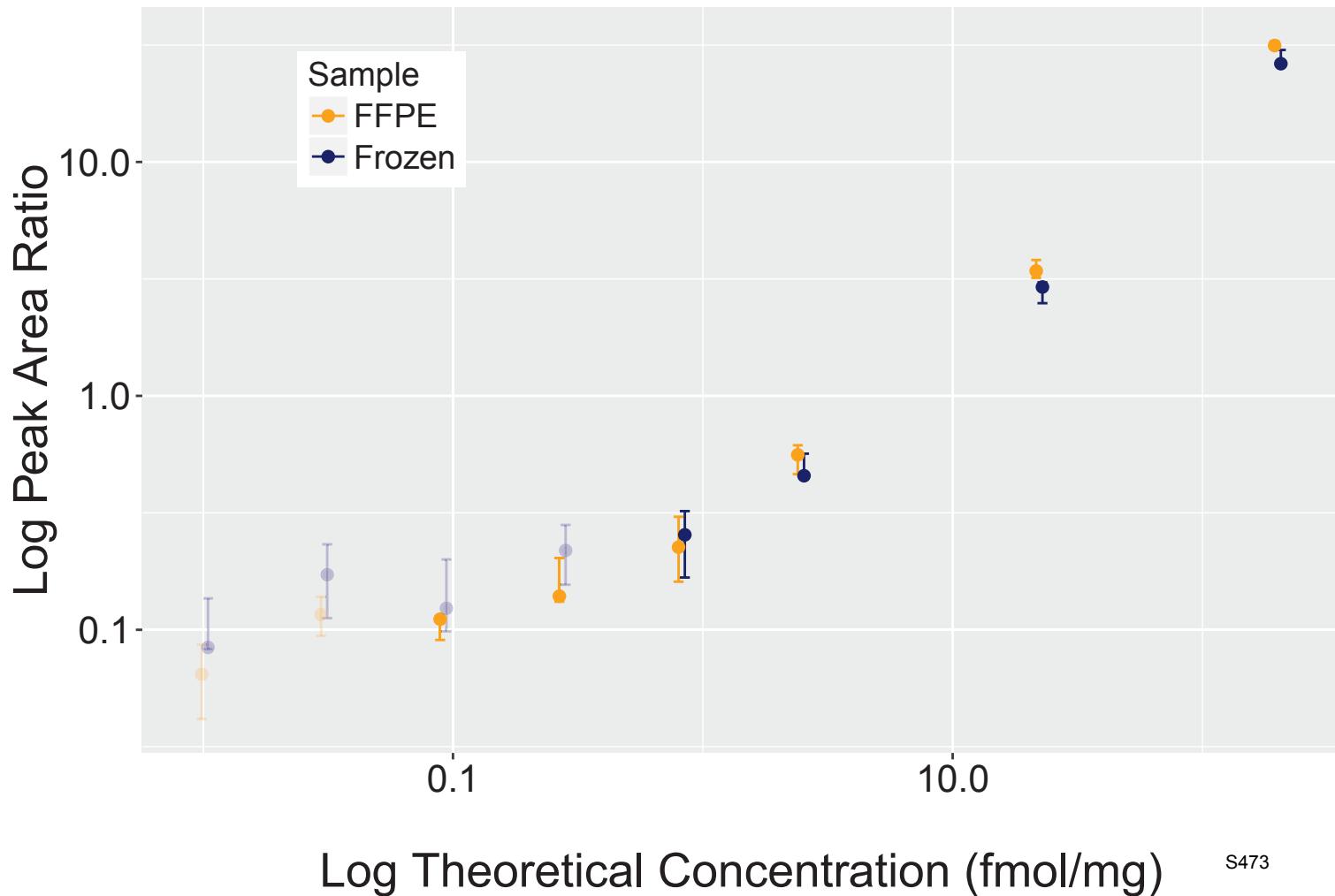
Analyte: USP5.SAADSISESPVGPK



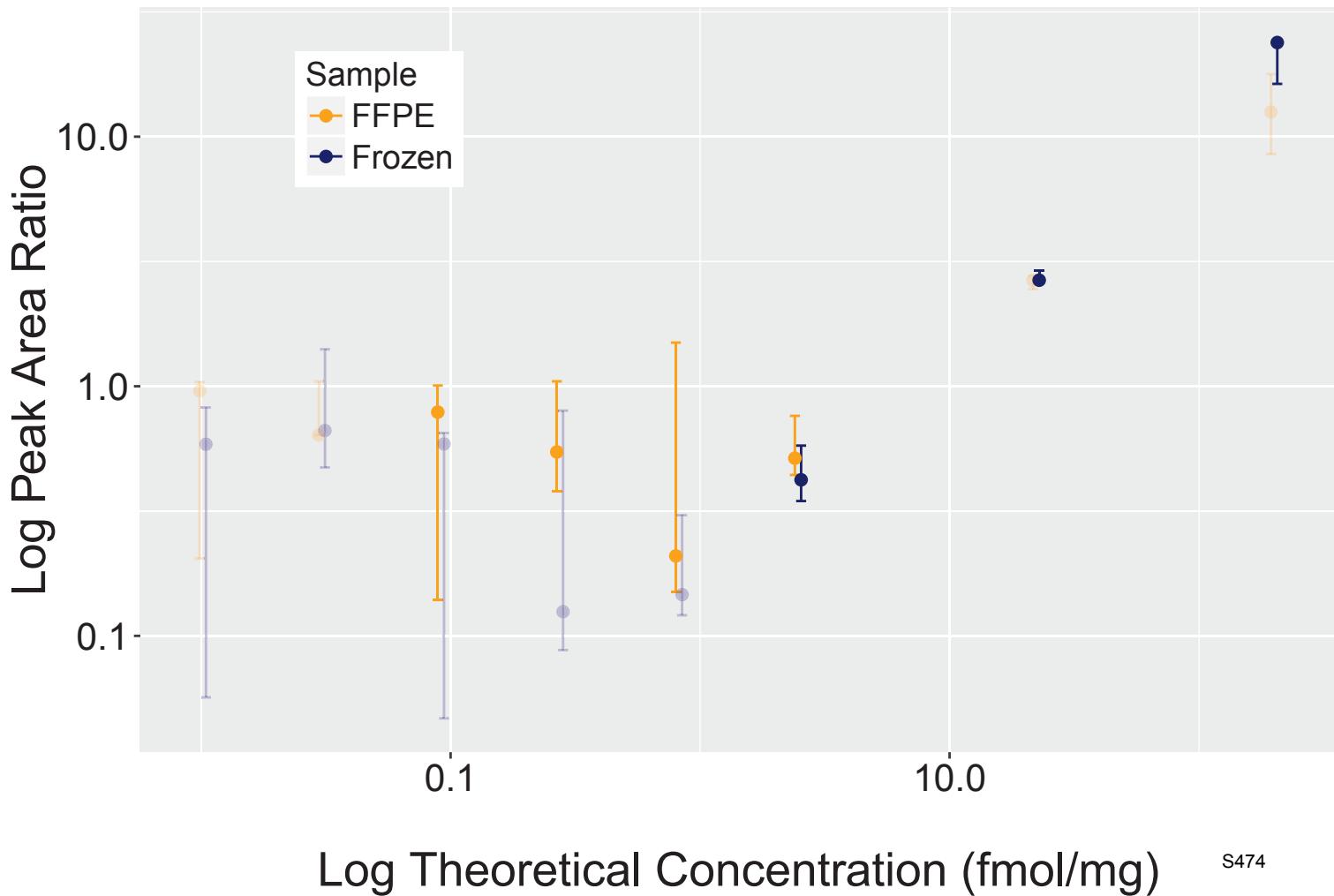
Analyte: CA2.SADFTNFDPR



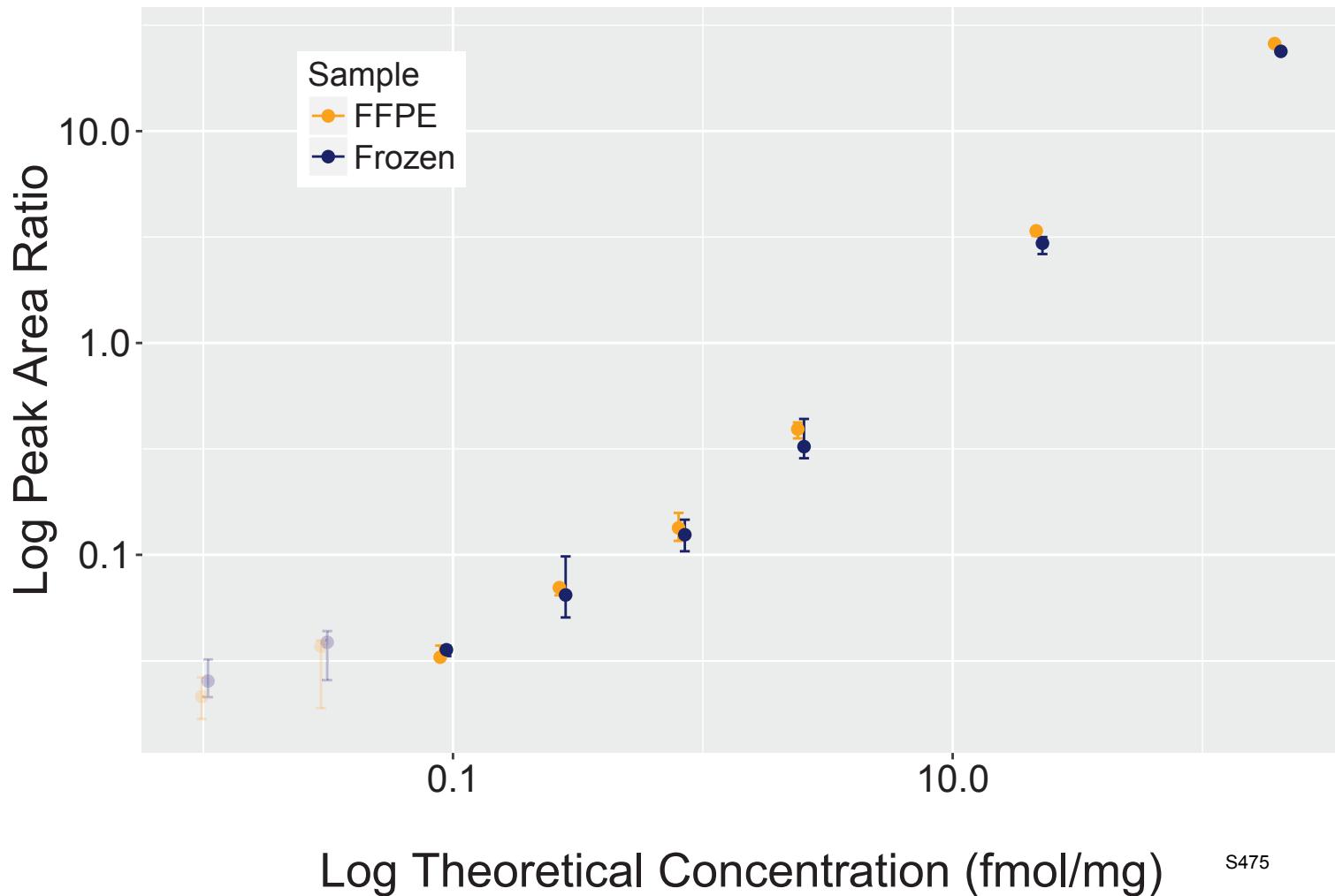
Analyte: KIF5B.SATLASIDAEELQK



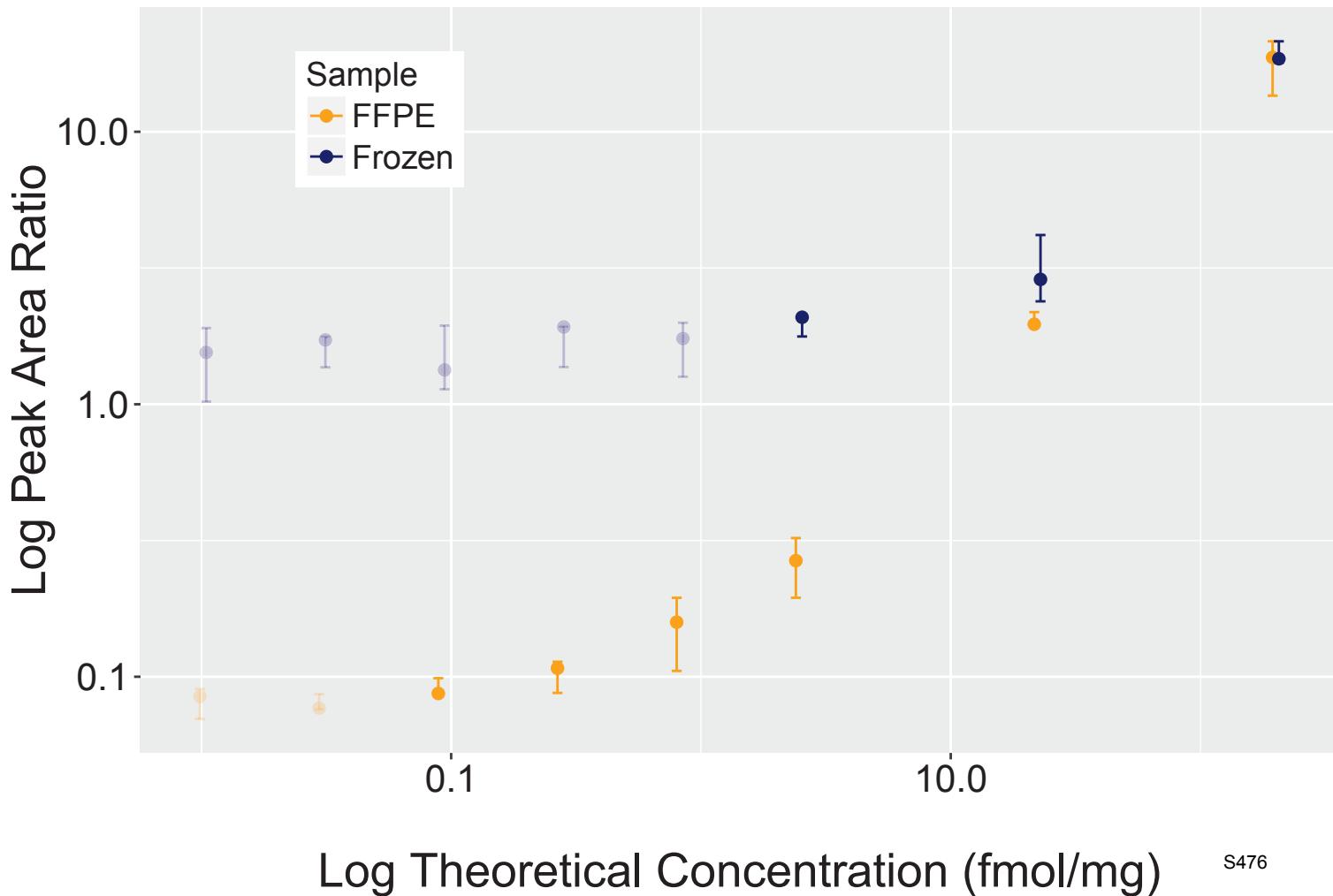
Analyte: XPO5.SC[+57]DPGLEDPC[+57]GLNR



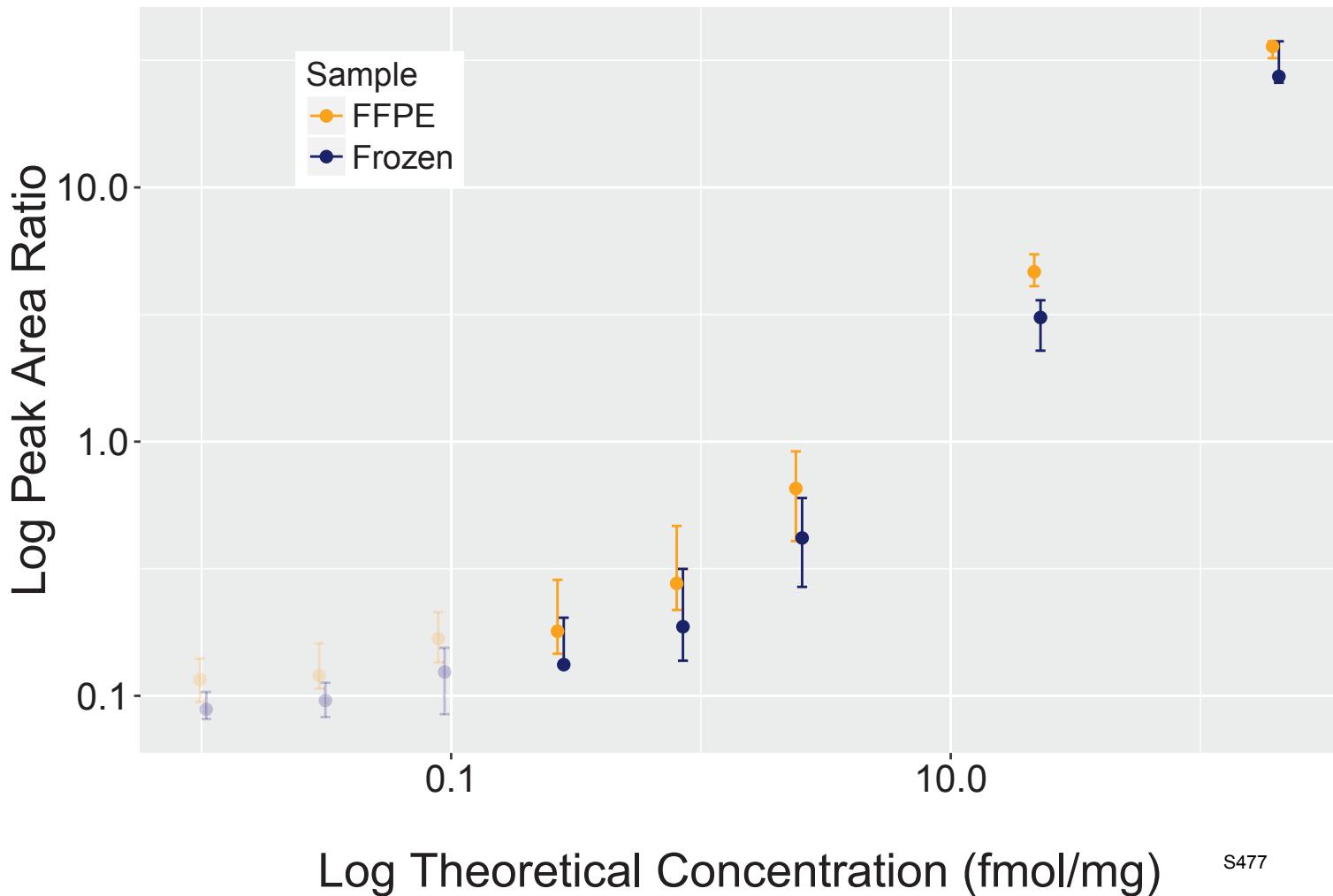
Analyte: ISYNA1.SC[+57]IENILR



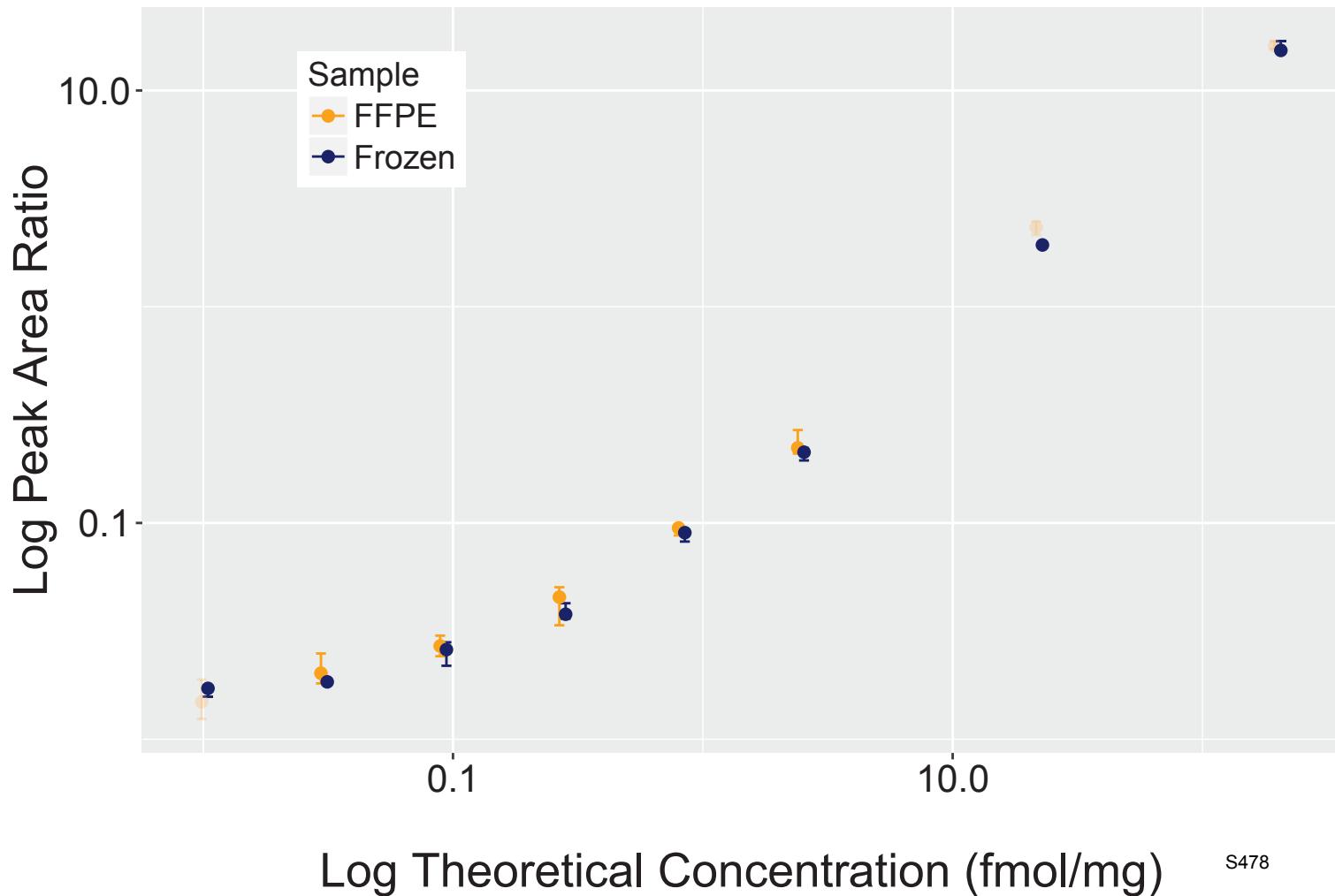
Analyte: LGALS3BP.SDLAVPSELALLK



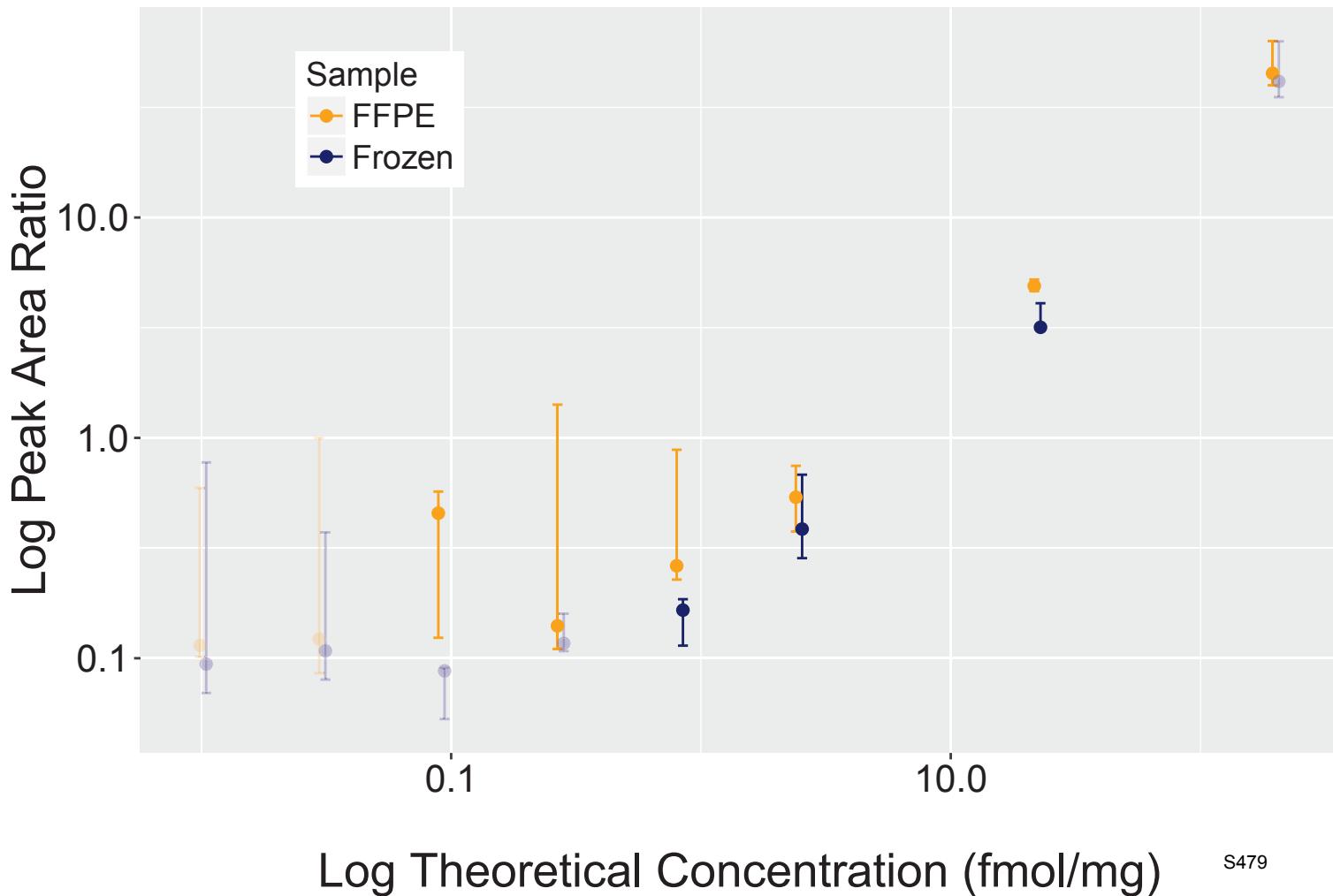
Analyte: CPNE1.SDPFLEFFR



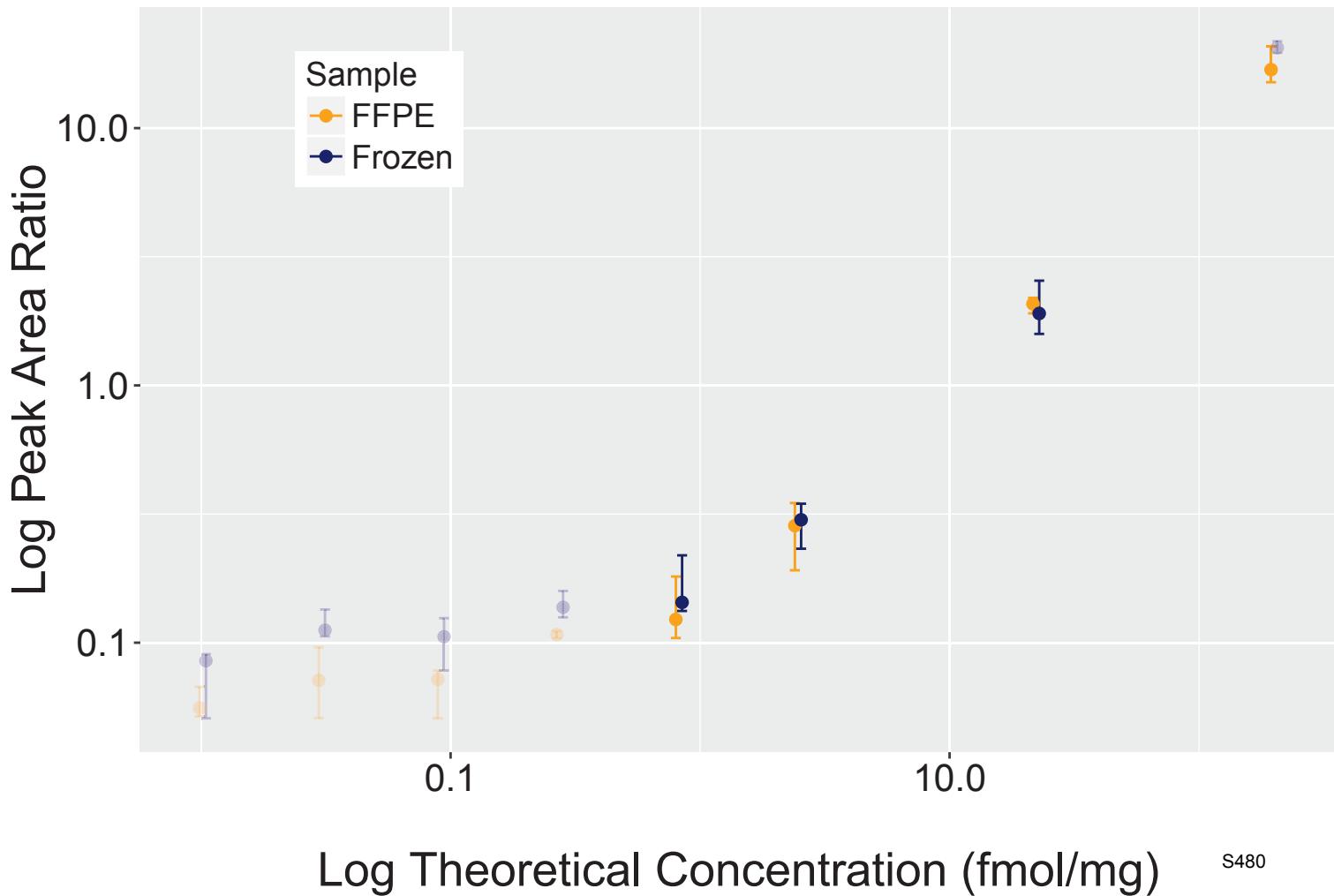
Analyte: CAPN2.SDTFINLR



Analyte: PRKCSH.SEALPTDLPAPSAPDLTEPK

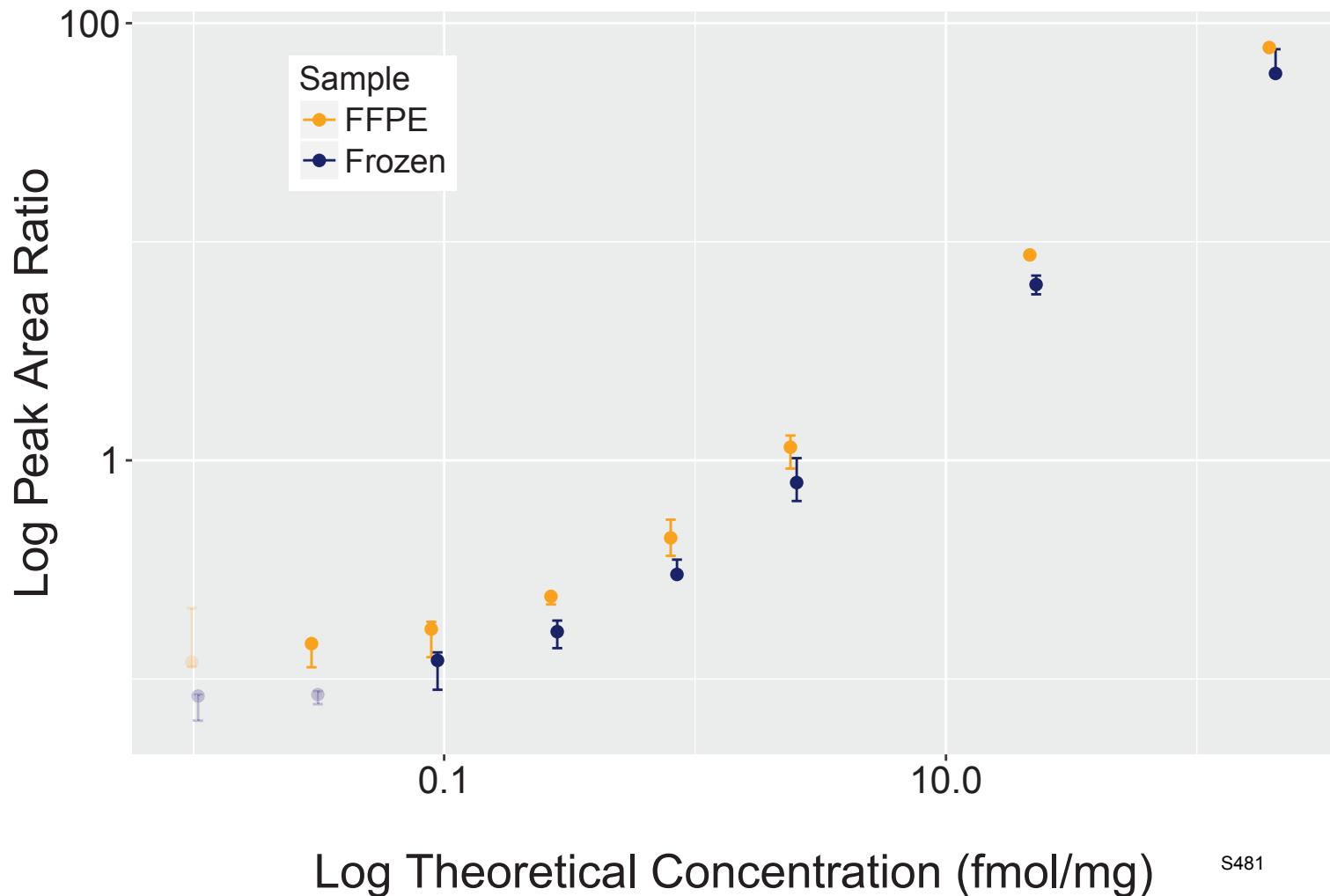


Analyte: RPN1.SEDLLDYGPFR



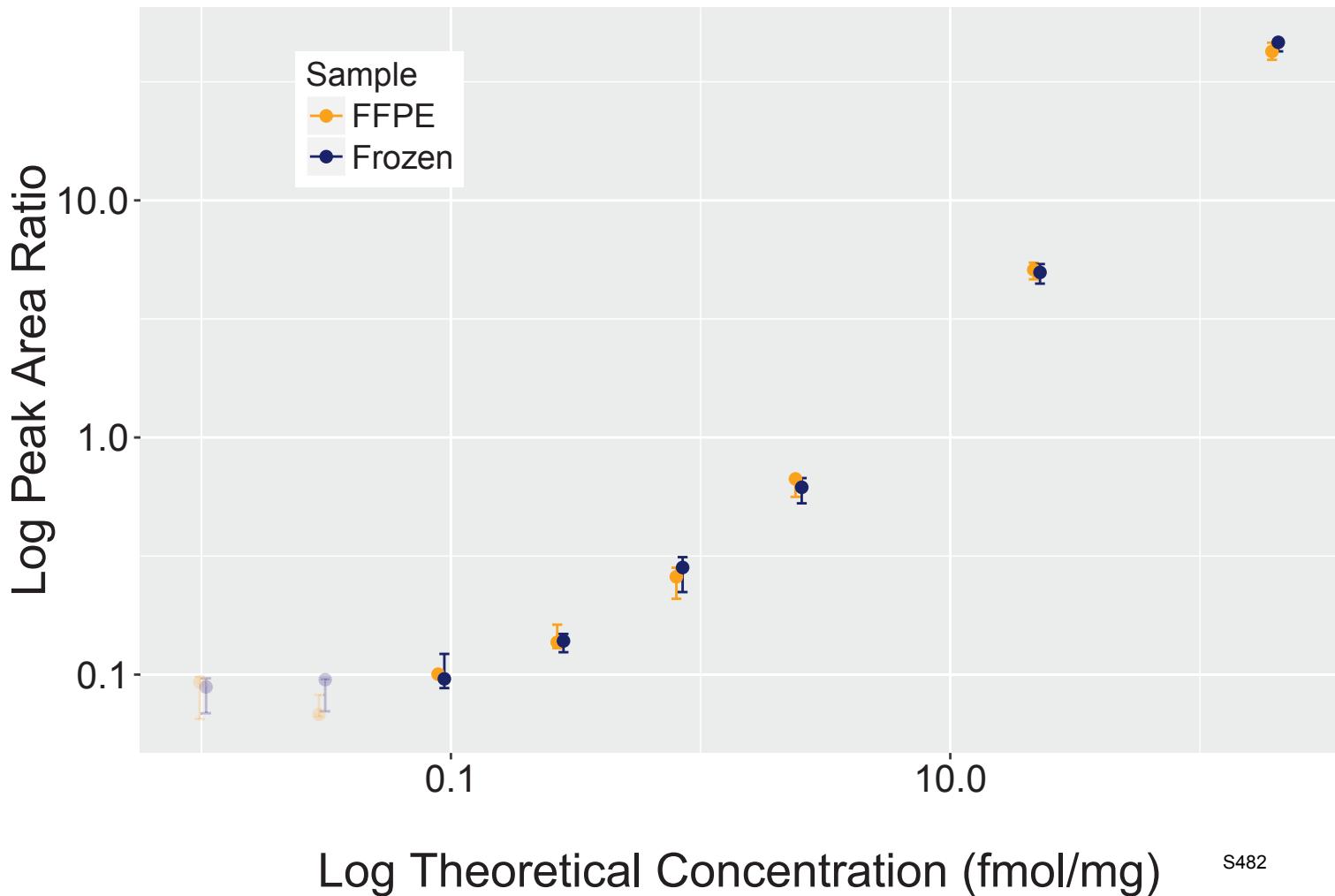
S480

Analyte: PLOD2.SEDYVDIVQGNR

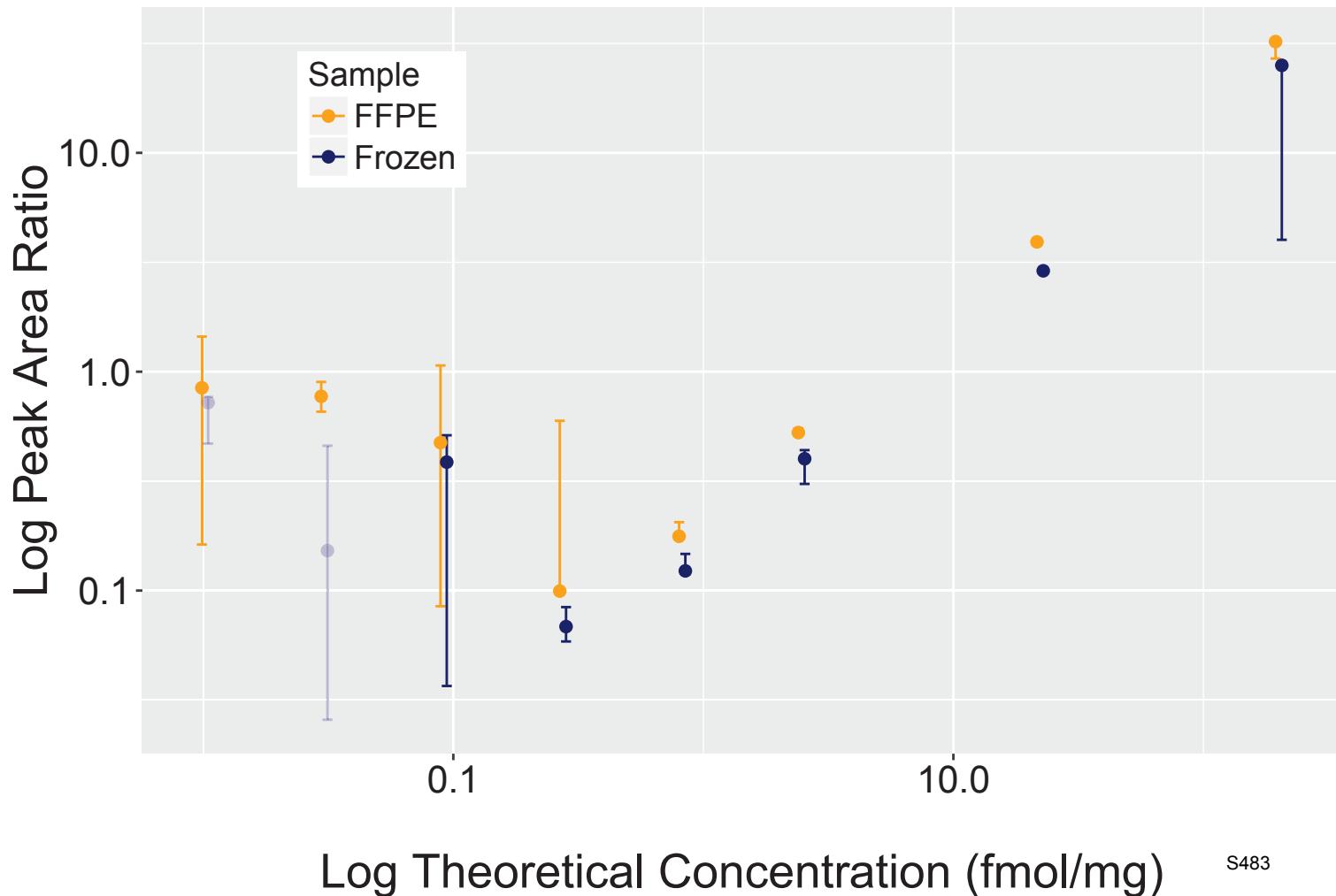


S481

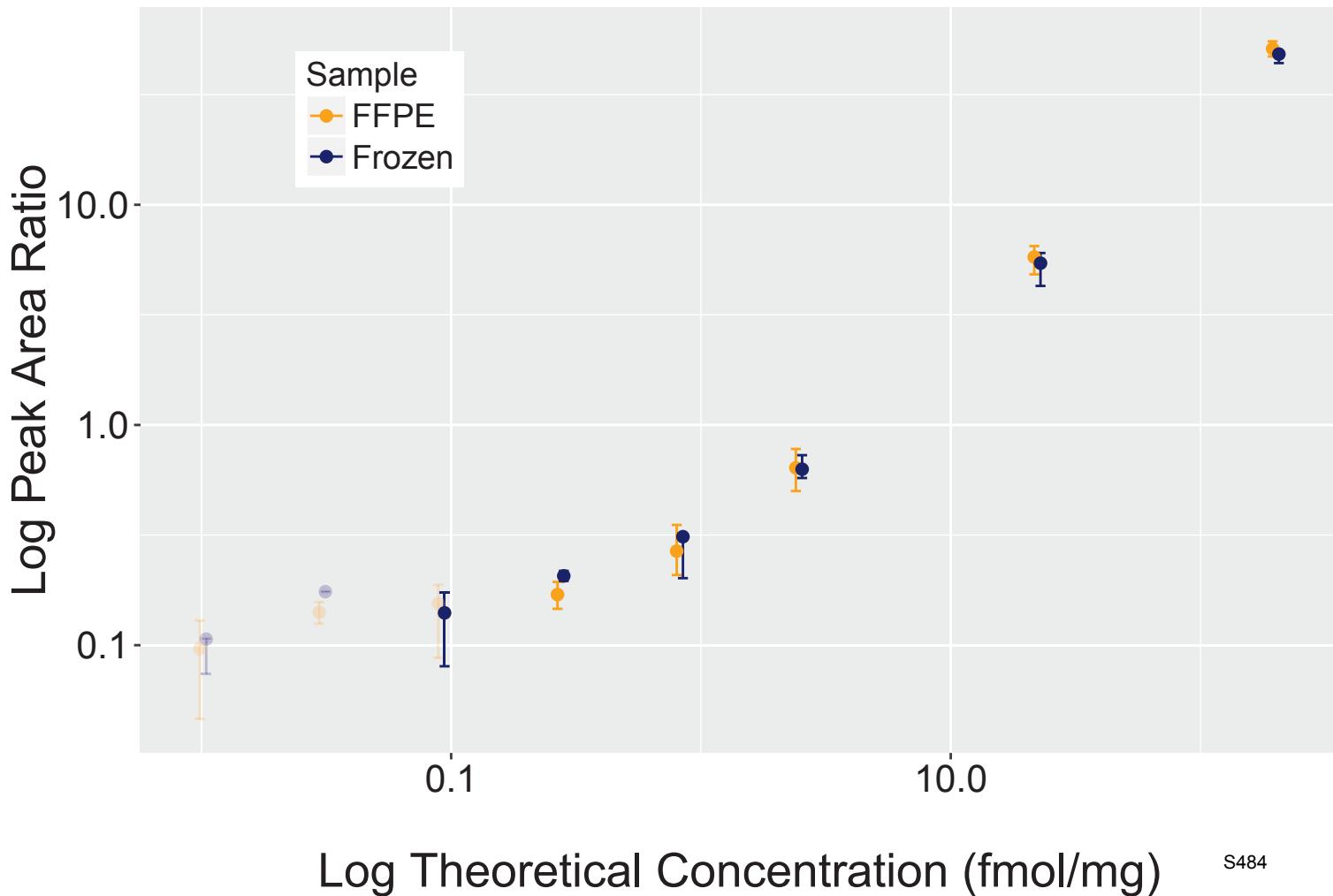
Analyte: PLOD1.SEDYVDIVQGR



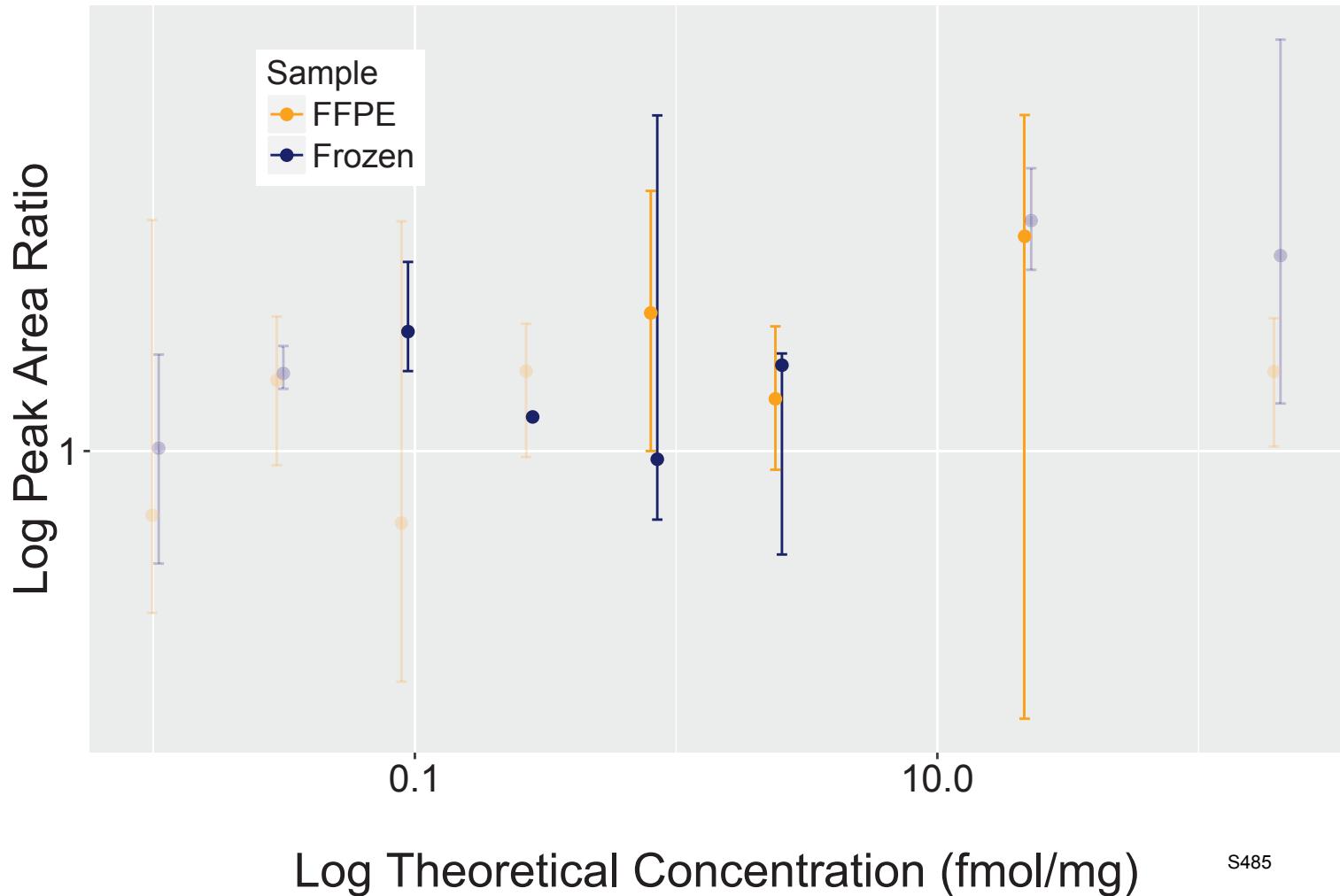
Analyte: TGM2.SEGTYC[+57]C[+57]GPVPVR



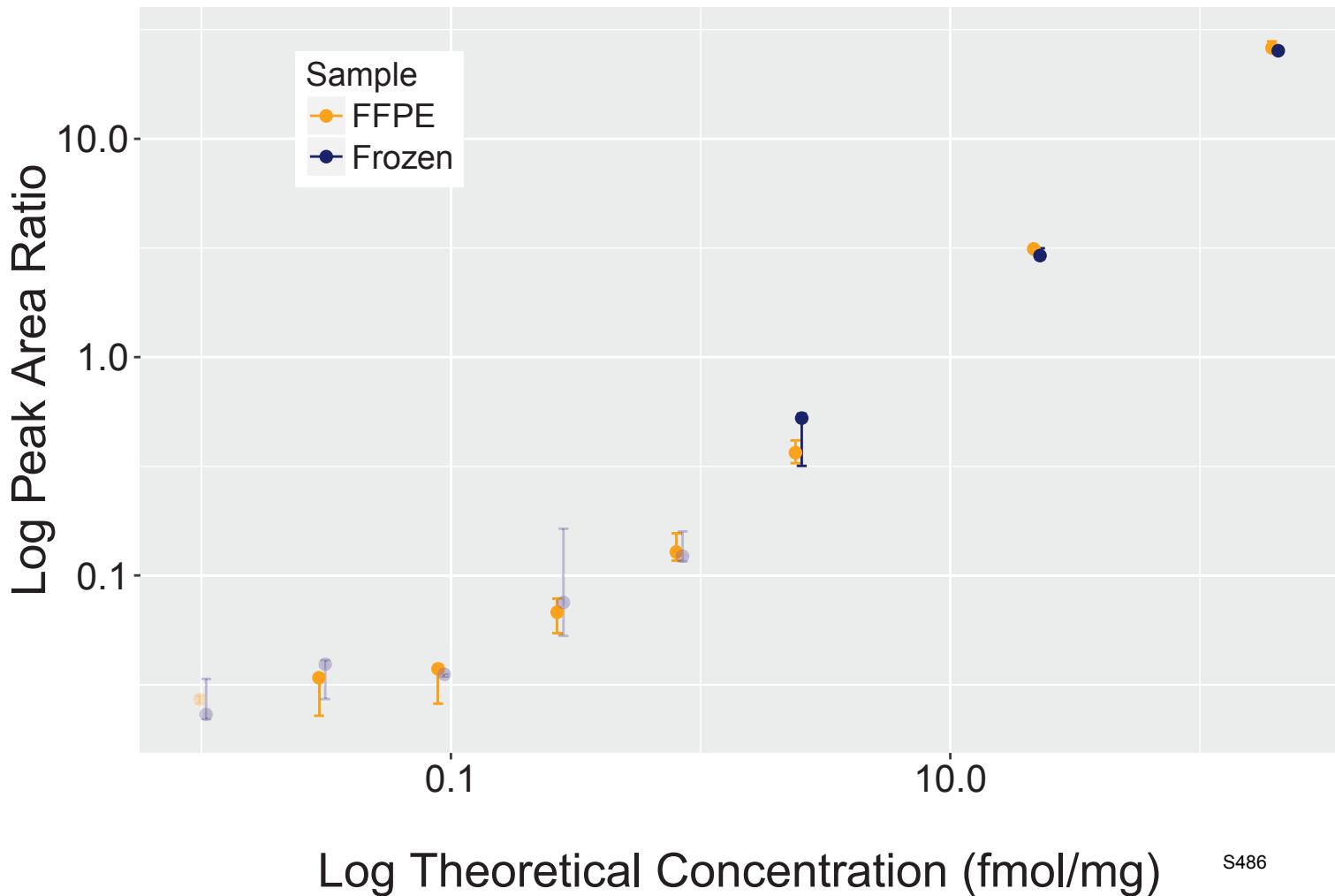
Analyte: DBN1.SESEVEAAIIAQRPDNPR



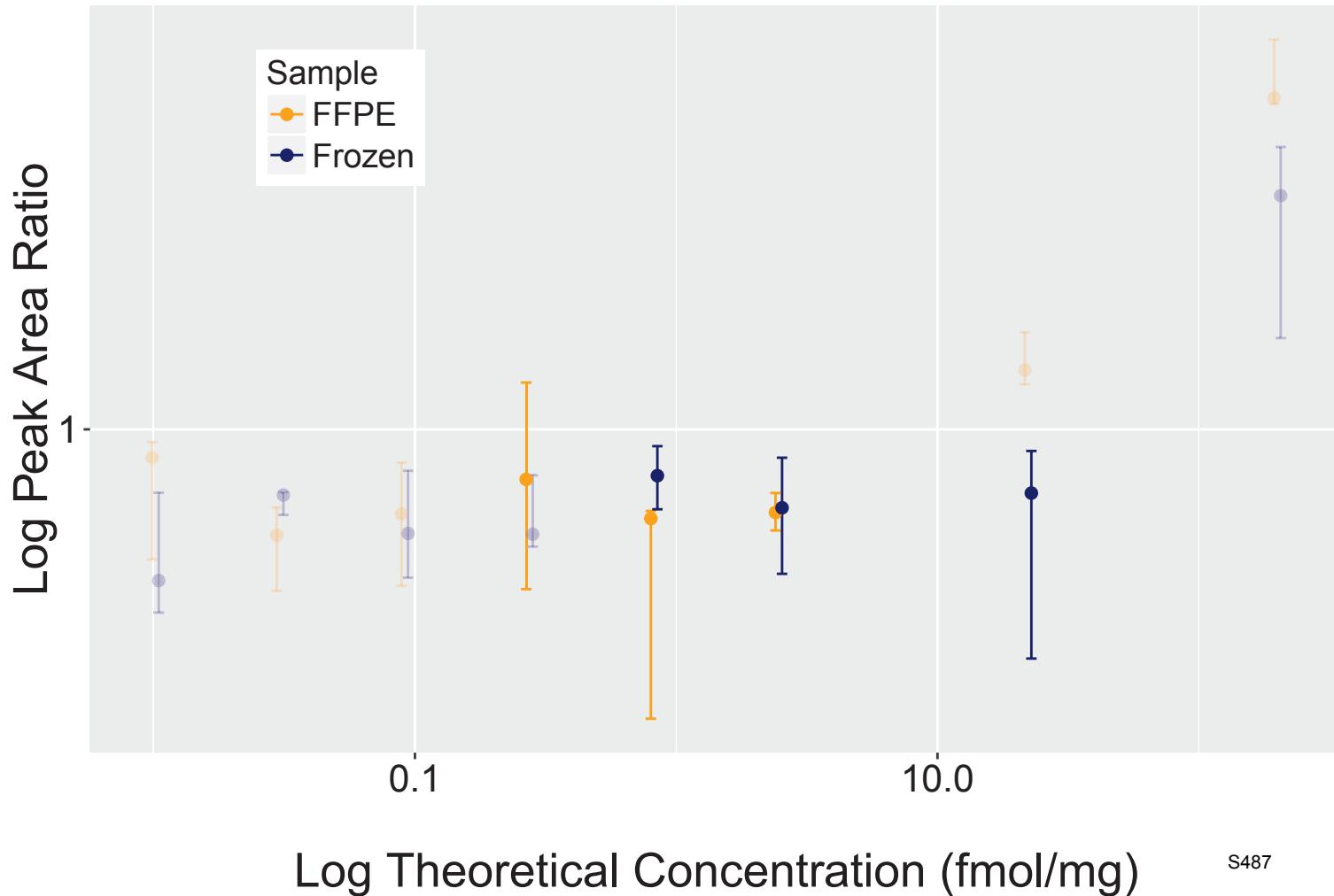
Analyte: BSG.SESVPPVTDWAWYK



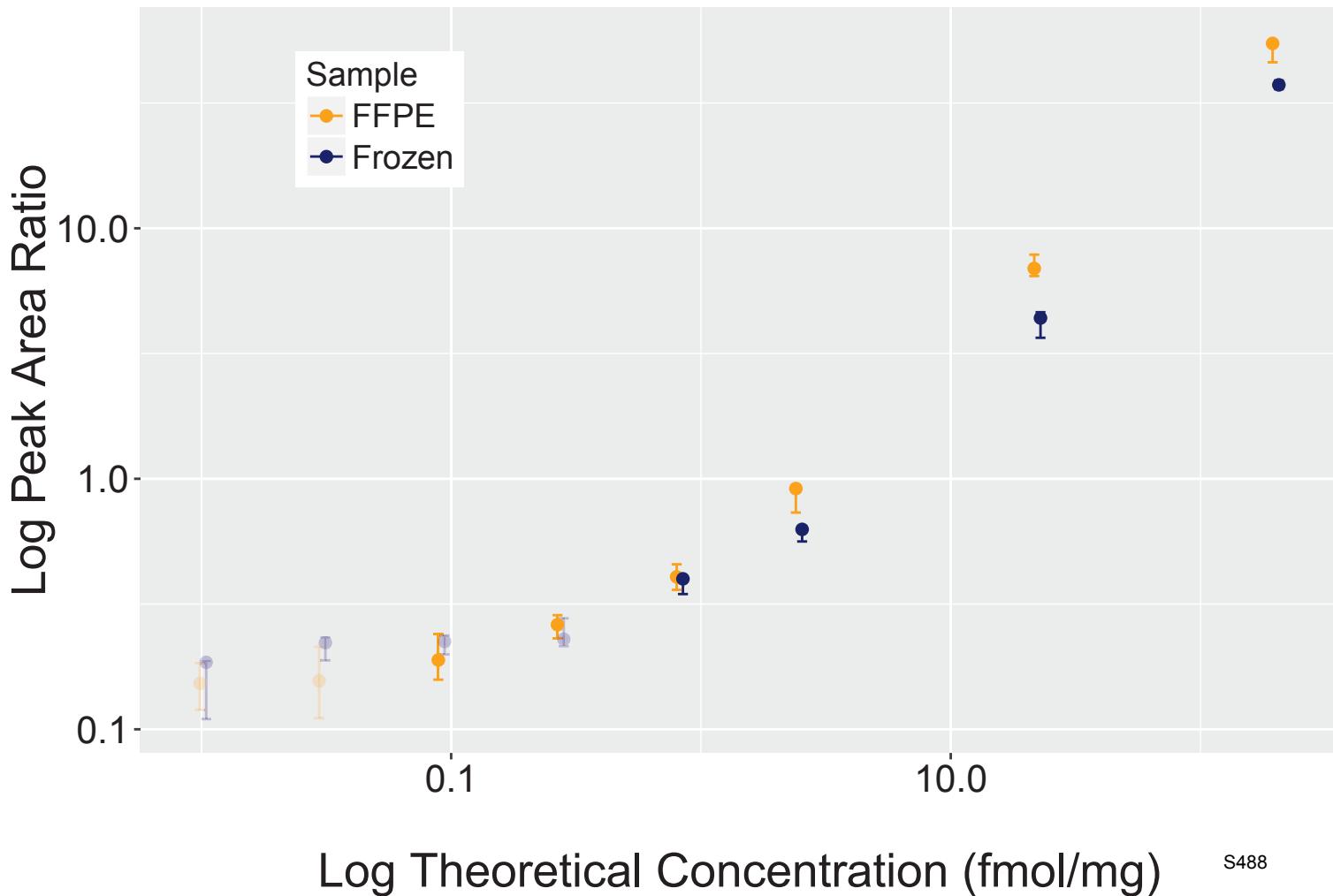
Analyte: PFKP.SFAGNLNTYK



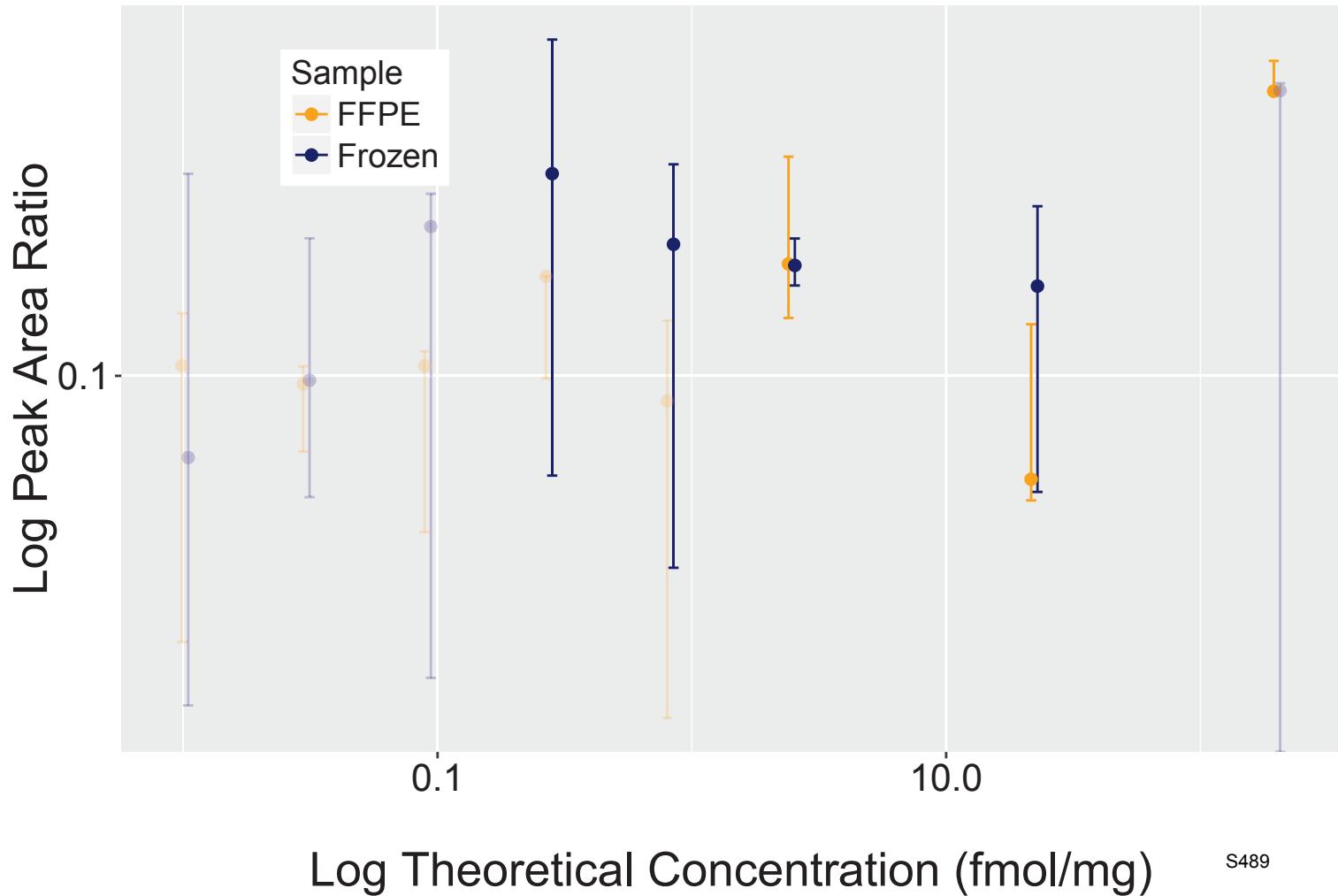
Analyte: PSMD2.SFANTLVDVC[+57]AYAGSGNVLK



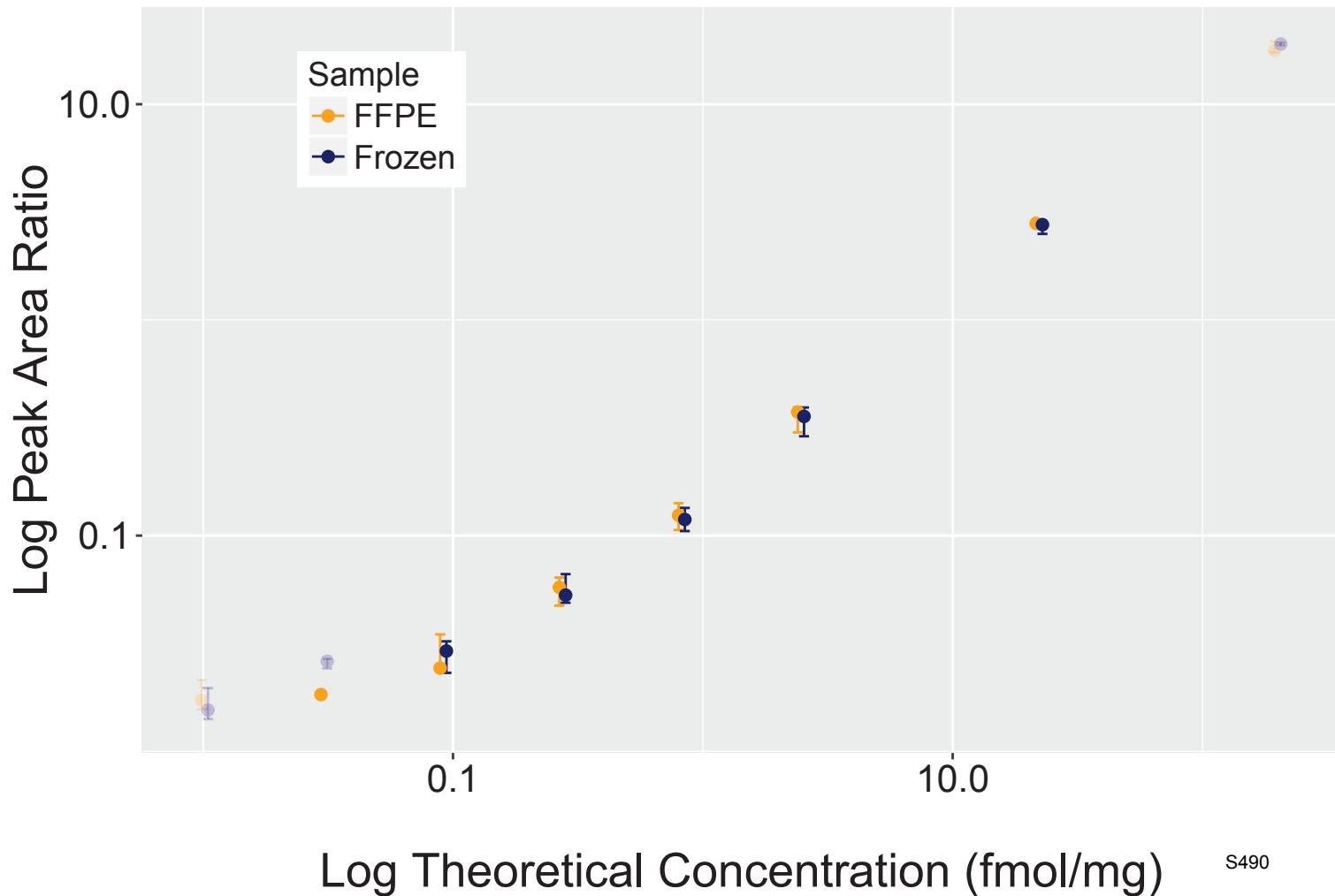
Analyte: UGP2.SFENSLGINVPR



Analyte: LGALS1.SFVLNLGK

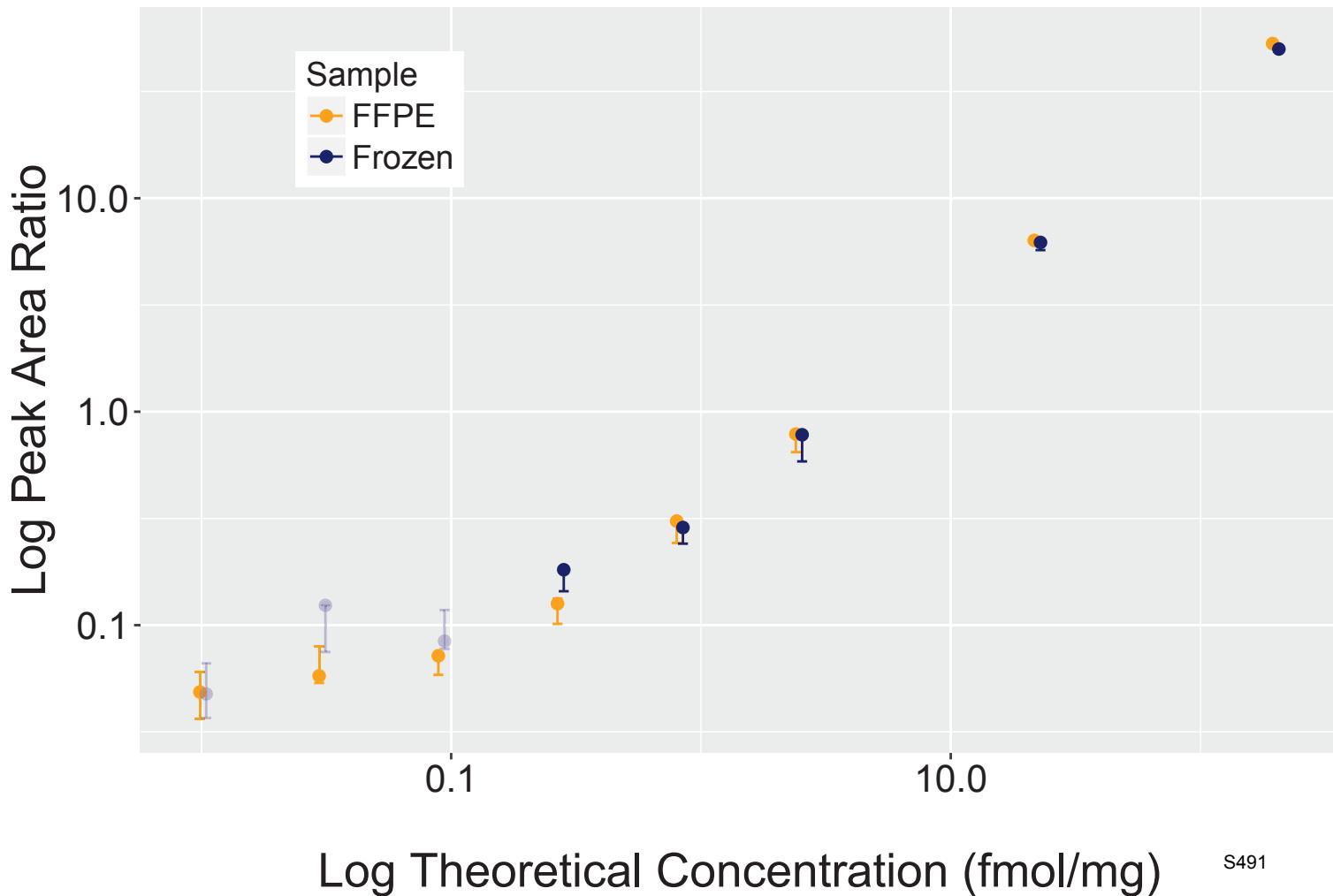


Analyte: CAPS.SGDGVVTVDDL R

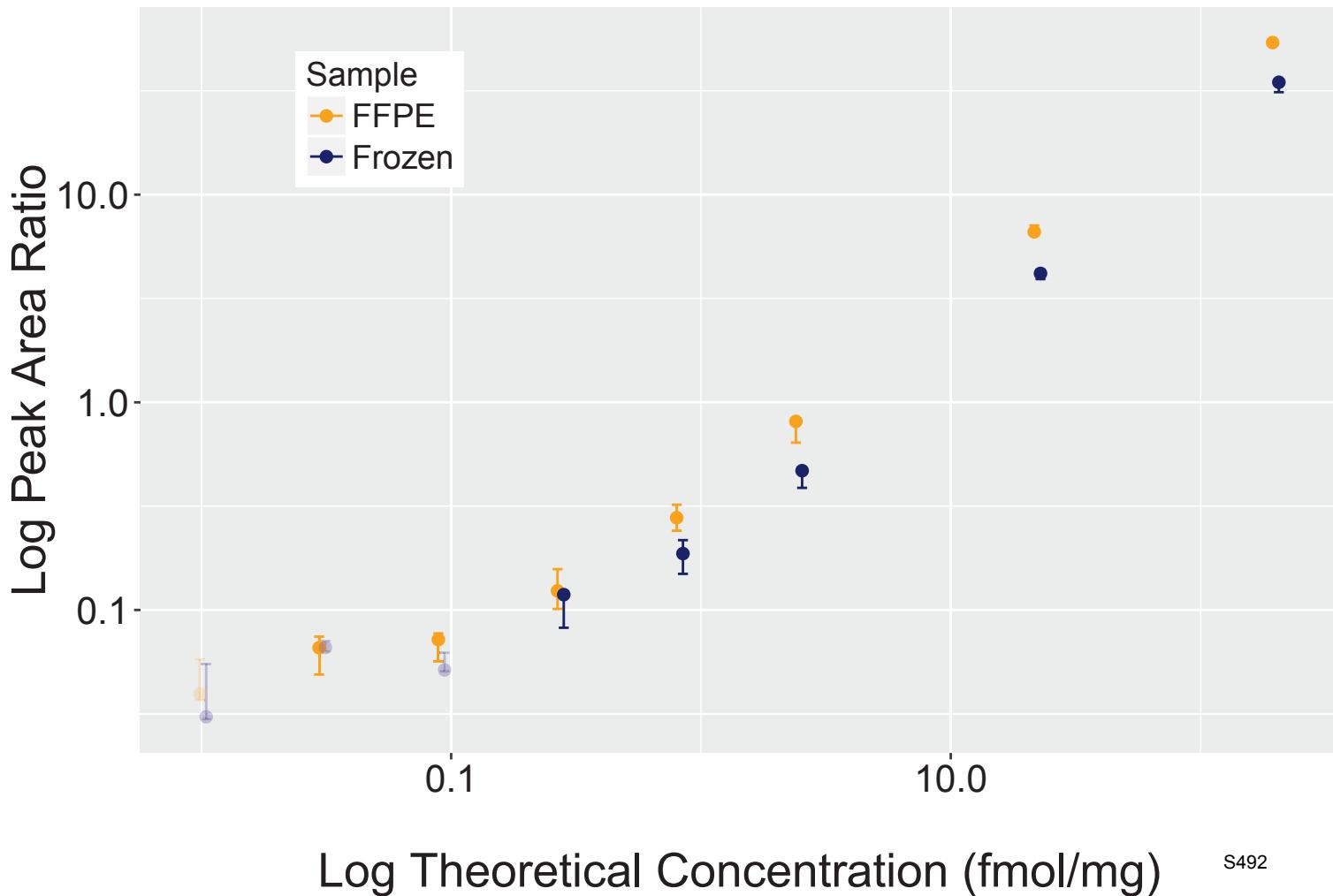


S490

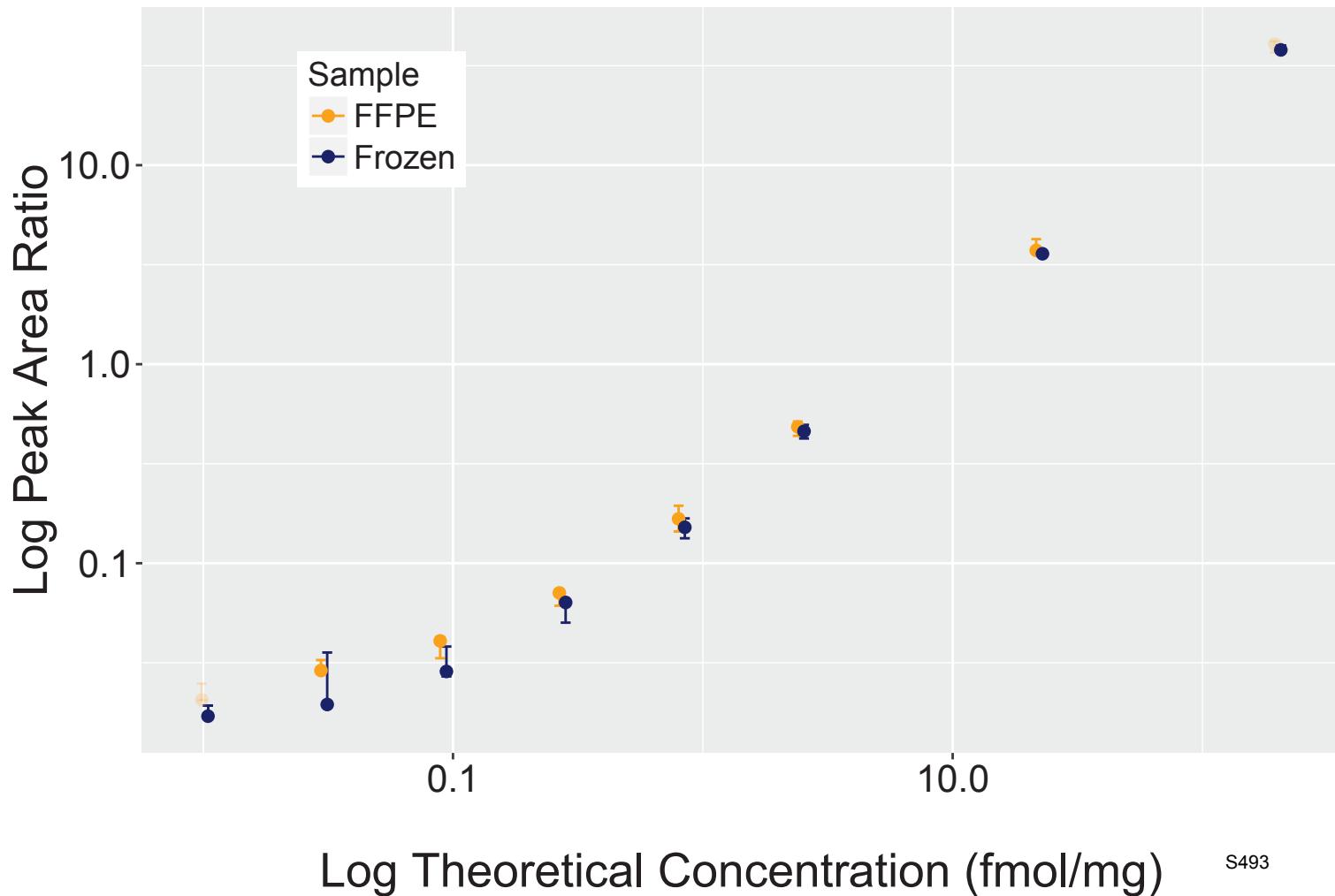
Analyte: GNL3.SGFNLEELEK



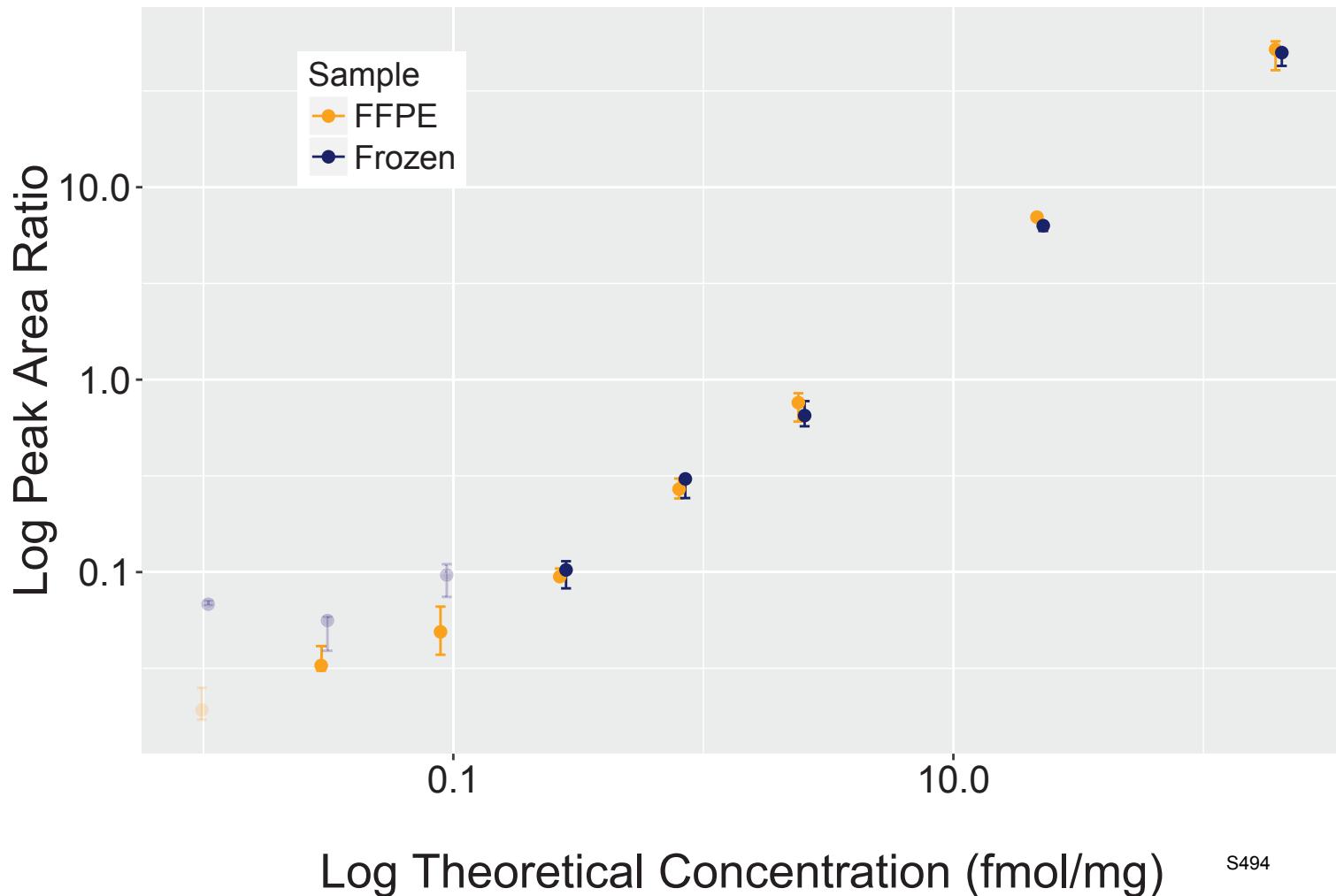
Analyte: NSFL1C.SGFSLDNGELR



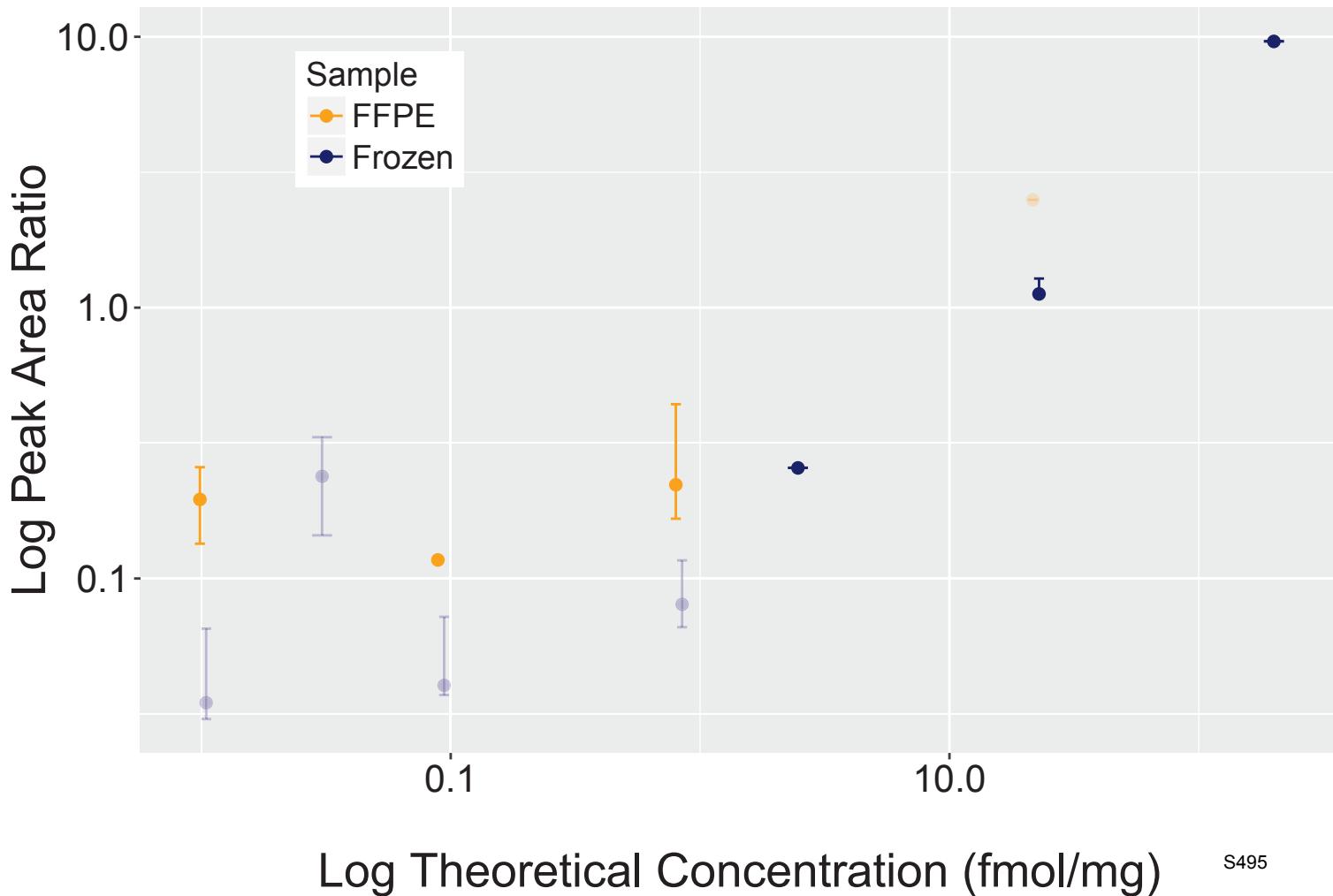
Analyte: LANCL2.SGNYPSSLSNETDR



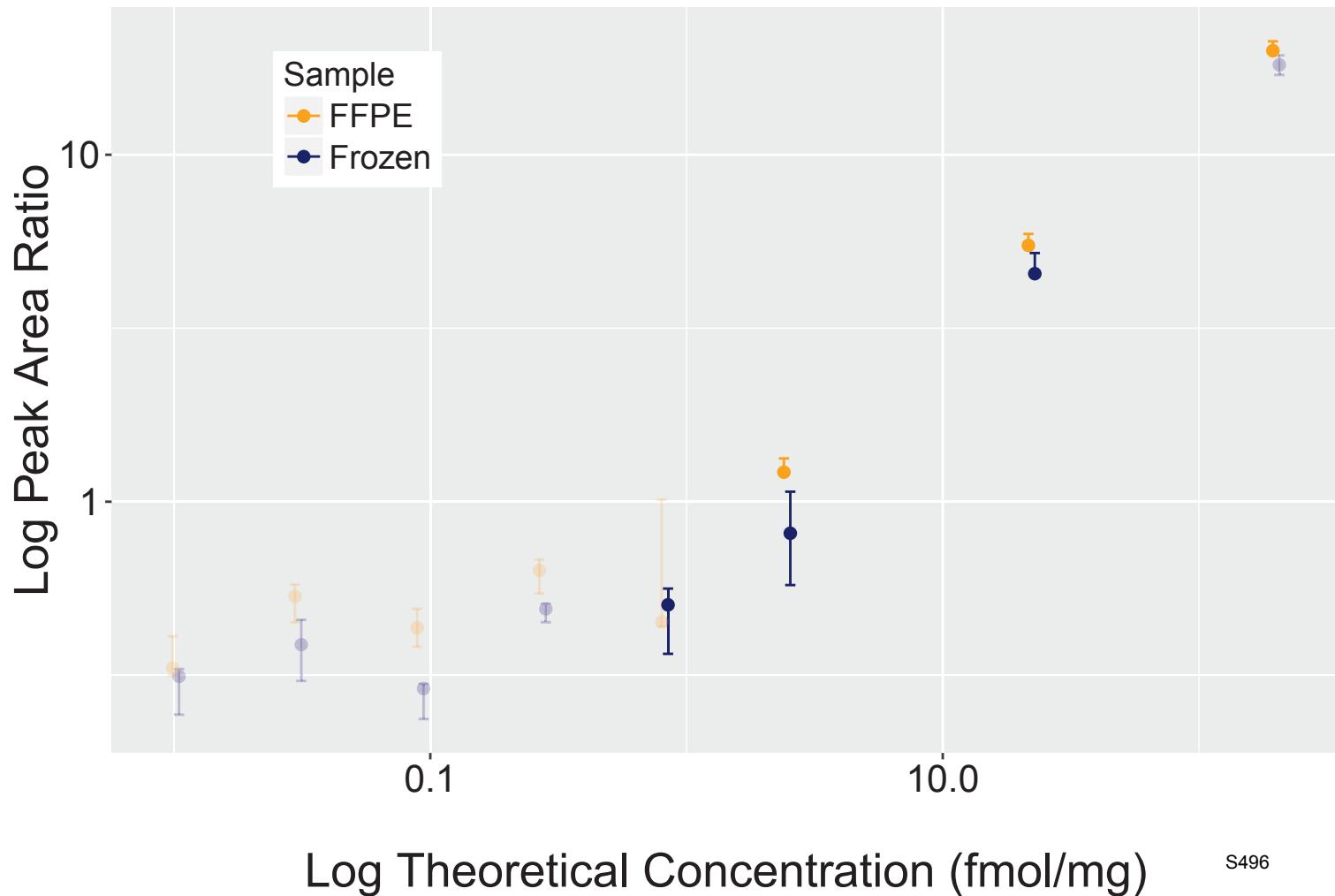
Analyte: H2AFY.SIAFPSIGSGR



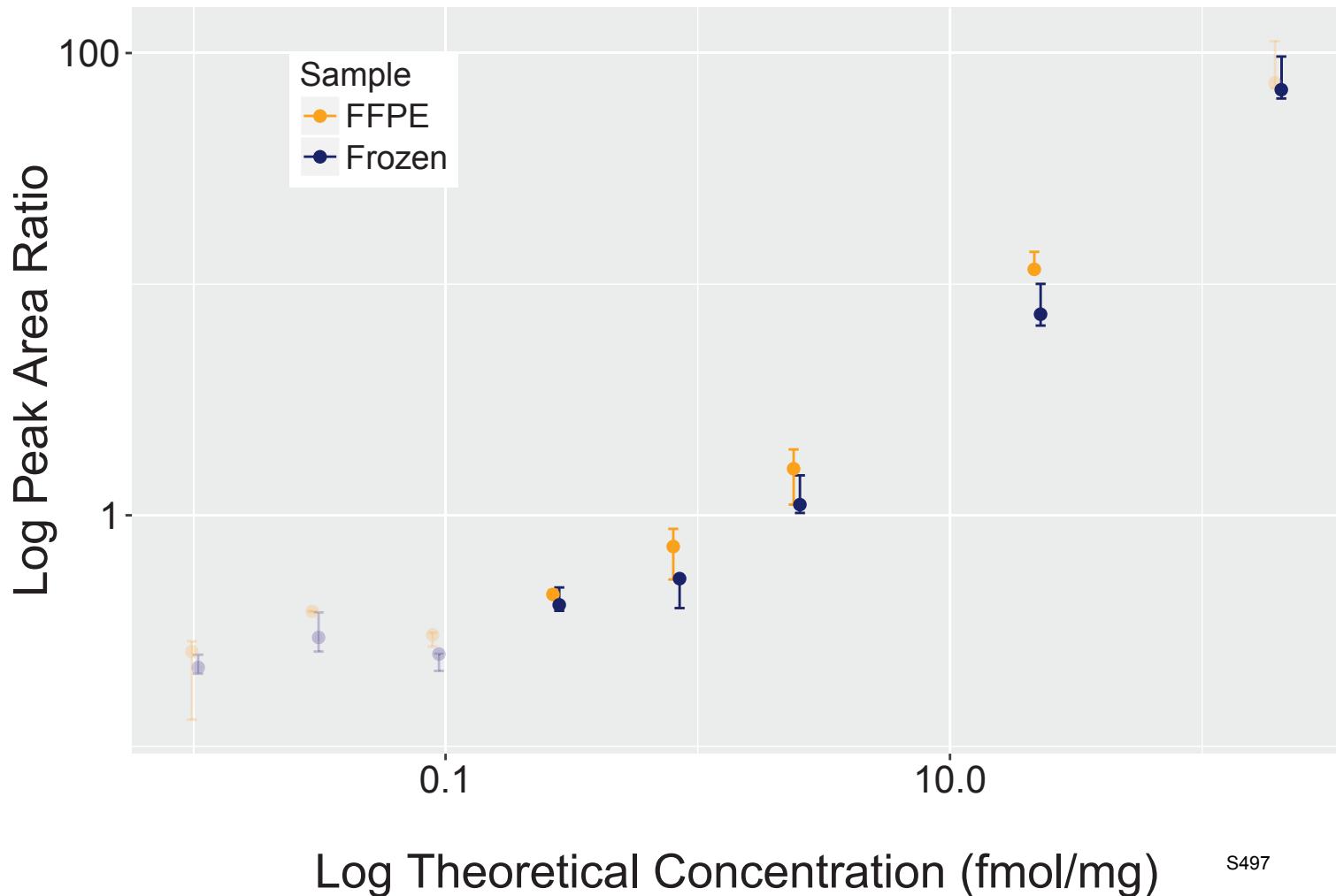
Analyte: EEF1B2.SIQADGLVWGSSK



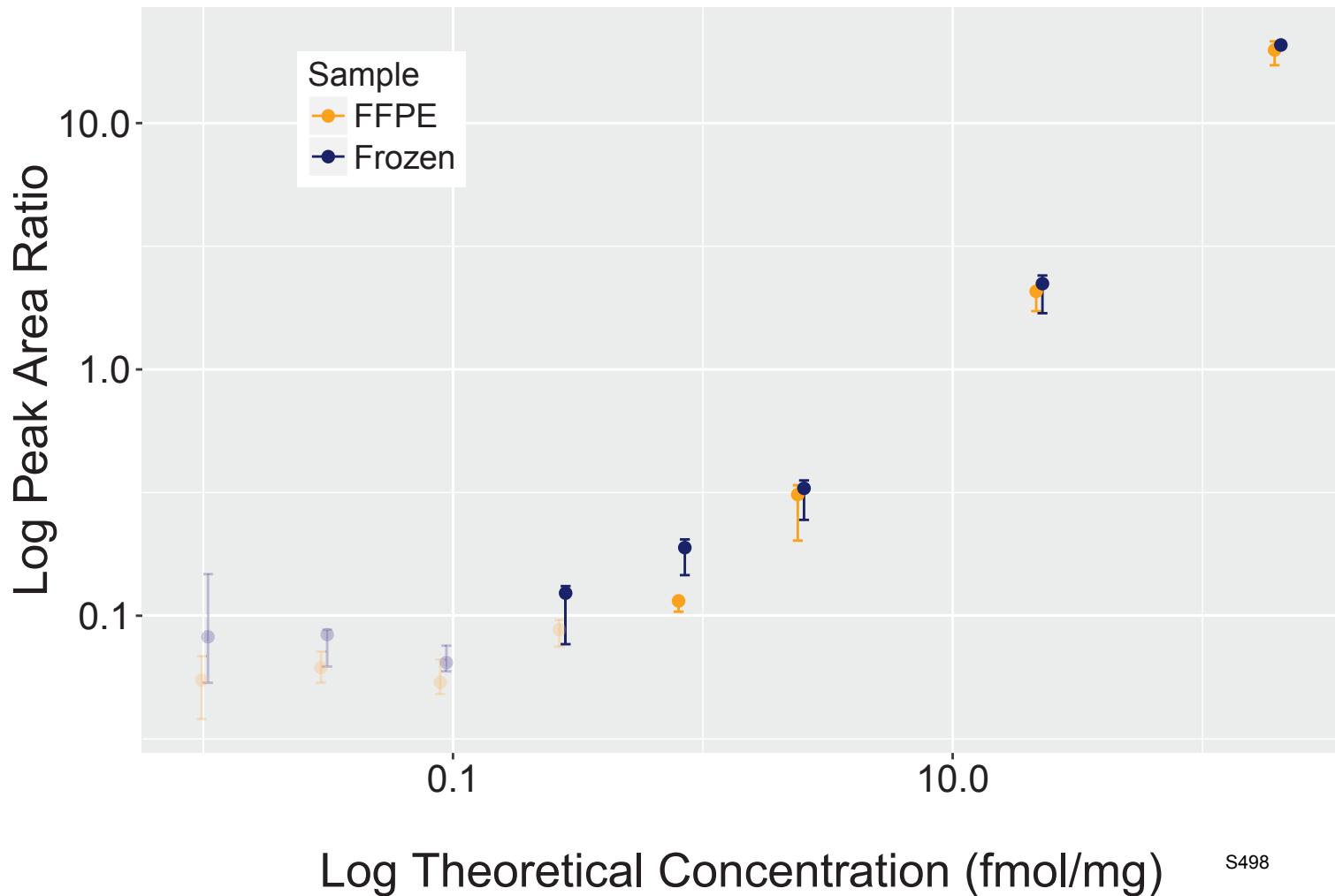
Analyte: GALK1.SLETSLVPLSDPK



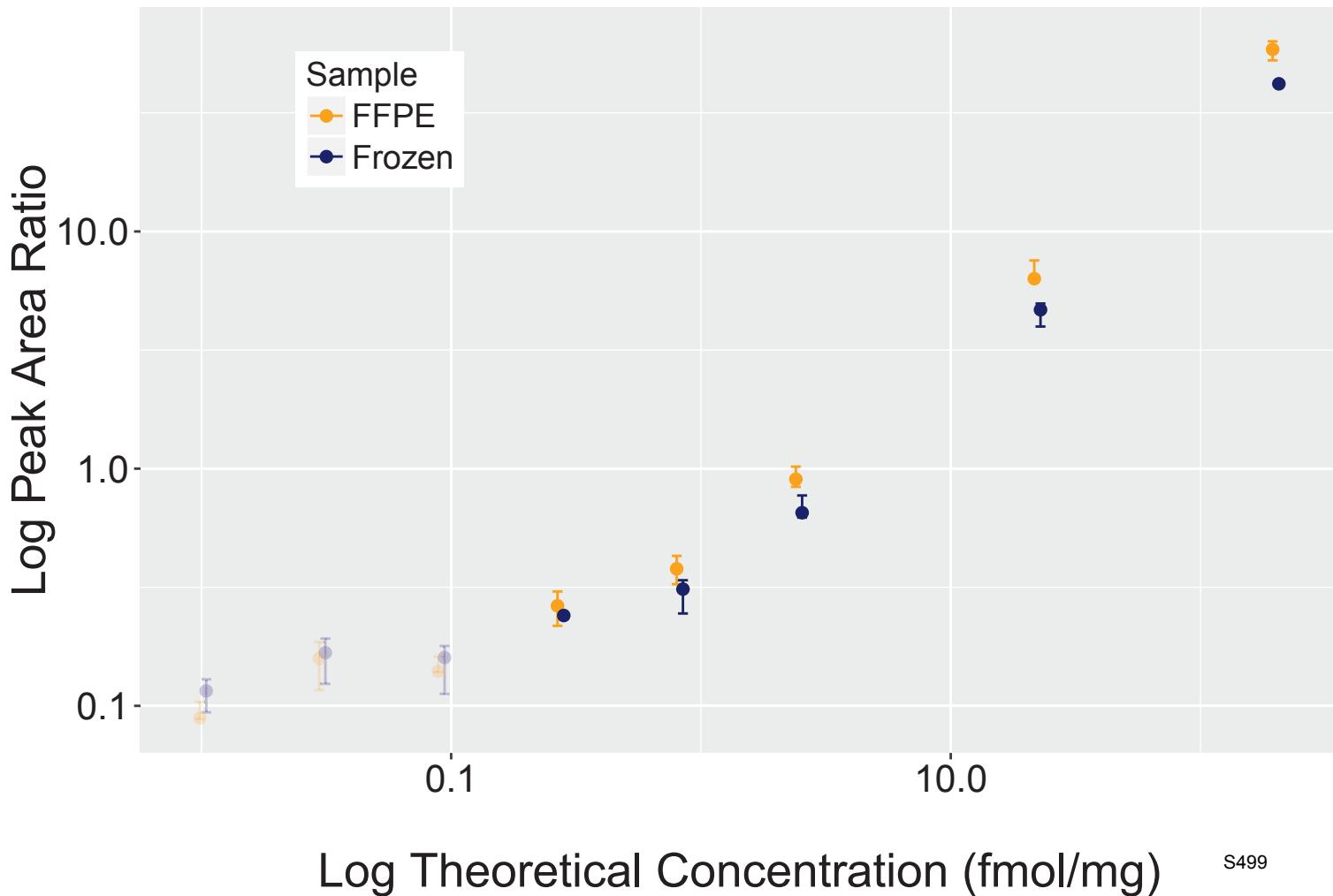
Analyte: ANXA3.SLGDDISSETSGDFR



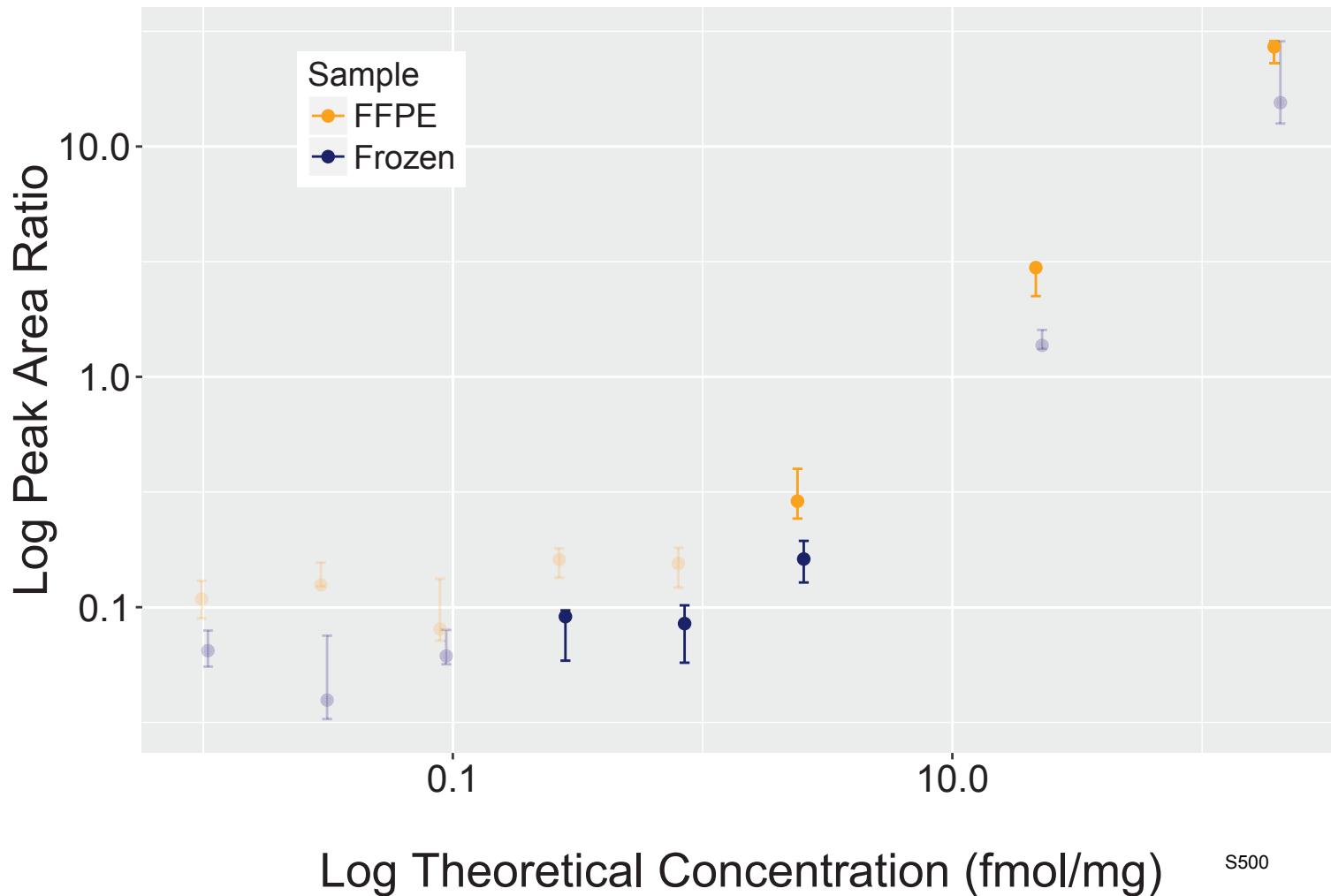
Analyte: NAGK.SLGLSLSGGDQEDAGR



Analyte: ADK.SLIANLAAANC[+57]YK

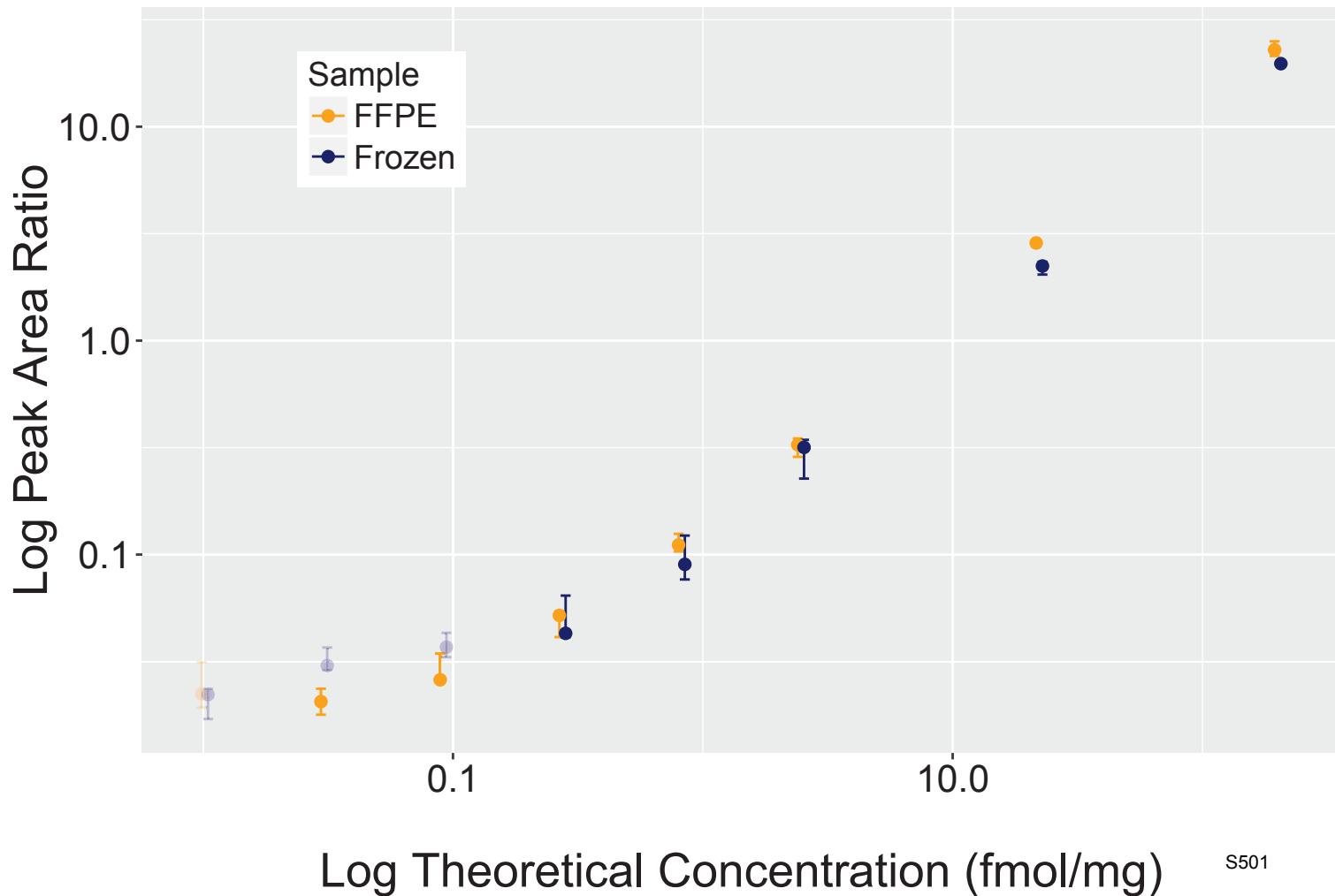


Analyte: MYOF.SLLTEADAGHTEFTDEVYQNESR



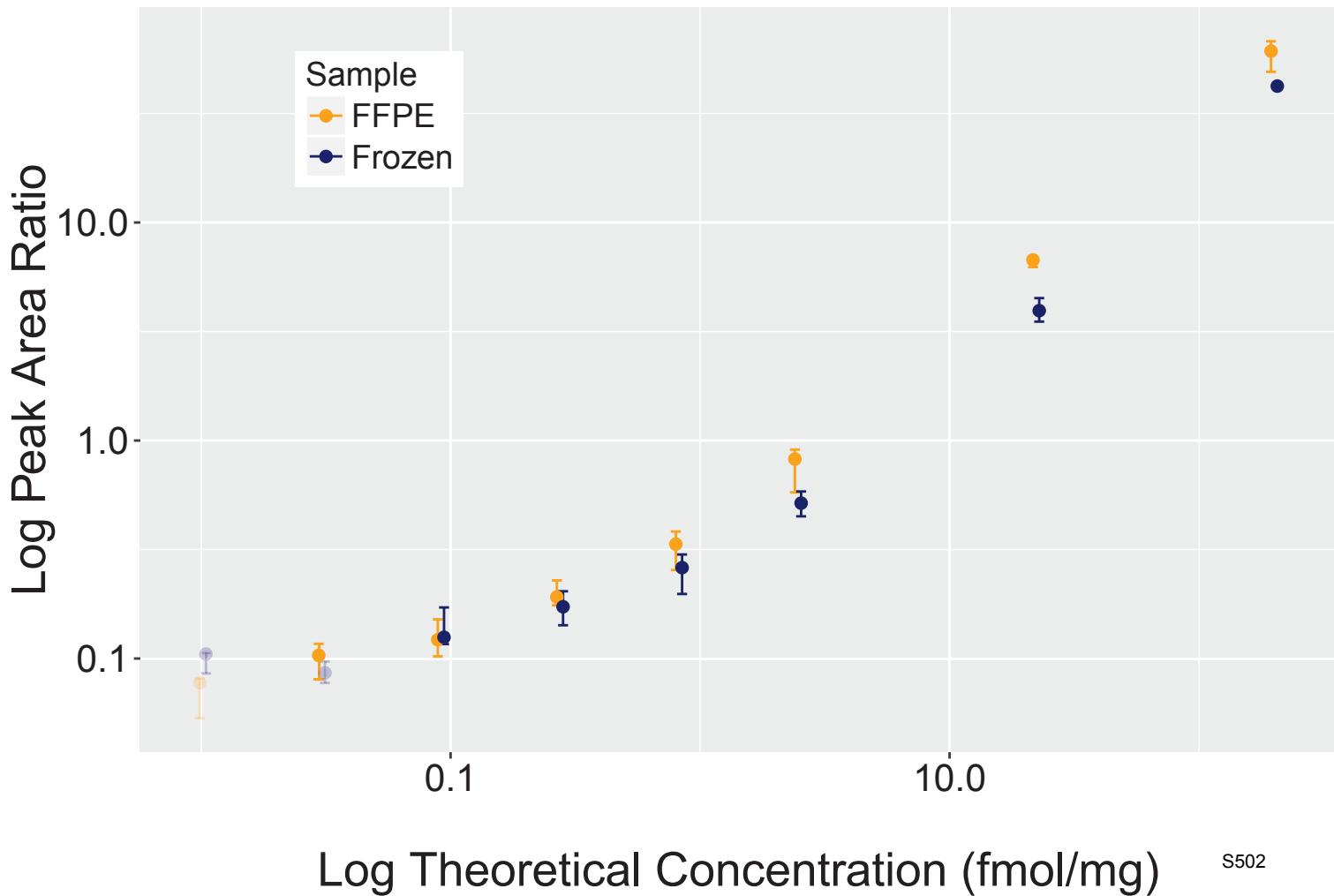
S500

Analyte: RALY.SNIDALLSR



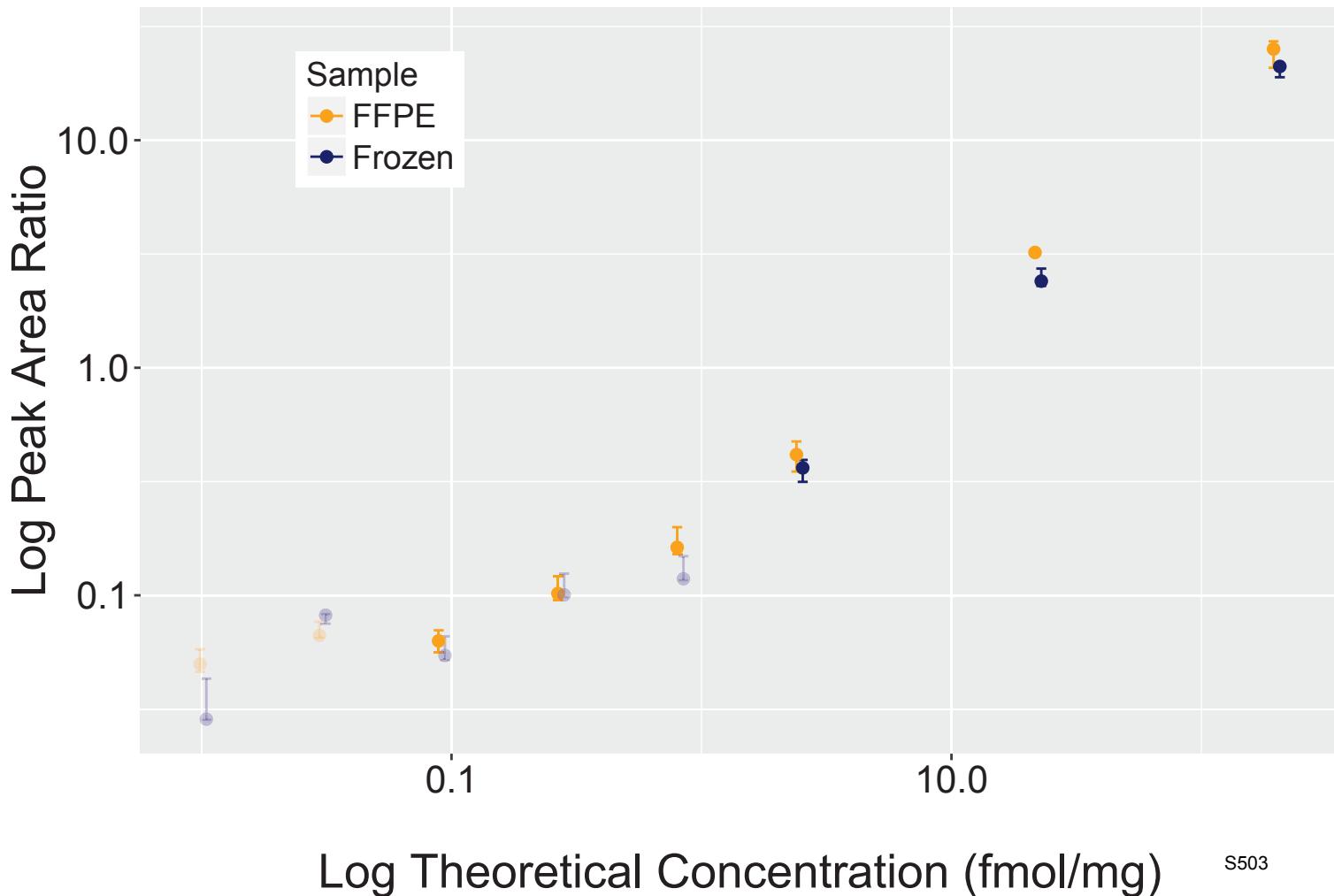
S501

Analyte: DAK.SPGADLLQVLTK



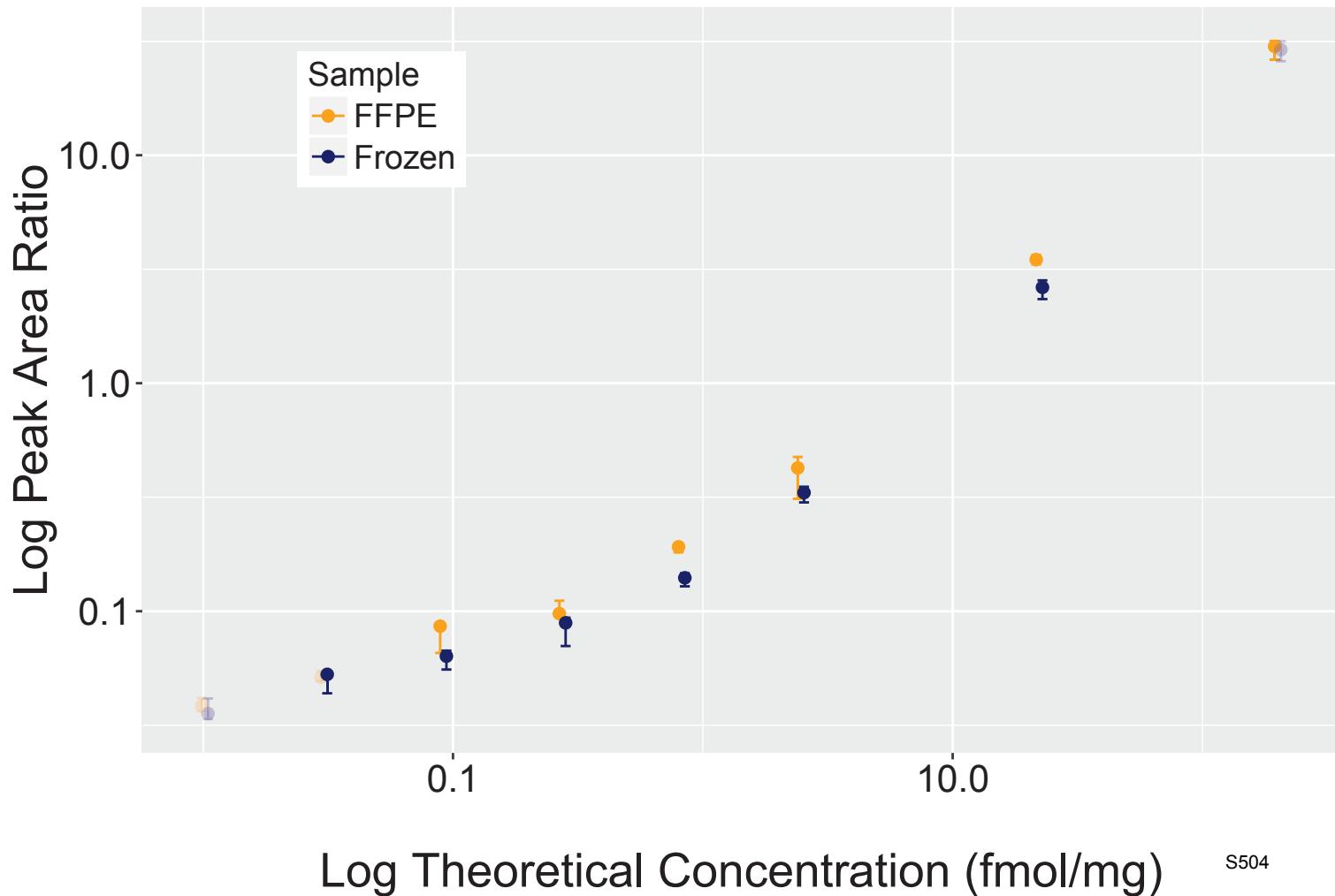
S502

Analyte: ZYX.SPGAPGPLTLK



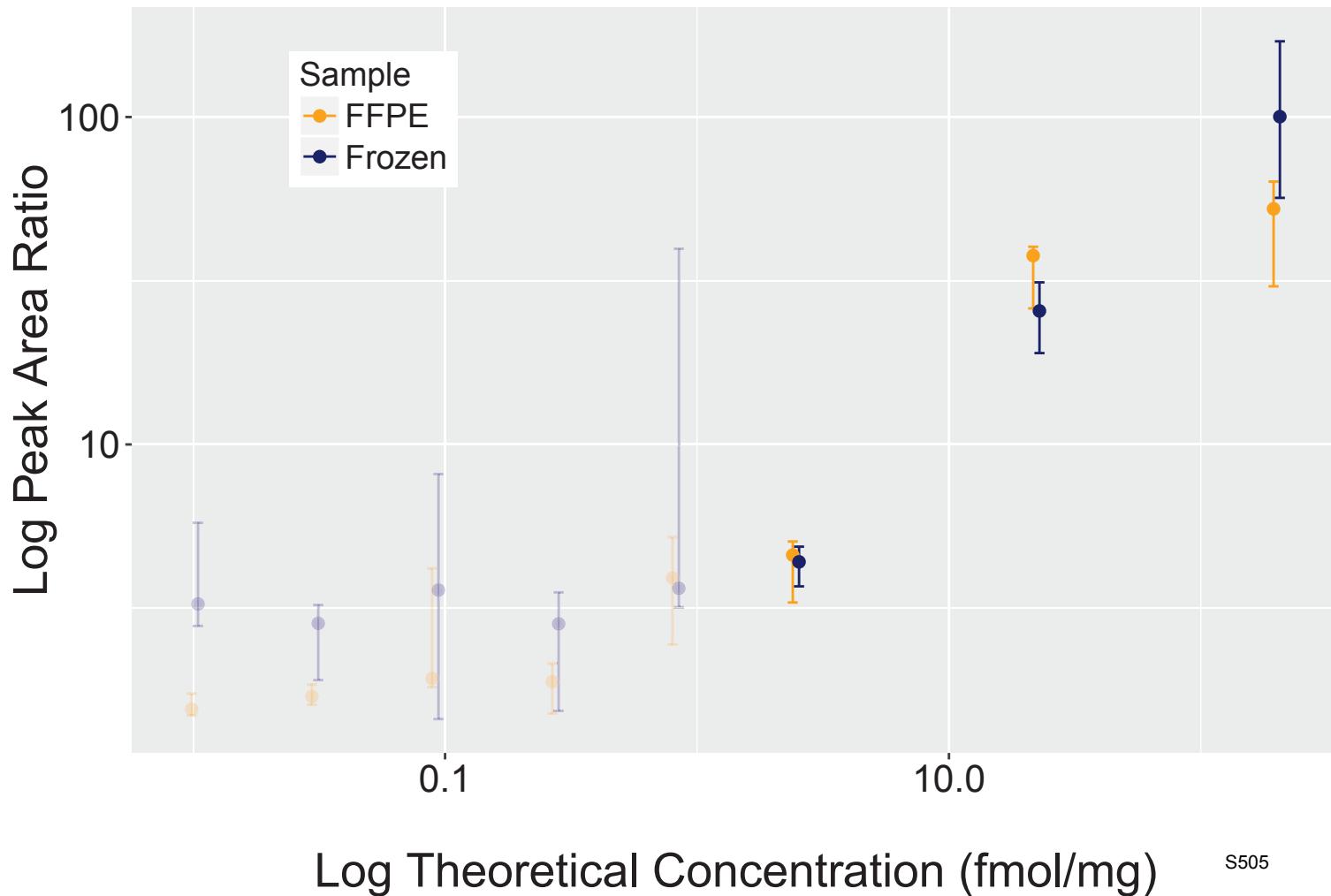
S503

Analyte: HIBADH.SPILLGSLAHQIYR

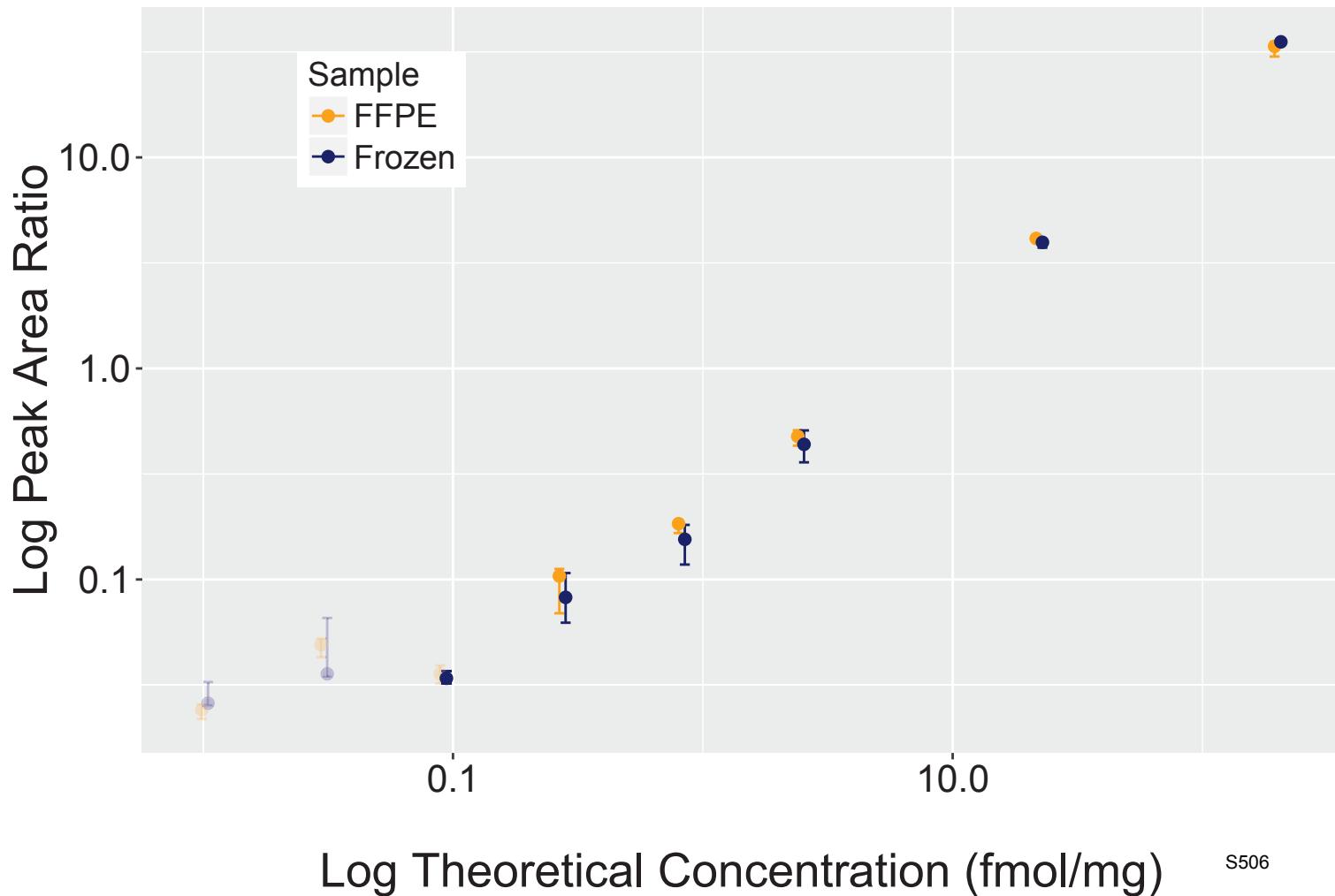


S504

Analyte: PNMT.SPNAGAAPDSAPGQAAVASAYQR

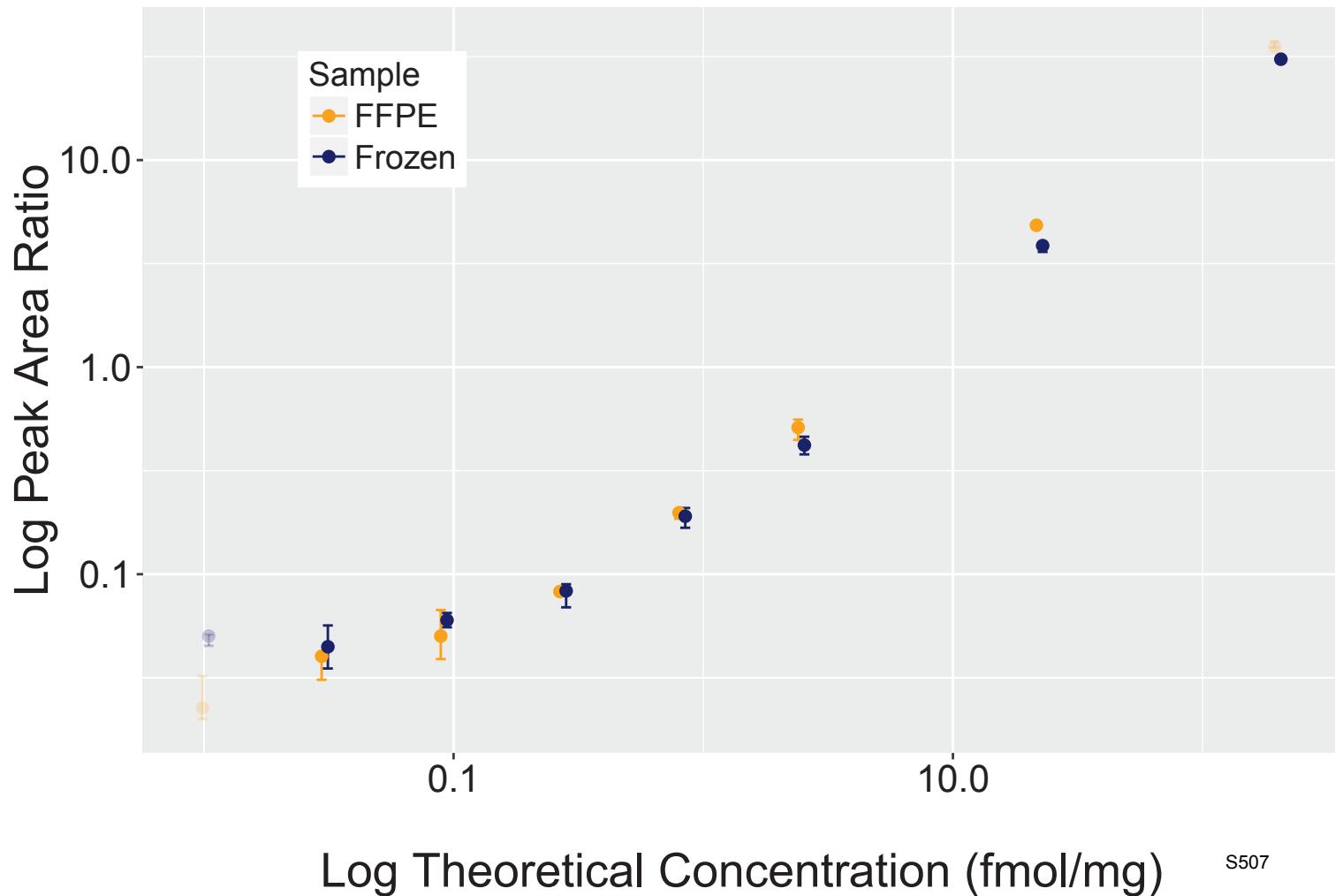


Analyte: DBN1.SPSDSSTASTPVAEQIER



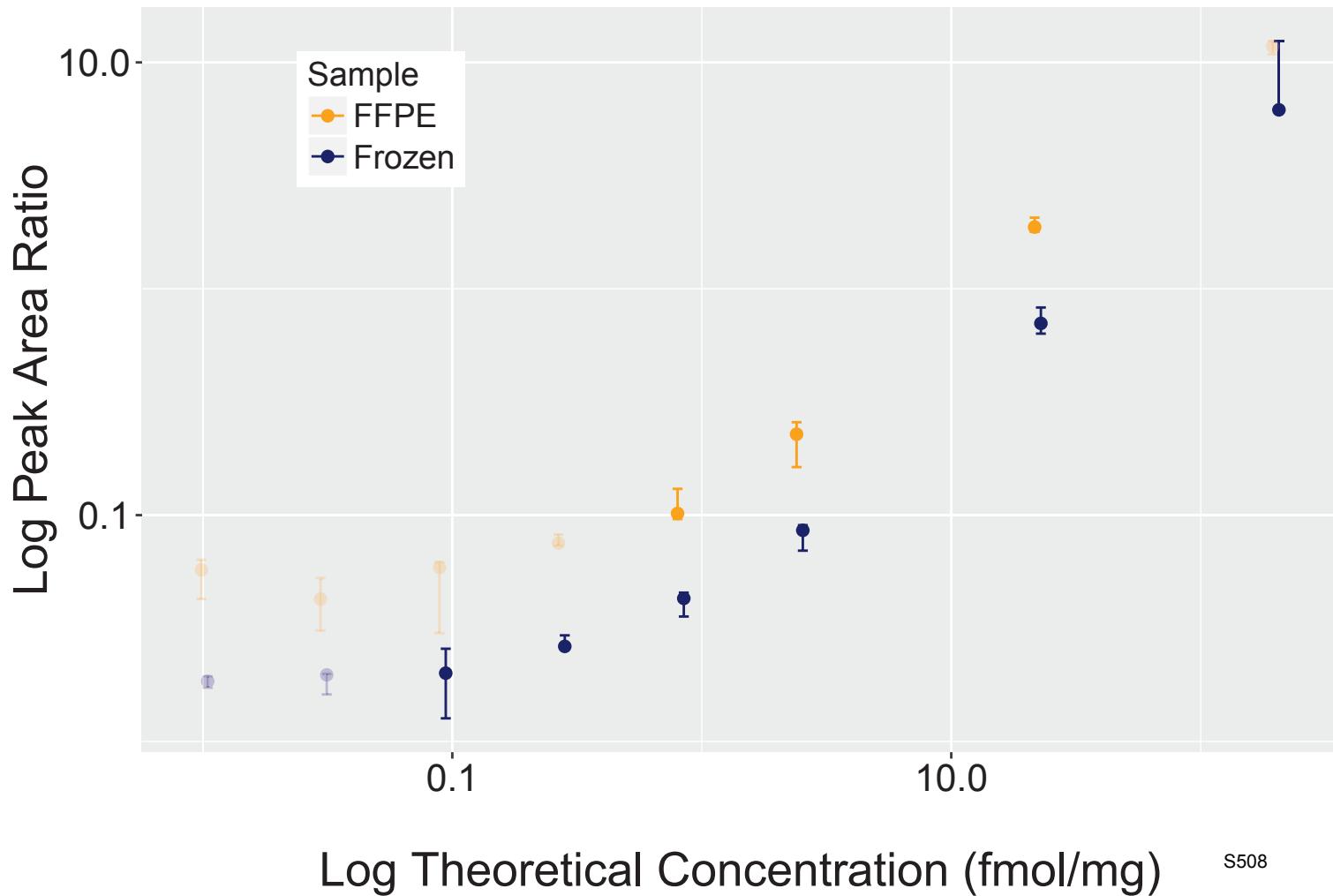
S506

Analyte: NPEPPS.SPVYLTVLK



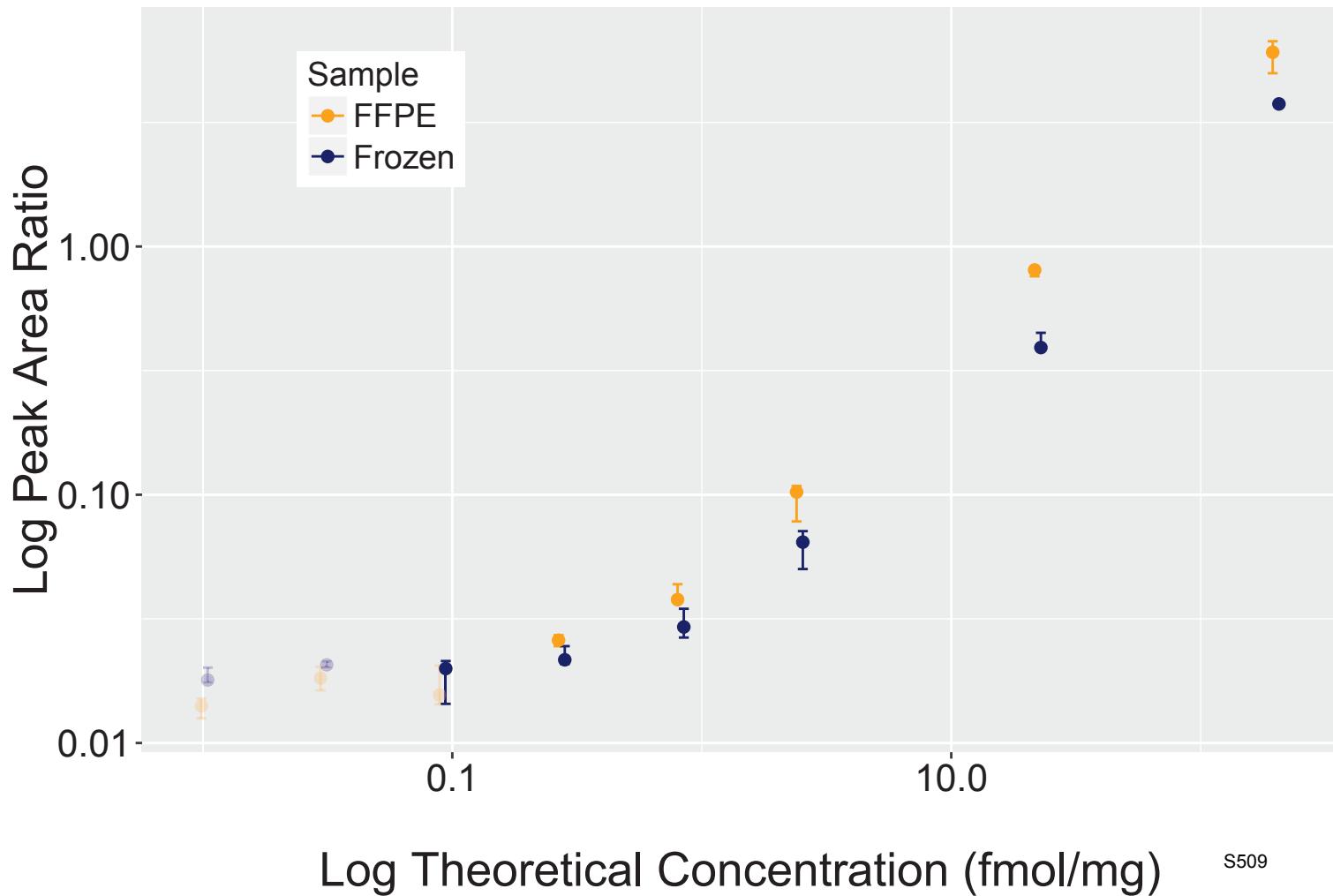
S507

Analyte: HSPA5.SQIFSTASDNQPTVTIK



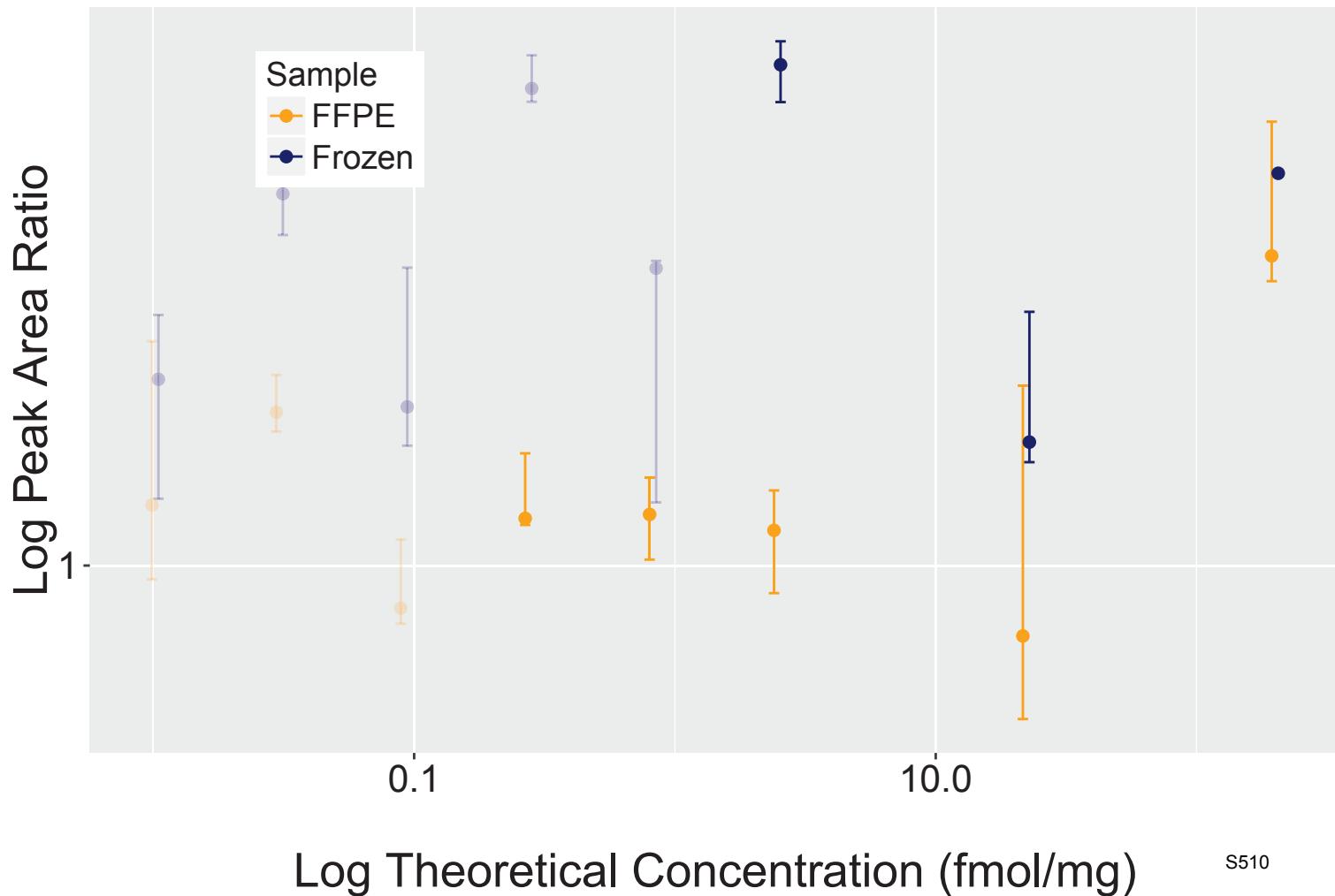
S508

Analyte: CSTB.SQVVAGTNYFIK



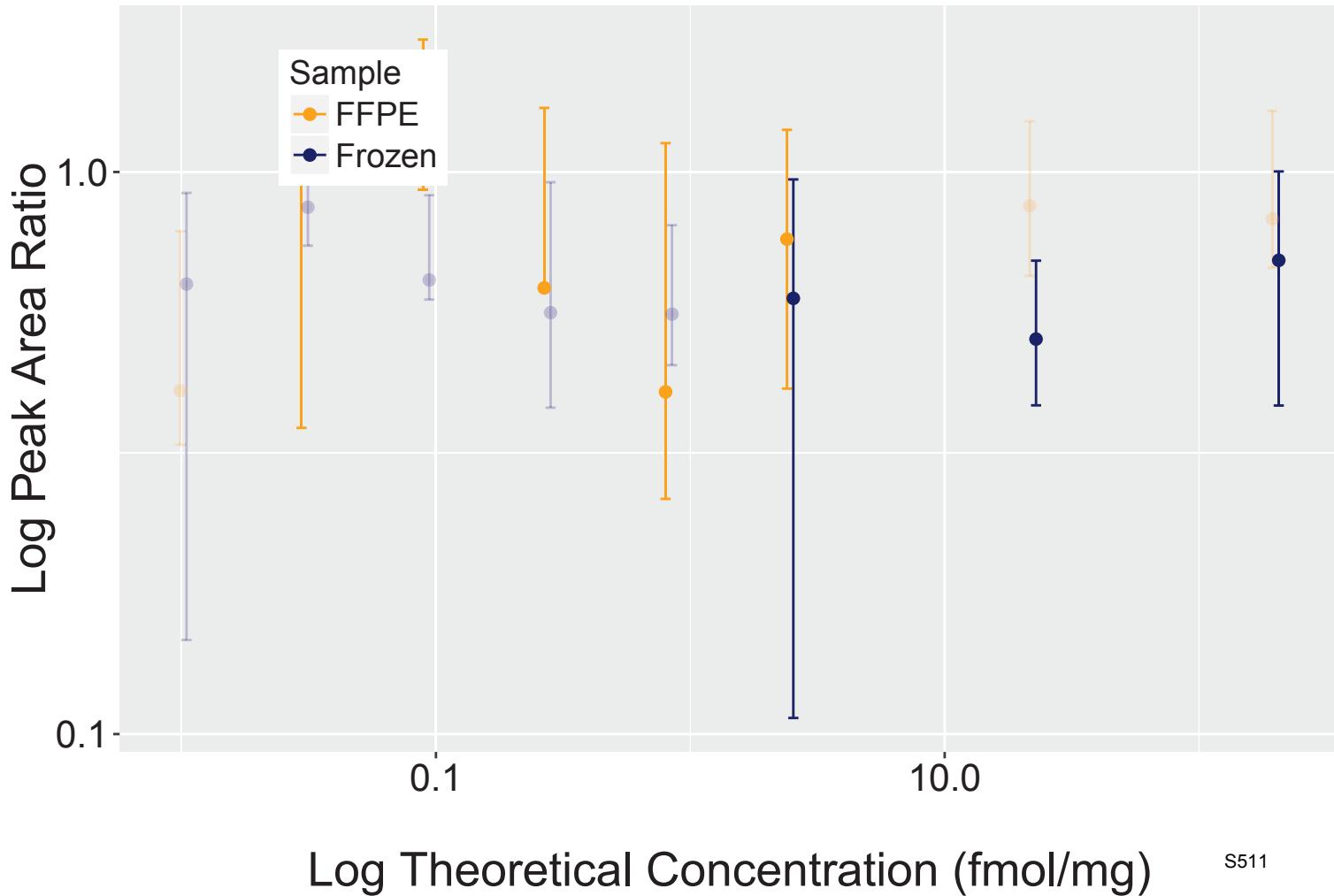
S509

Analyte: ATP6V1C1.SSNVLSEDQDSYLC[+57]NVTLFR



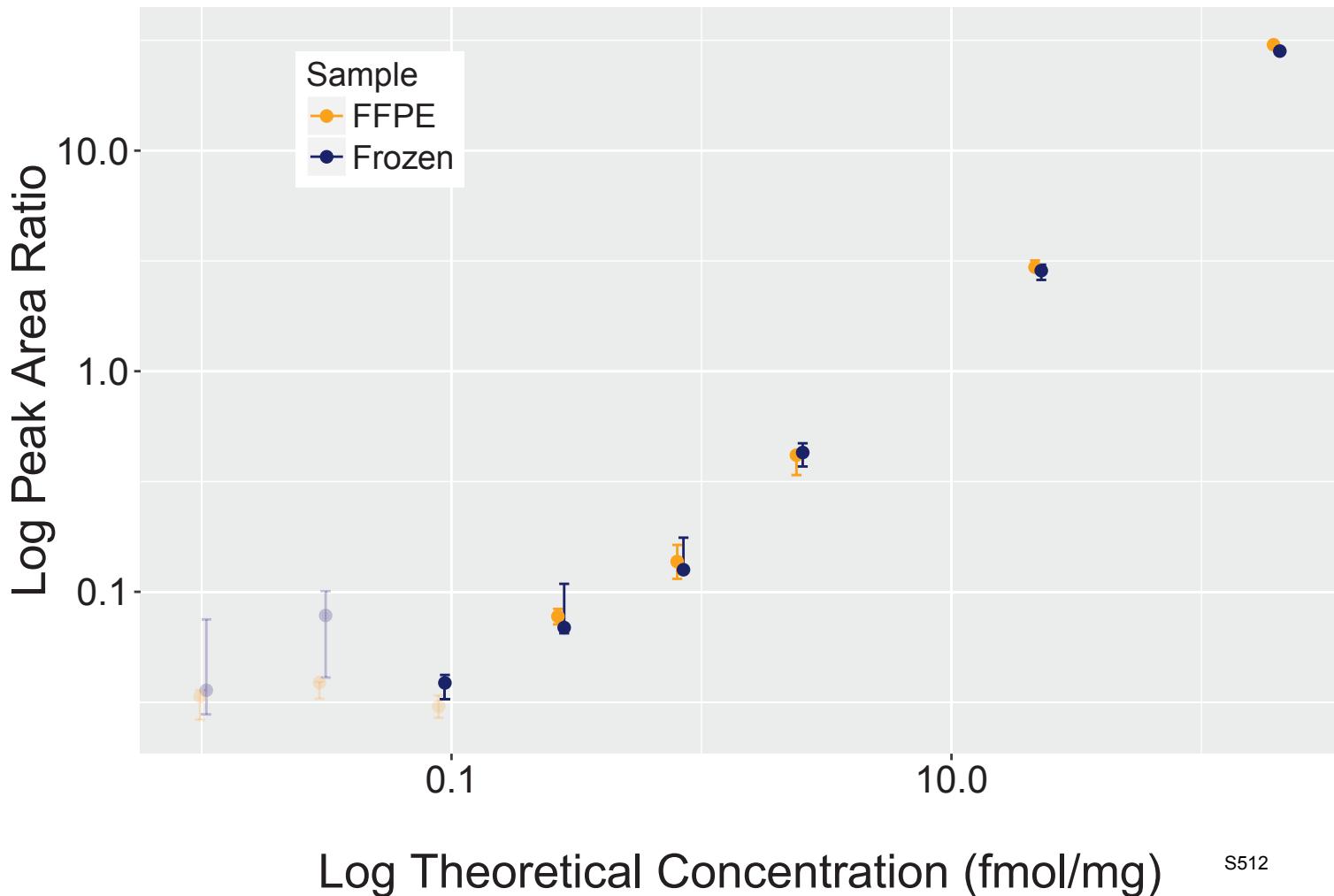
S510

Analyte: FSCN1.SSYDVFQLEFNDGAYNIK

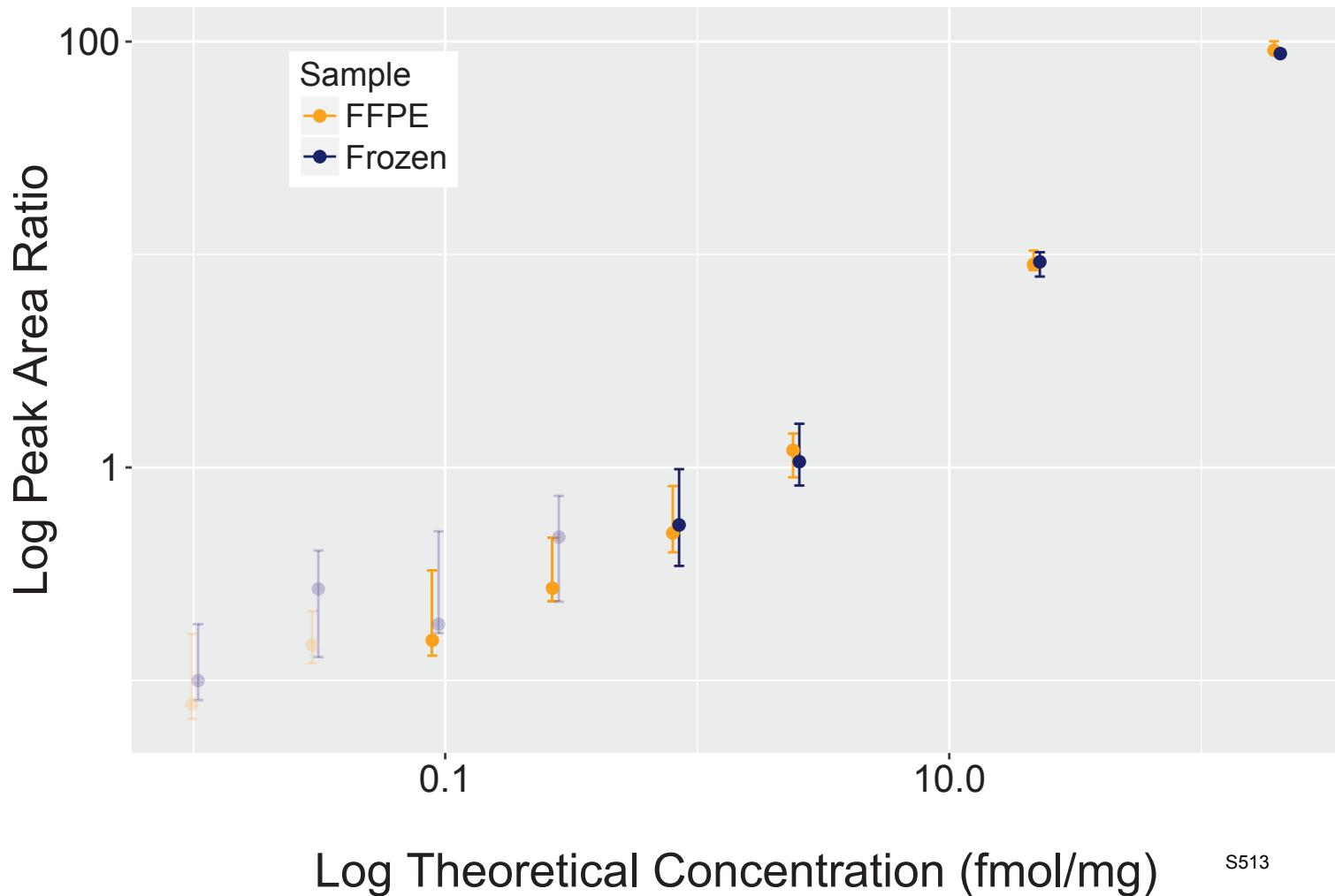


S511

Analyte: ALDH4A1.STGSIVGQQPFGGAR

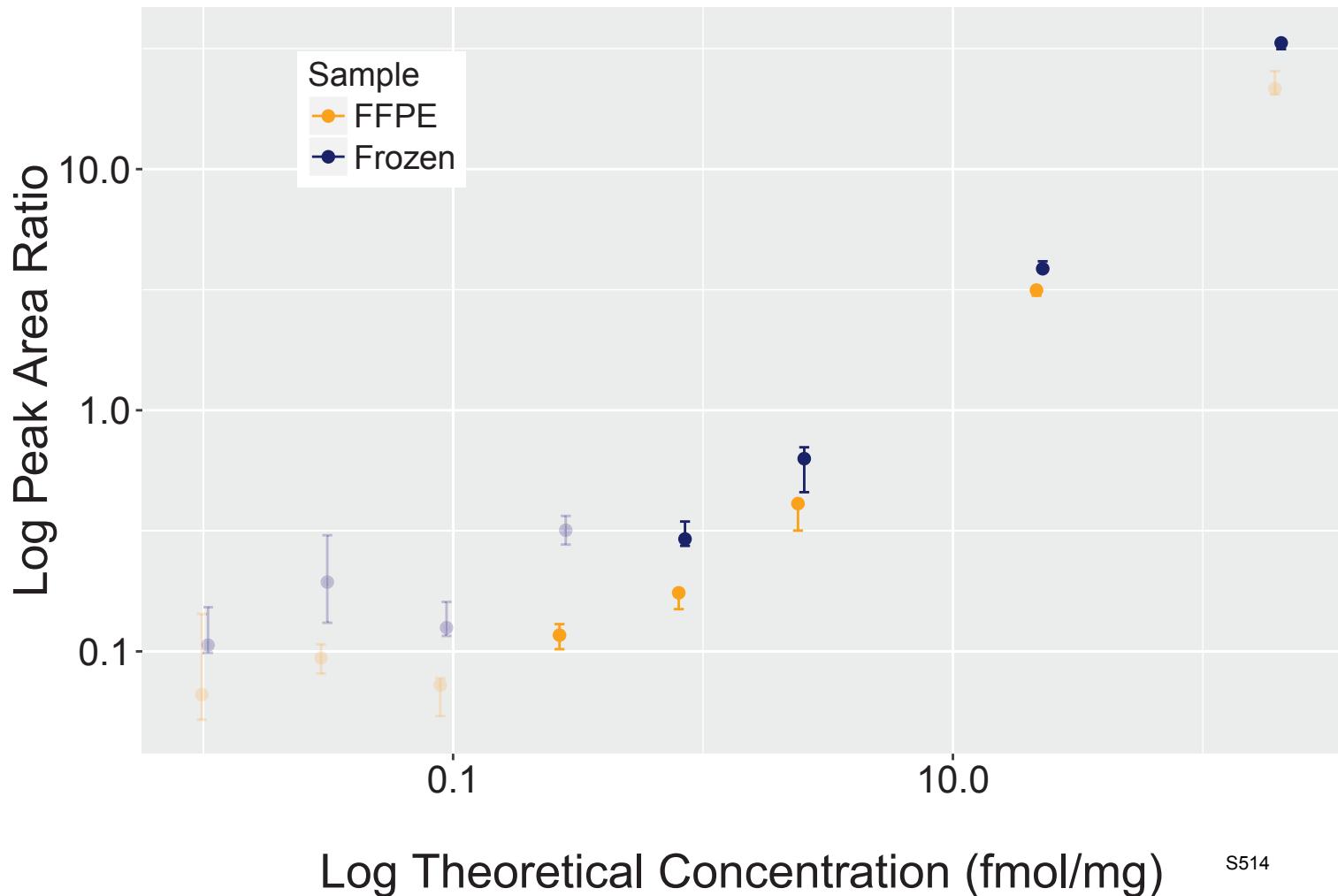


Analyte: ABCF1.STLLLLTGK



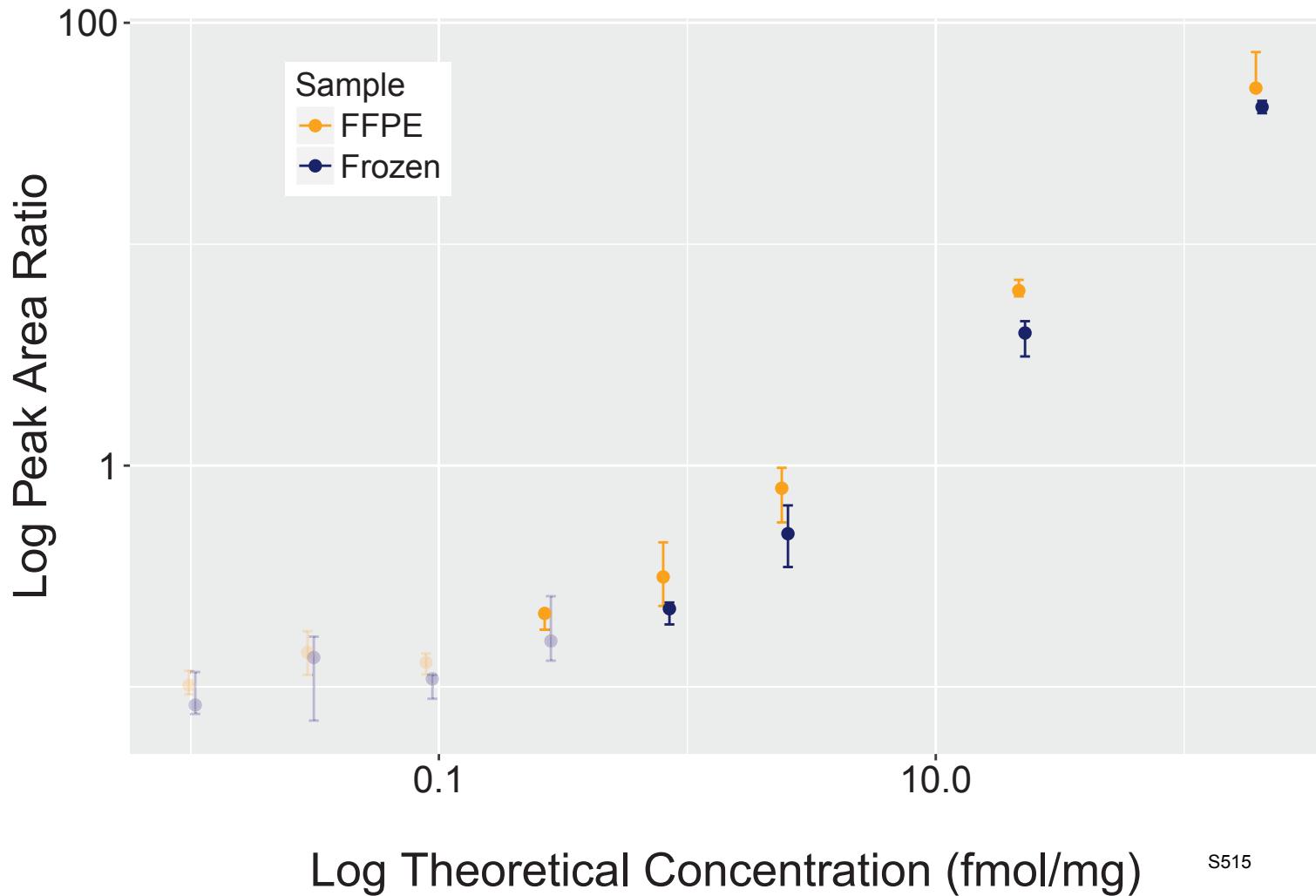
S513

Analyte: CYB5R3.STPAITLESPDIK



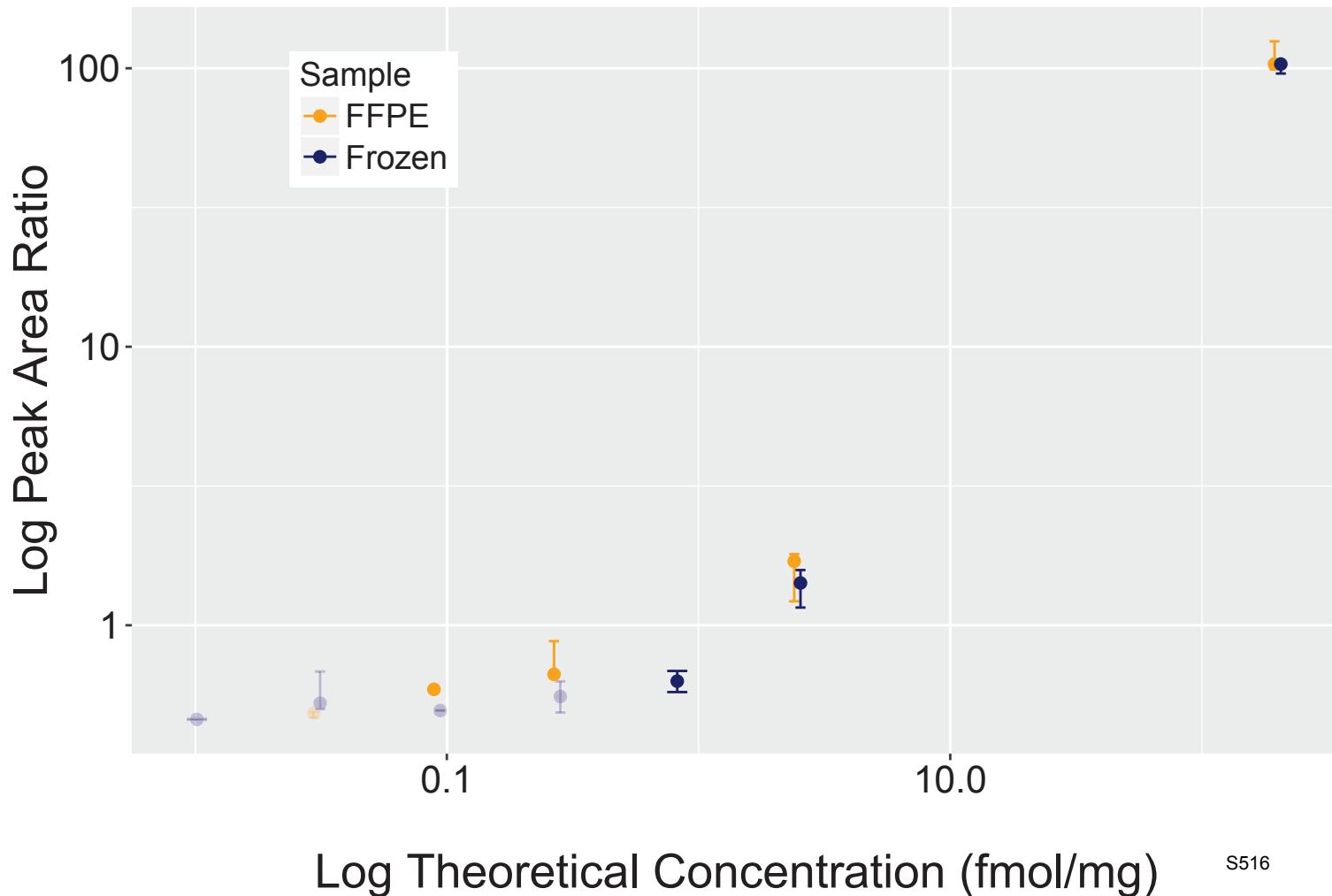
S514

Analyte: NAMPT.STQAPLIIRPDSGNPLDTVLK



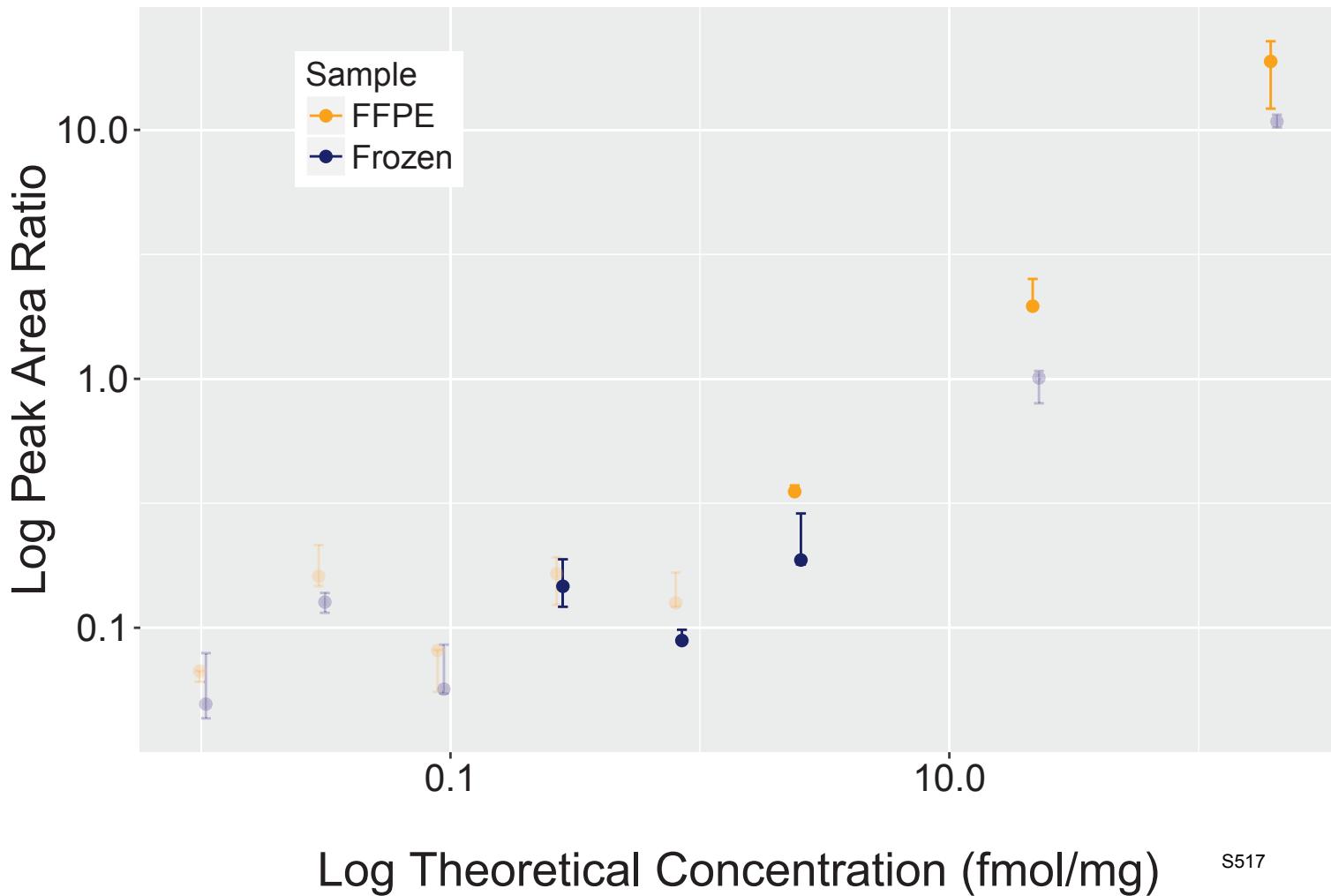
S515

Analyte: MSH6.SVAPAAAPTSC[+57]DFSPGDLVWAK

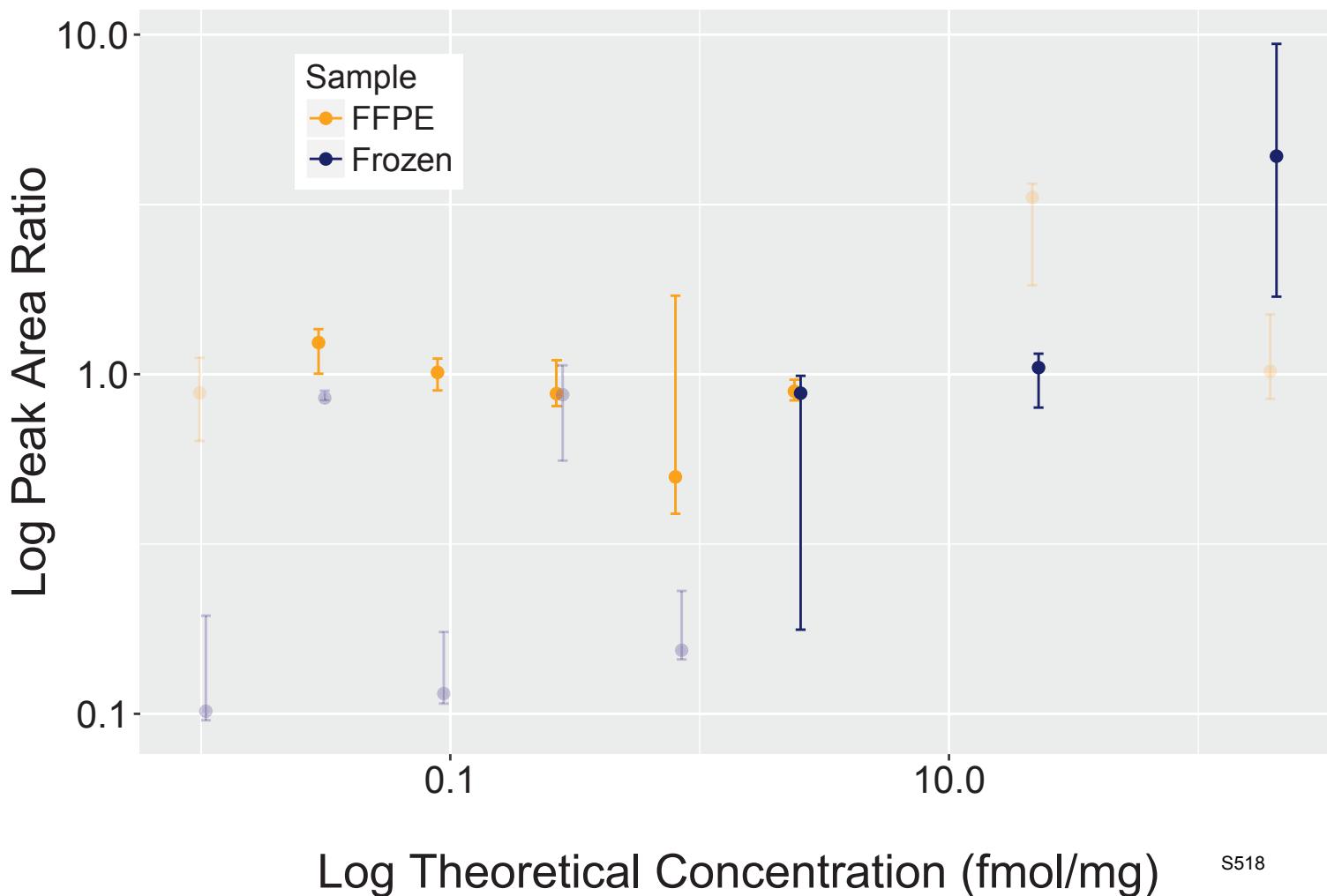


S516

Analyte: PDCD6IP.SVIEQGGIQTVDQLIK

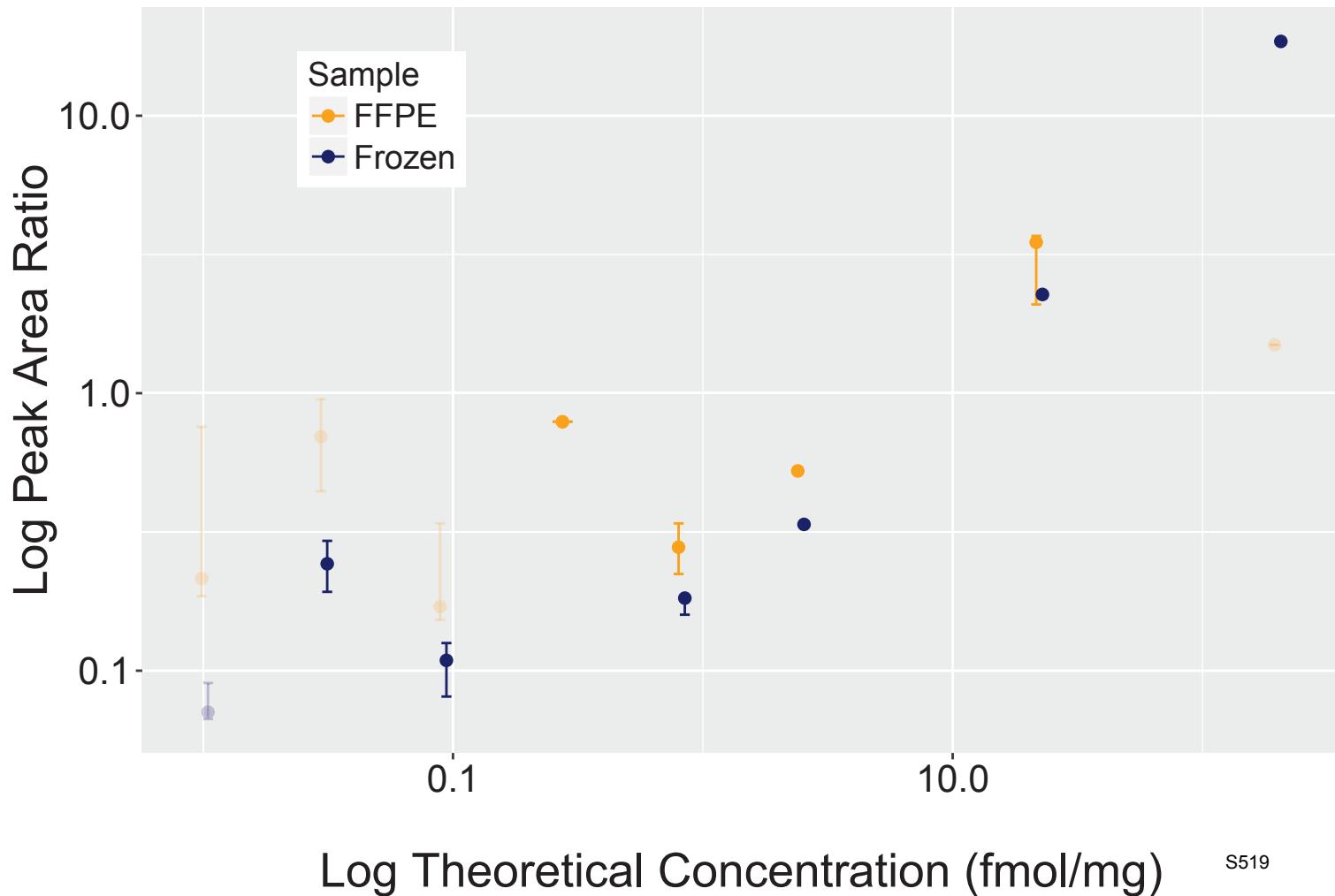


Analyte: ESD.SVSAFAPIC[+57]NPVLC[+57]PWGK



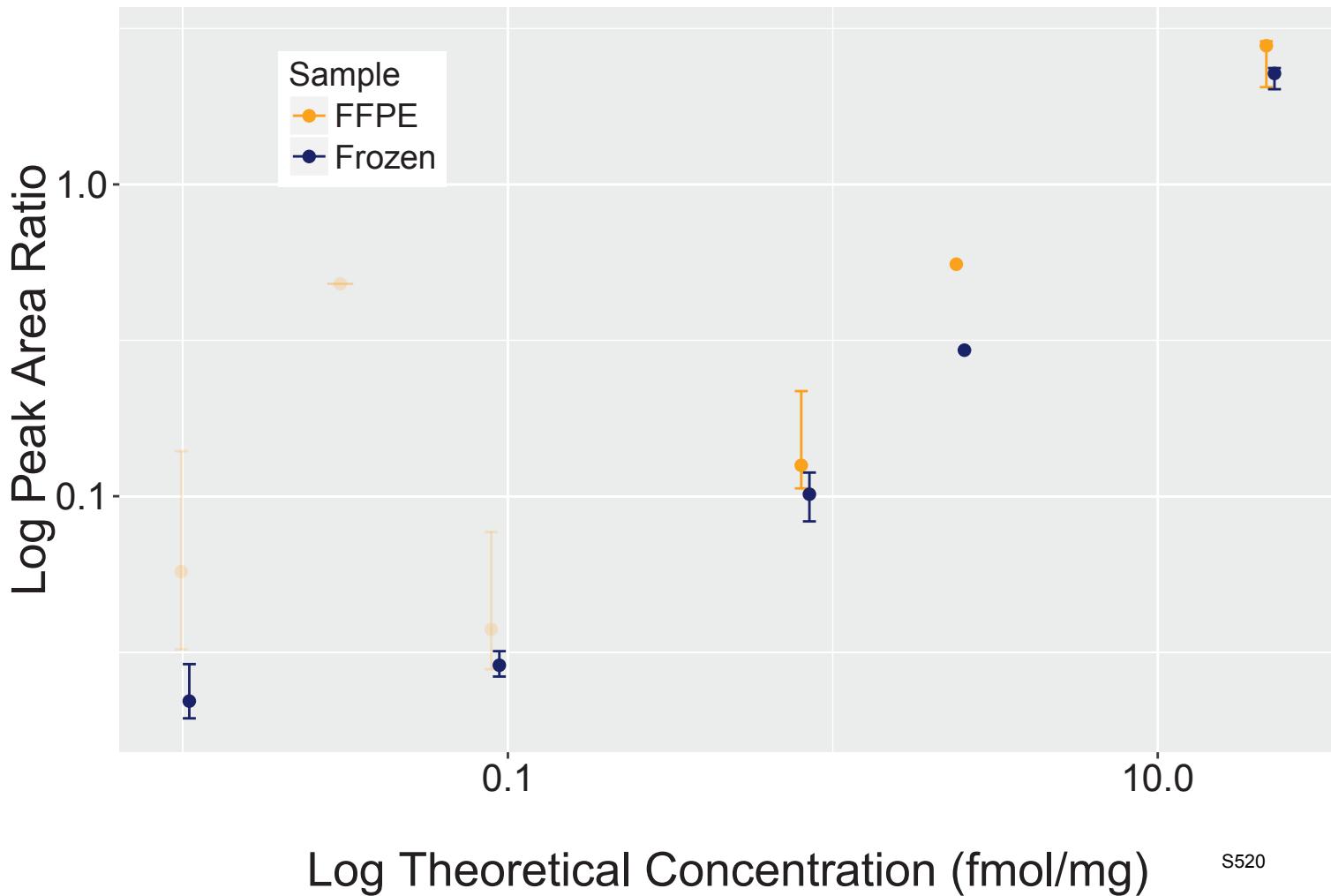
S518

Analyte: TPD52L2.SWHDVQVSSAYVK



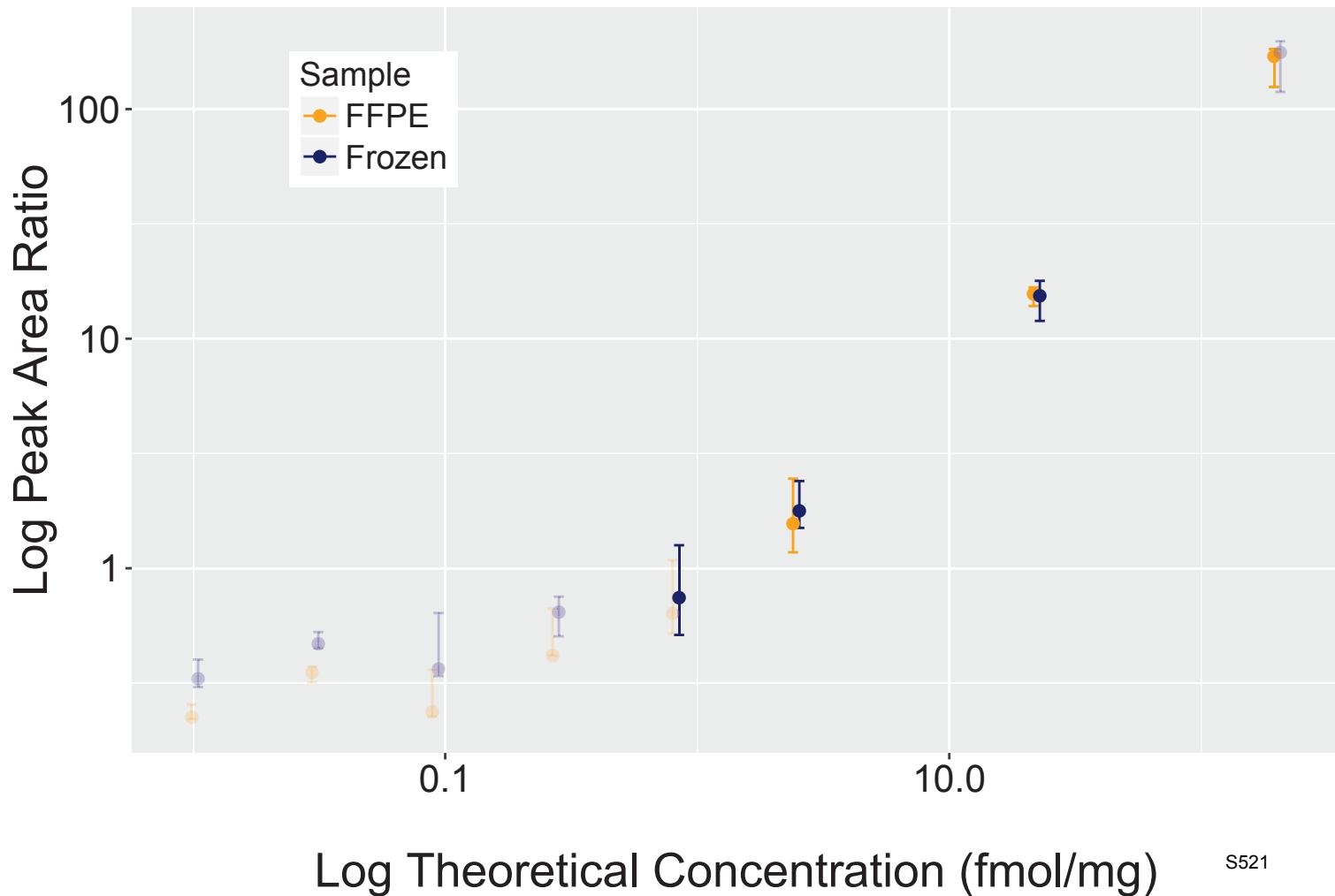
S519

Analyte: ATP5H.SWNETLTSR



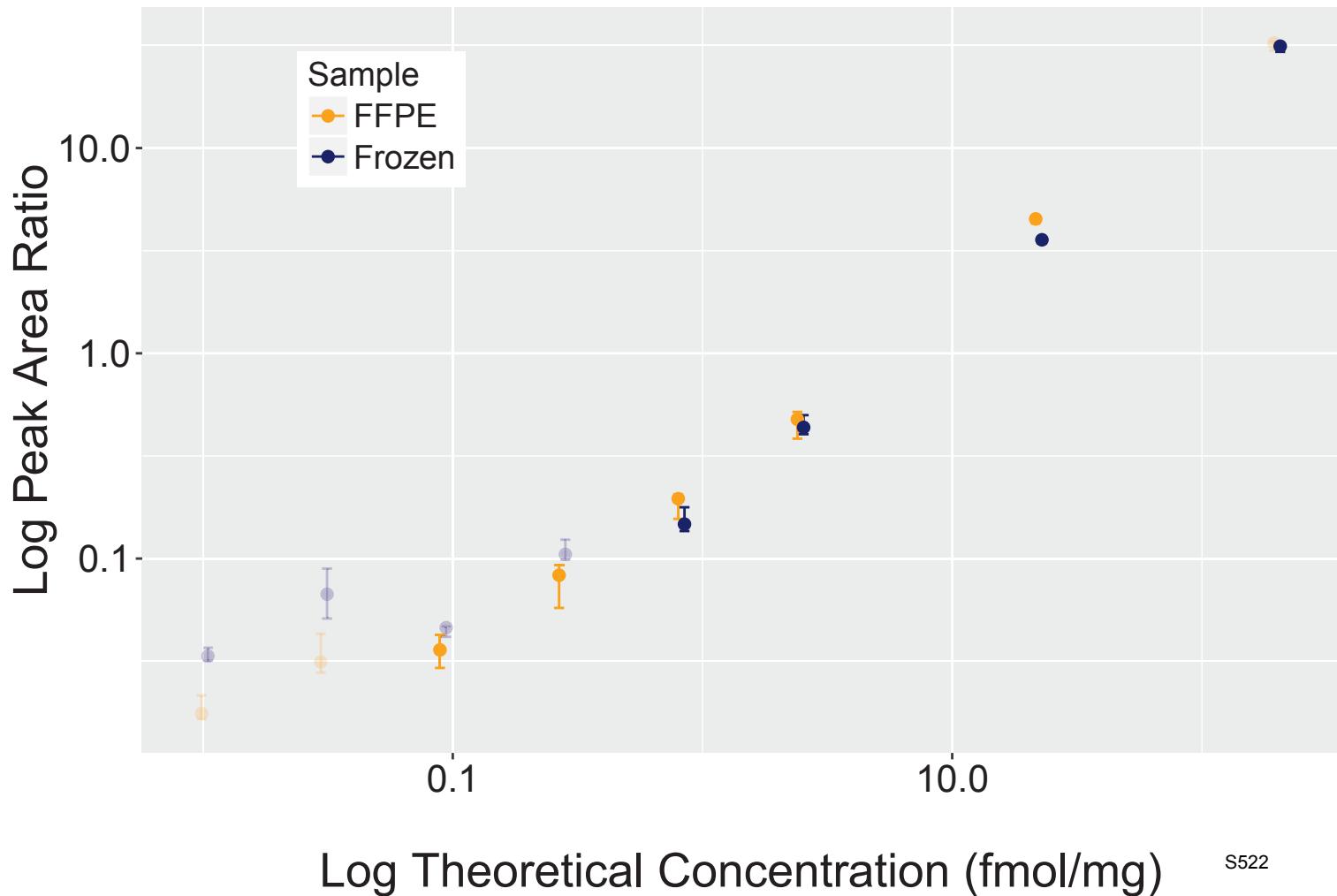
S520

Analyte: ATP1B1.SYEAYVLNIVR



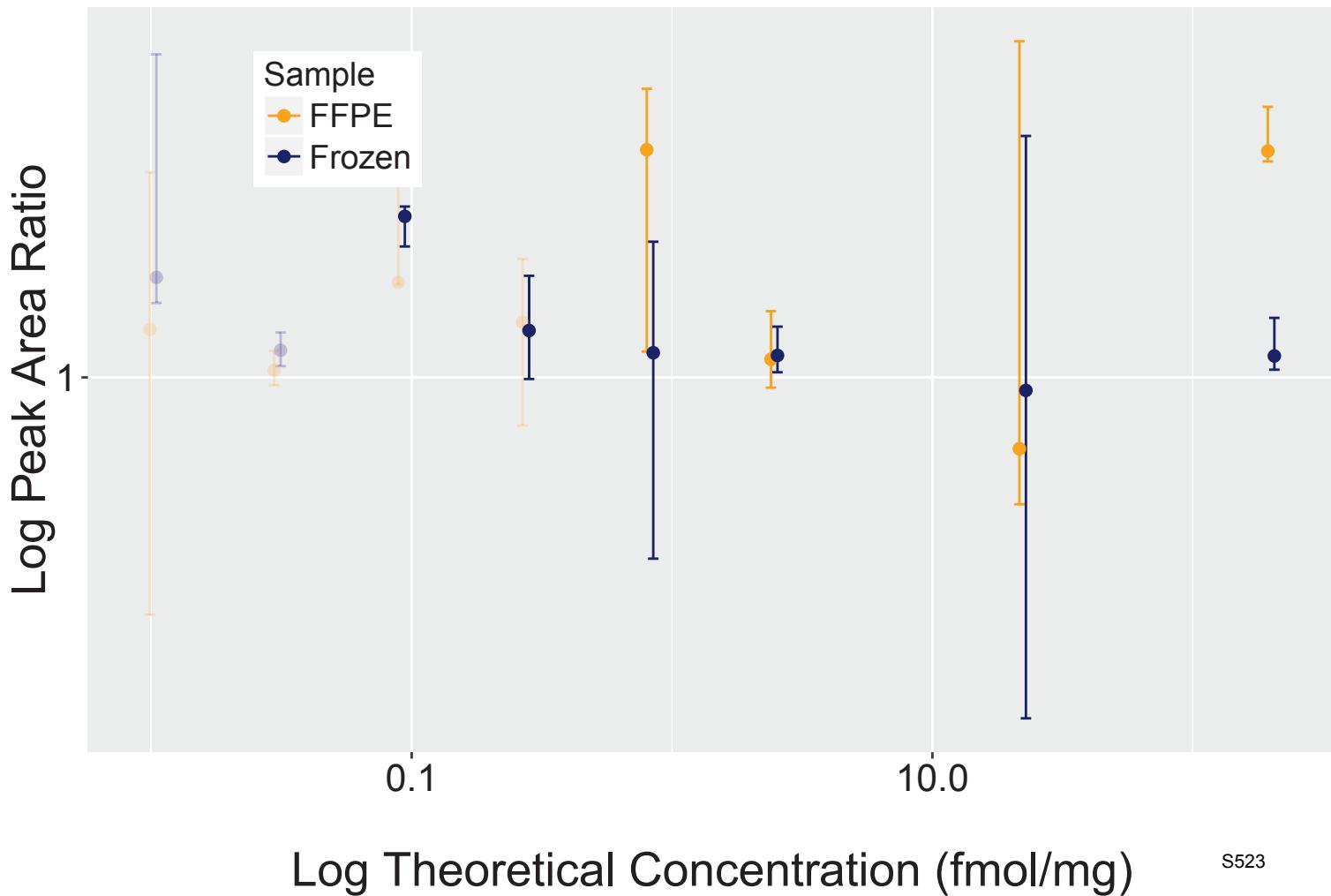
S521

Analyte: DDOST.TADDPSLSLIK

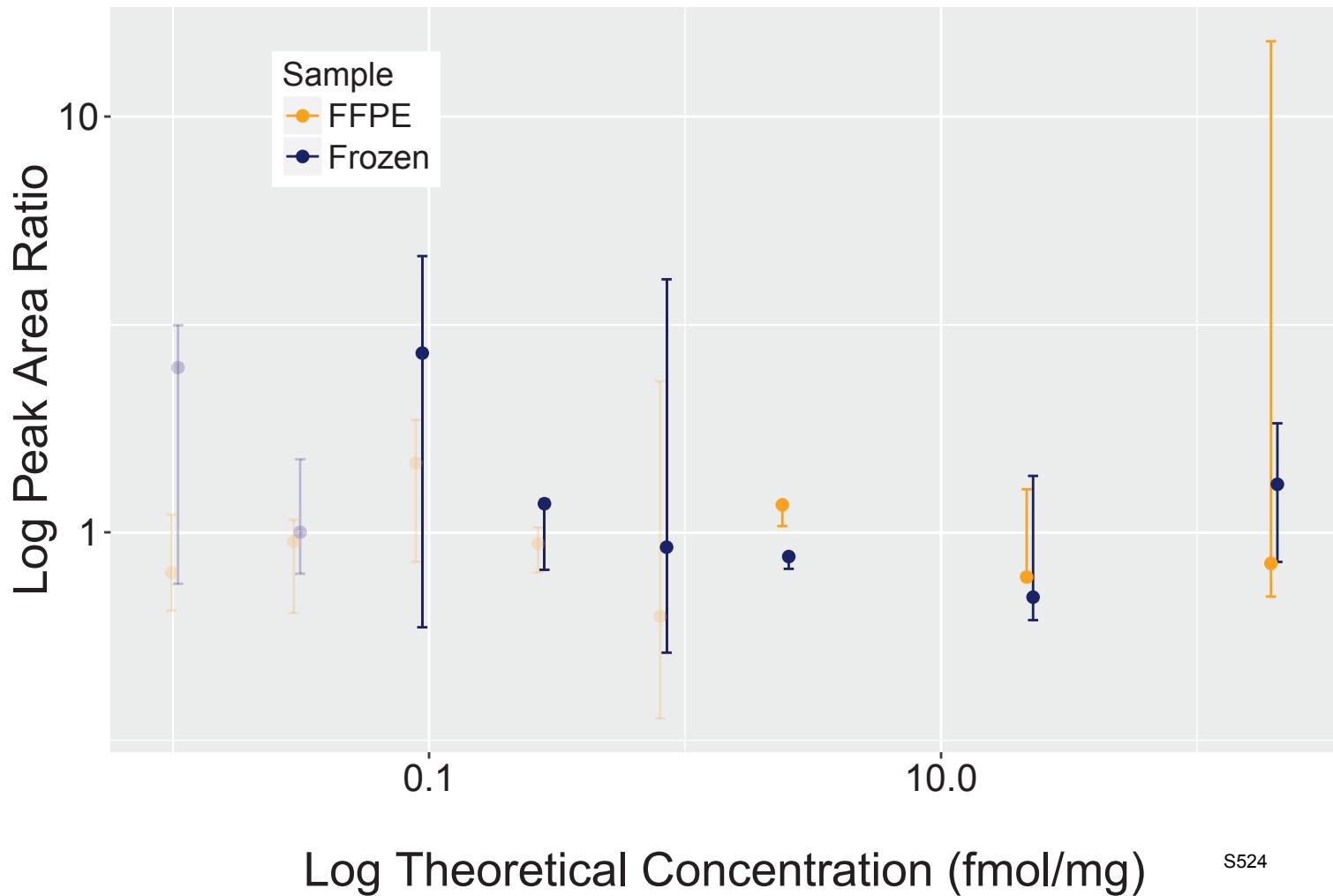


S522

Analyte: YWHAG.TAFDDAIAELDTLNEDSYK

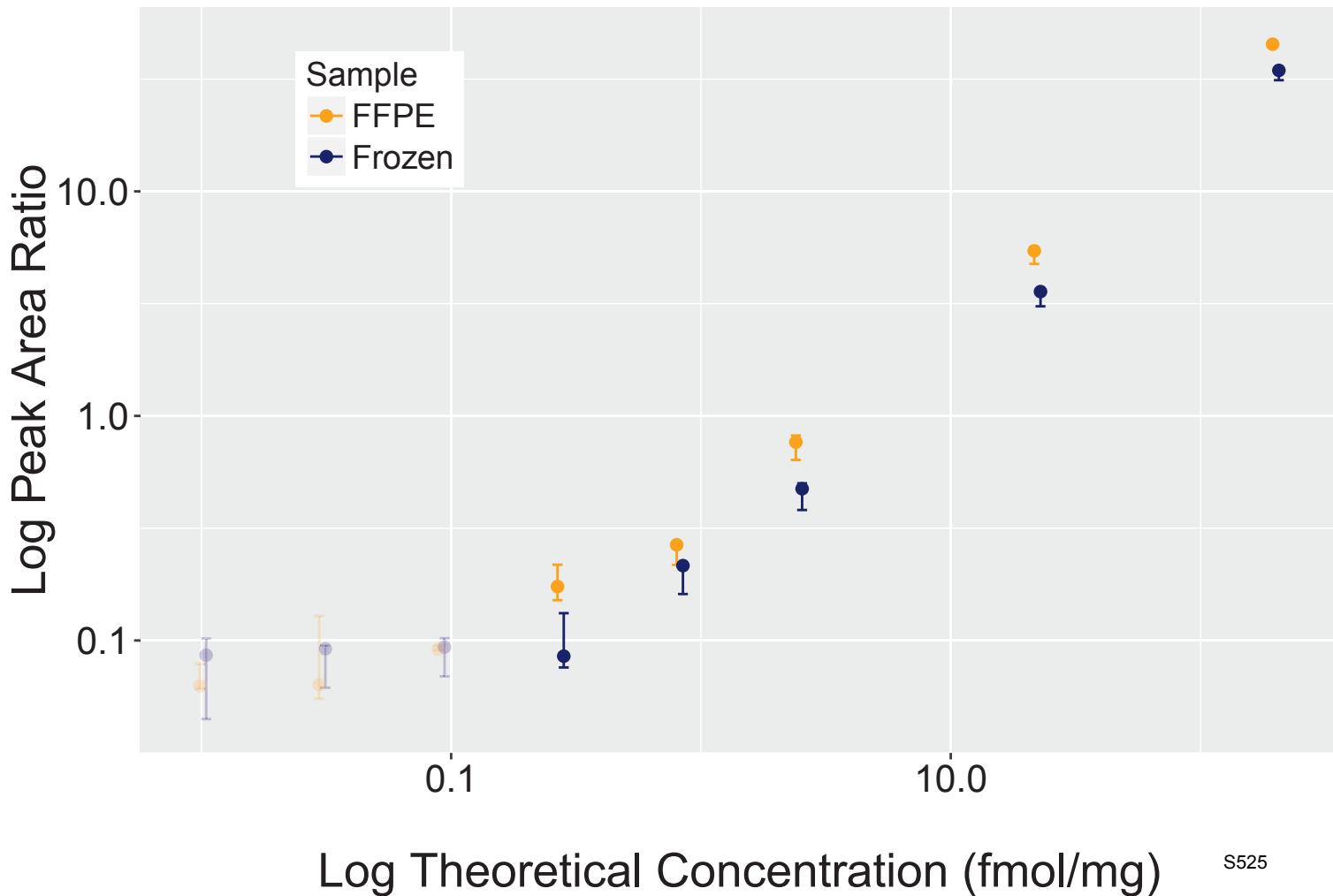


Analyte: YWHAH.TAFDEAIAELDTLNEESYK



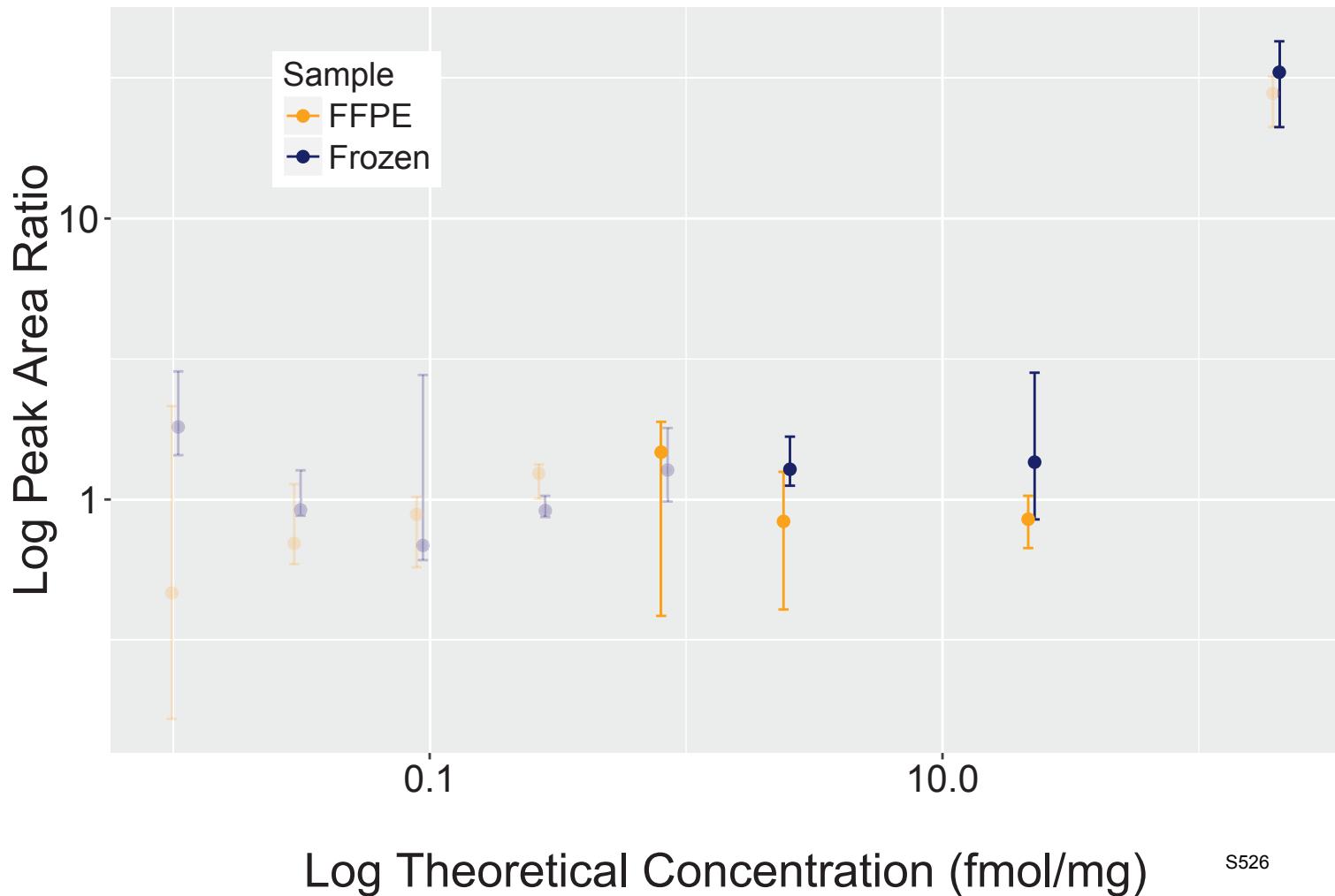
S524

Analyte: PAFAH1B1.TAPYVVTGSVDQTVK



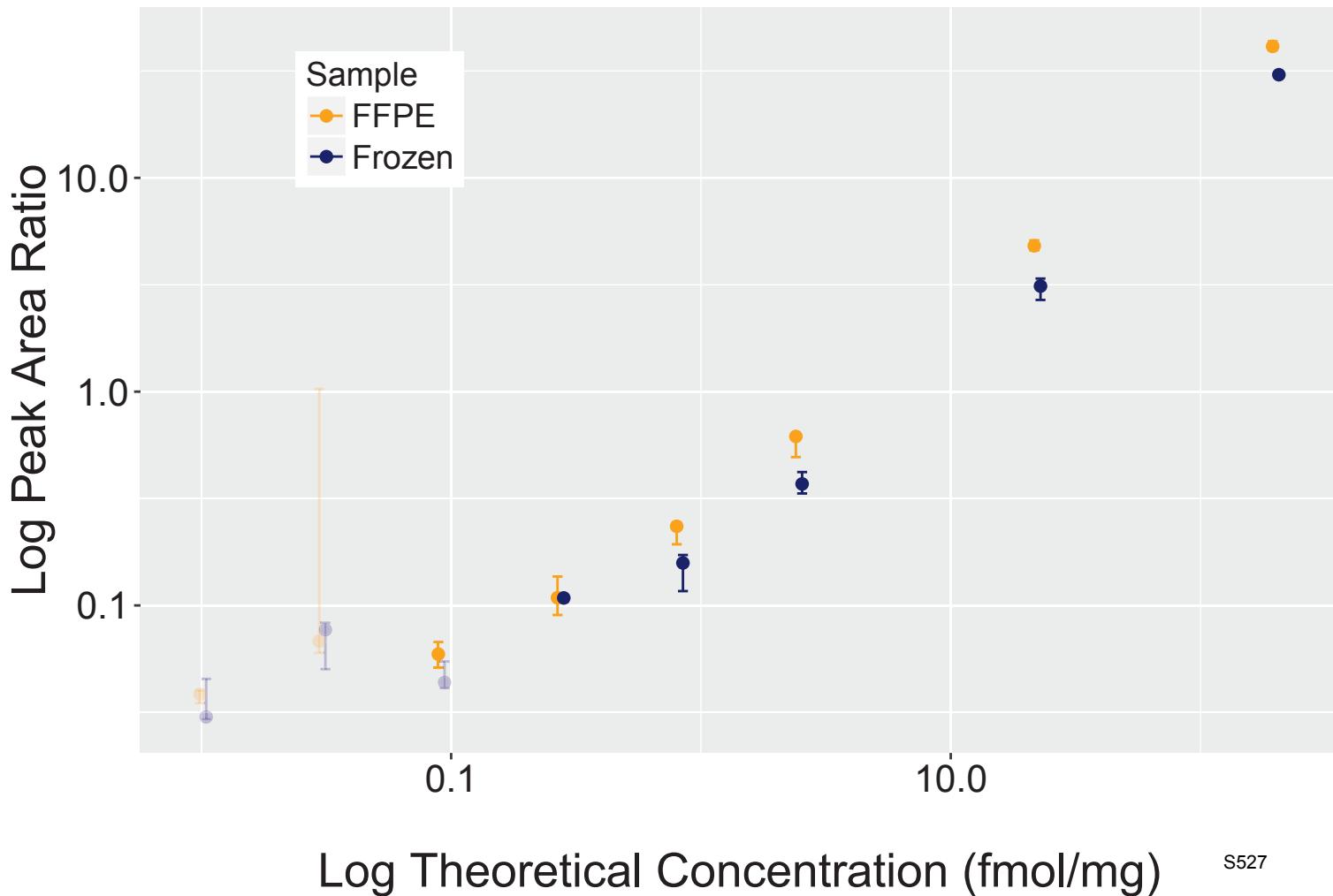
S525

Analyte: UBAP2L.TATEEWGTEDWNEDLSETK

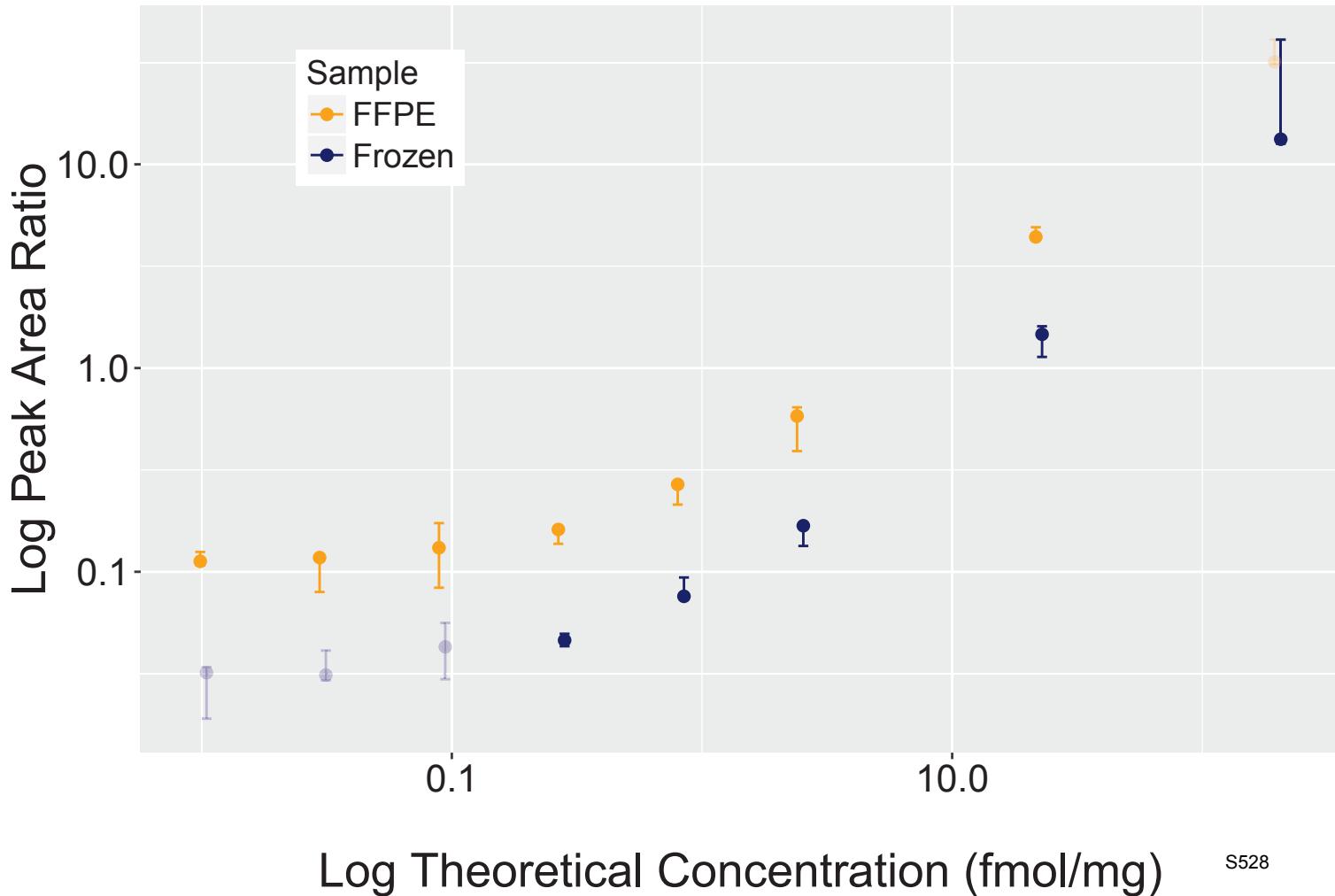


S526

Analyte: CKAP4.TAVDSLVAYSVK

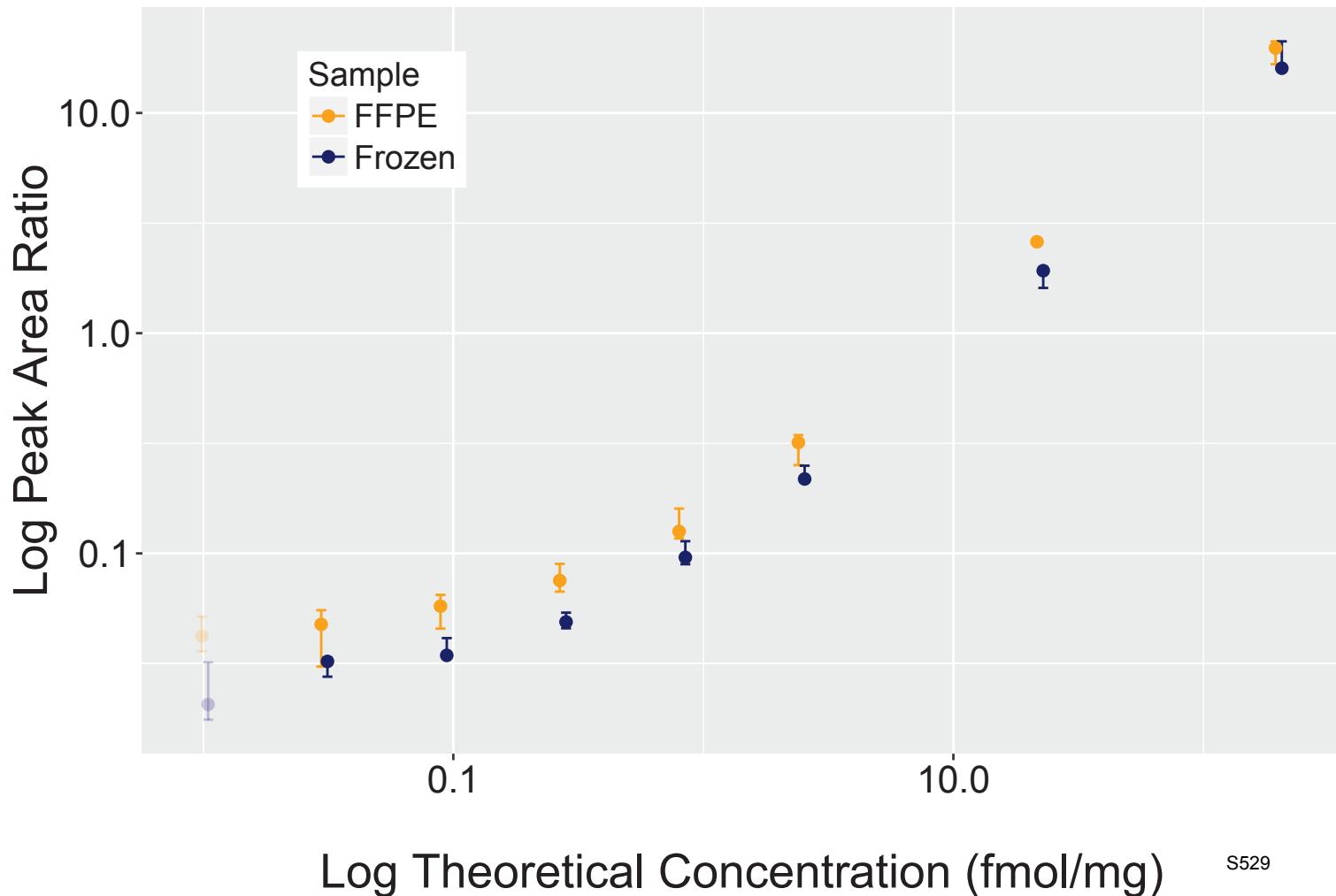


Analyte: GDI2.TDDYLDQPC[+57]YETINR

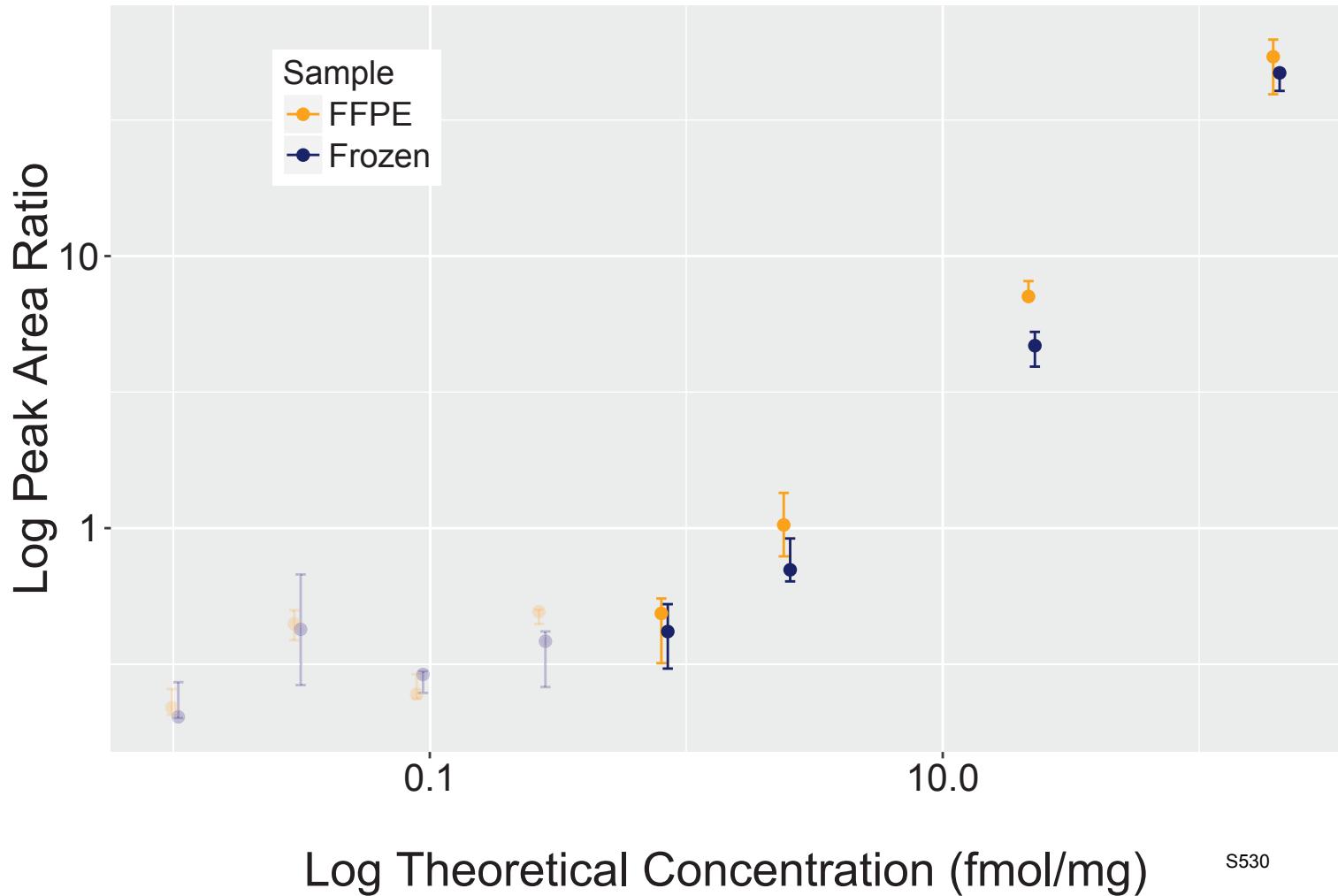


S528

Analyte: CAPNS1.TDGFGIDTC[+57]R

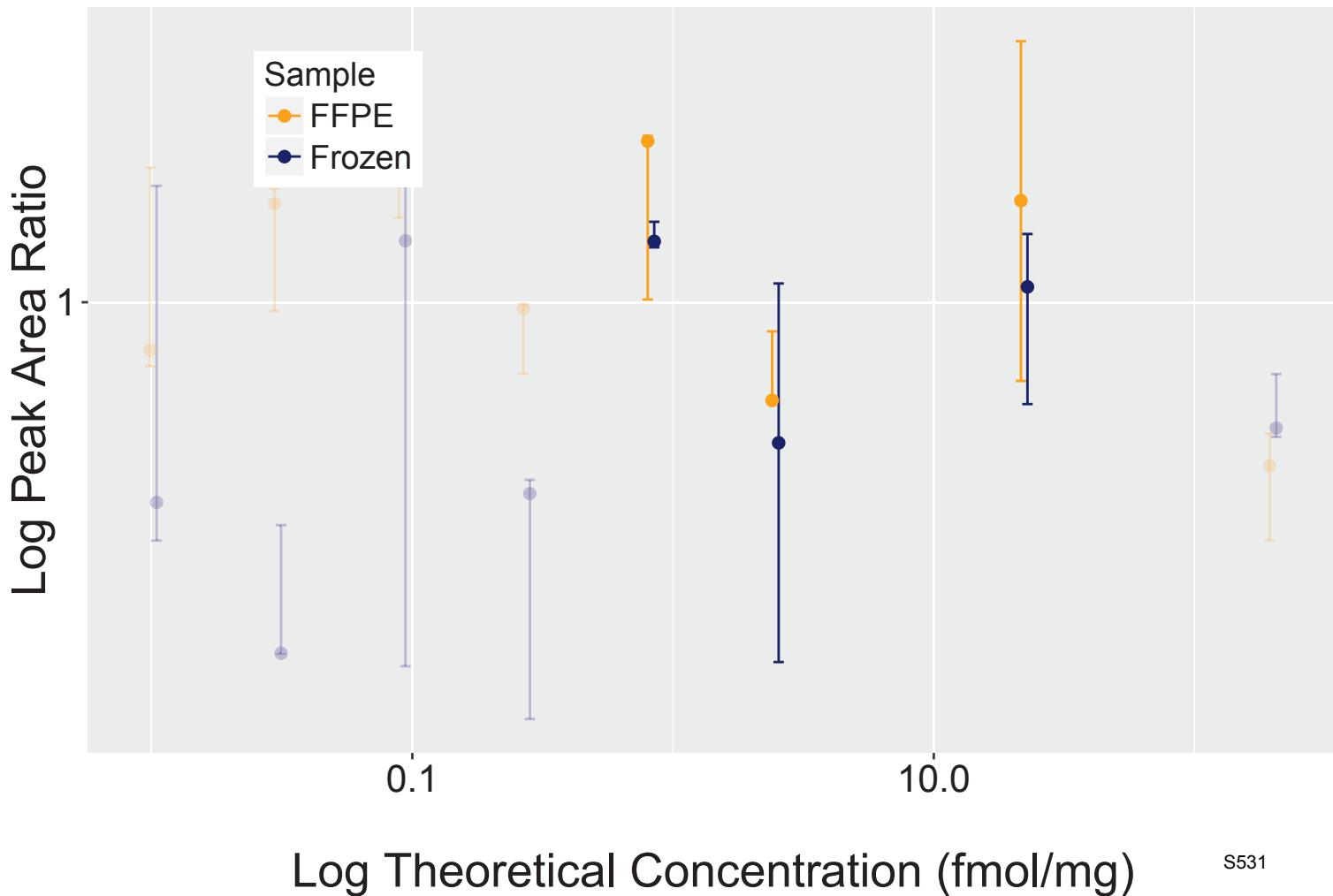


Analyte: DUT.TDIQIALPSGC[+57]YGR



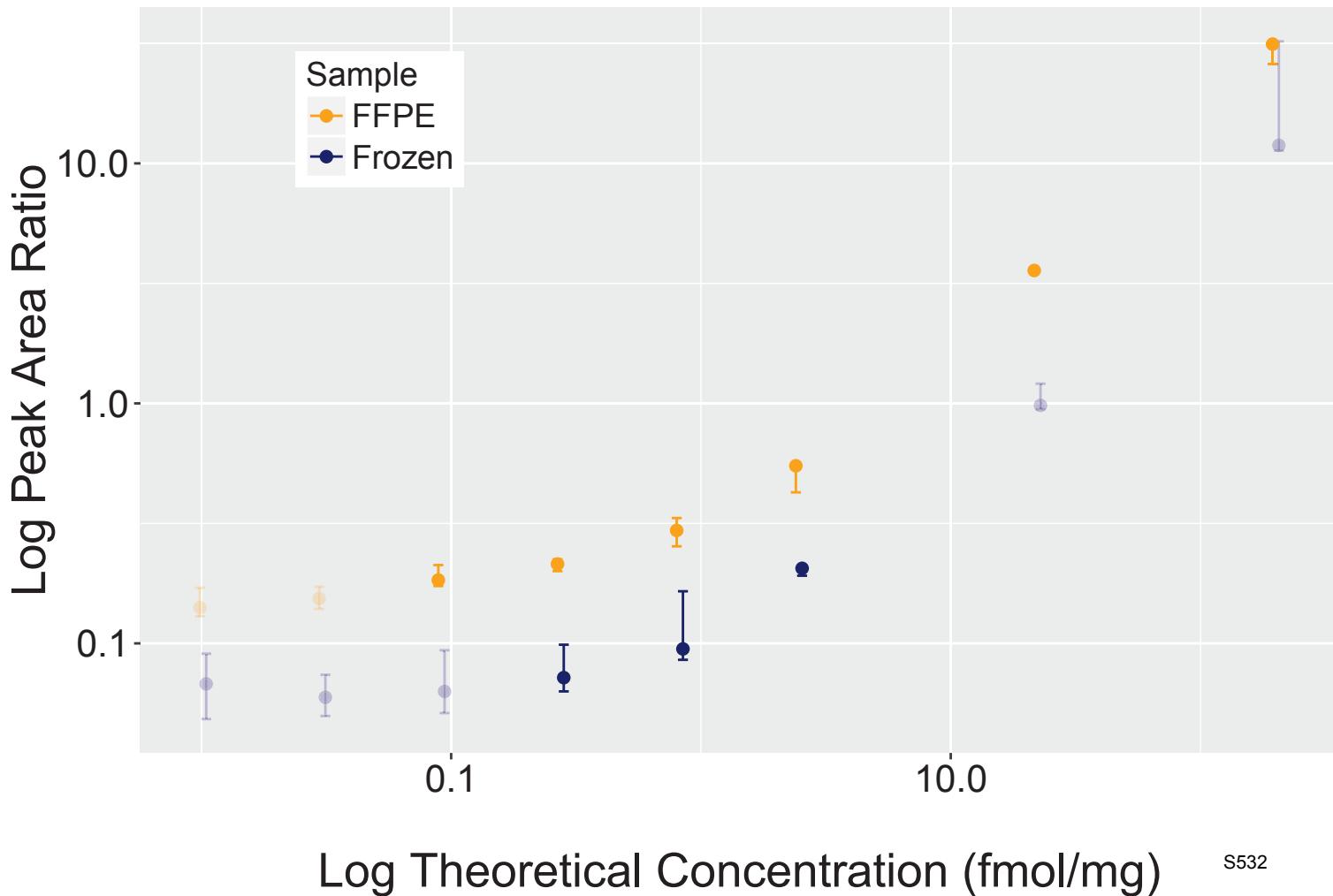
S530

Analyte: ALDH18A1.TDLLIVLSDVEGLFDSPPGSDDAK

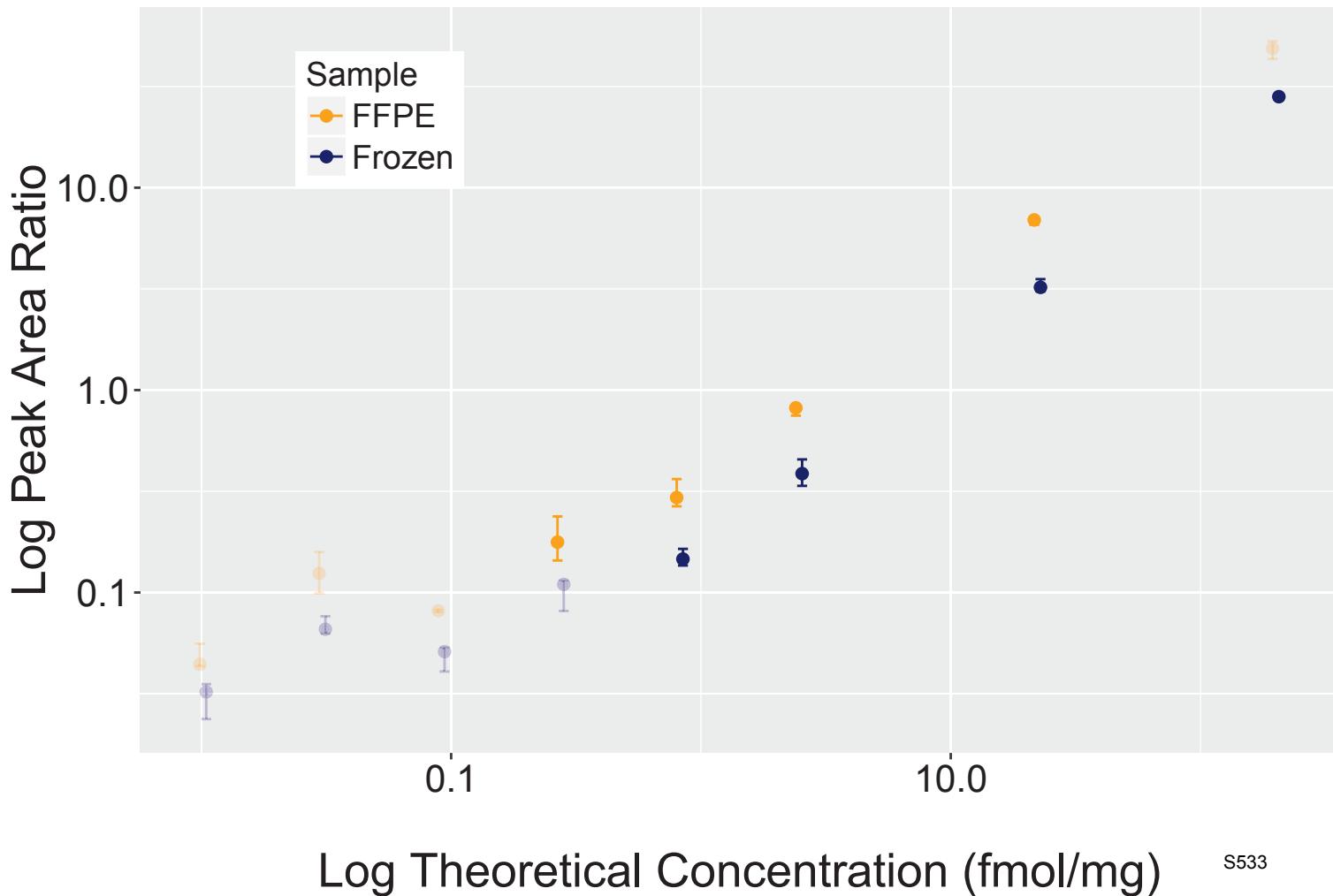


S531

Analyte: XRCC5.TDTLEDLFPTTK

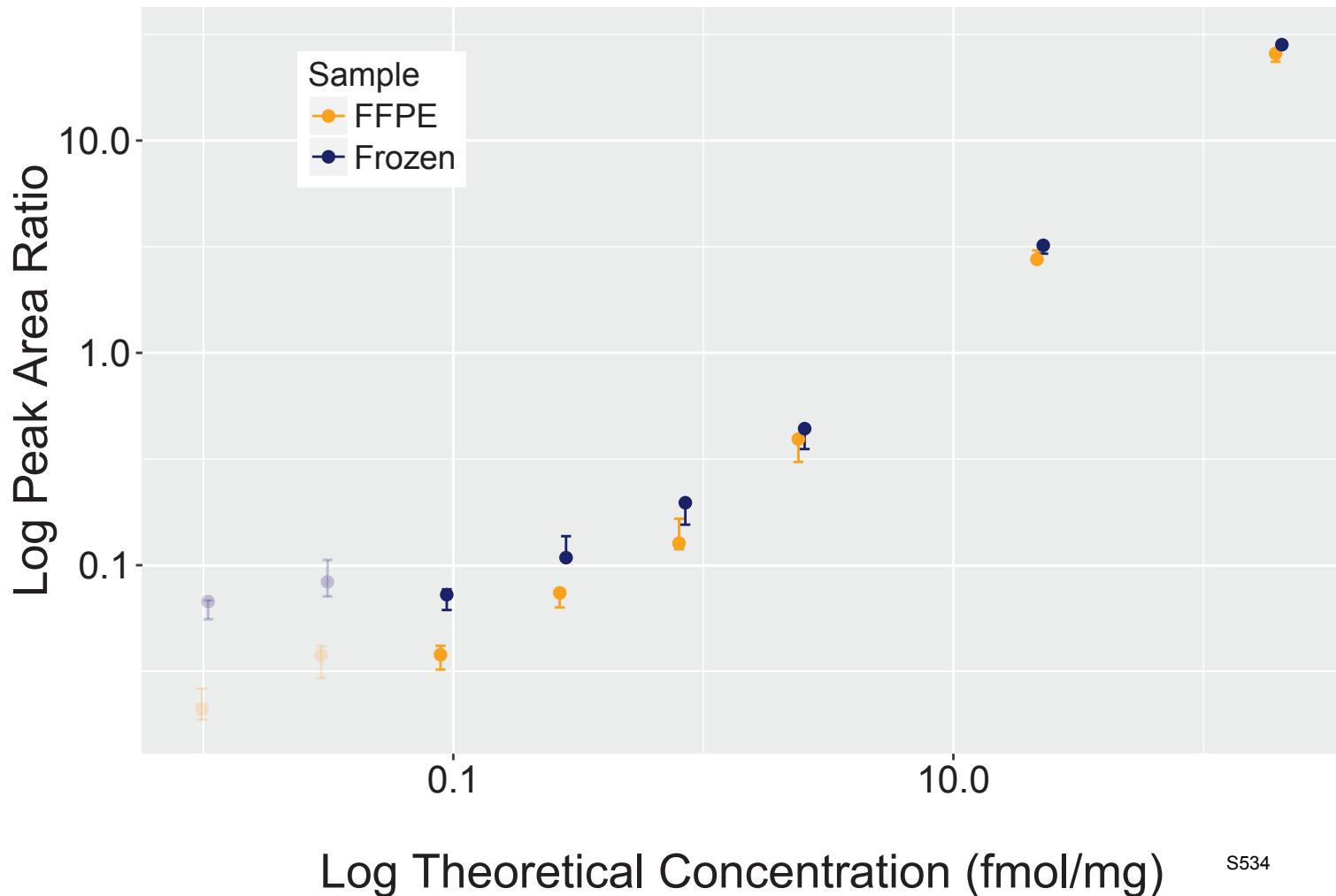


Analyte: CACYBP.TDTVLILC[+57]R

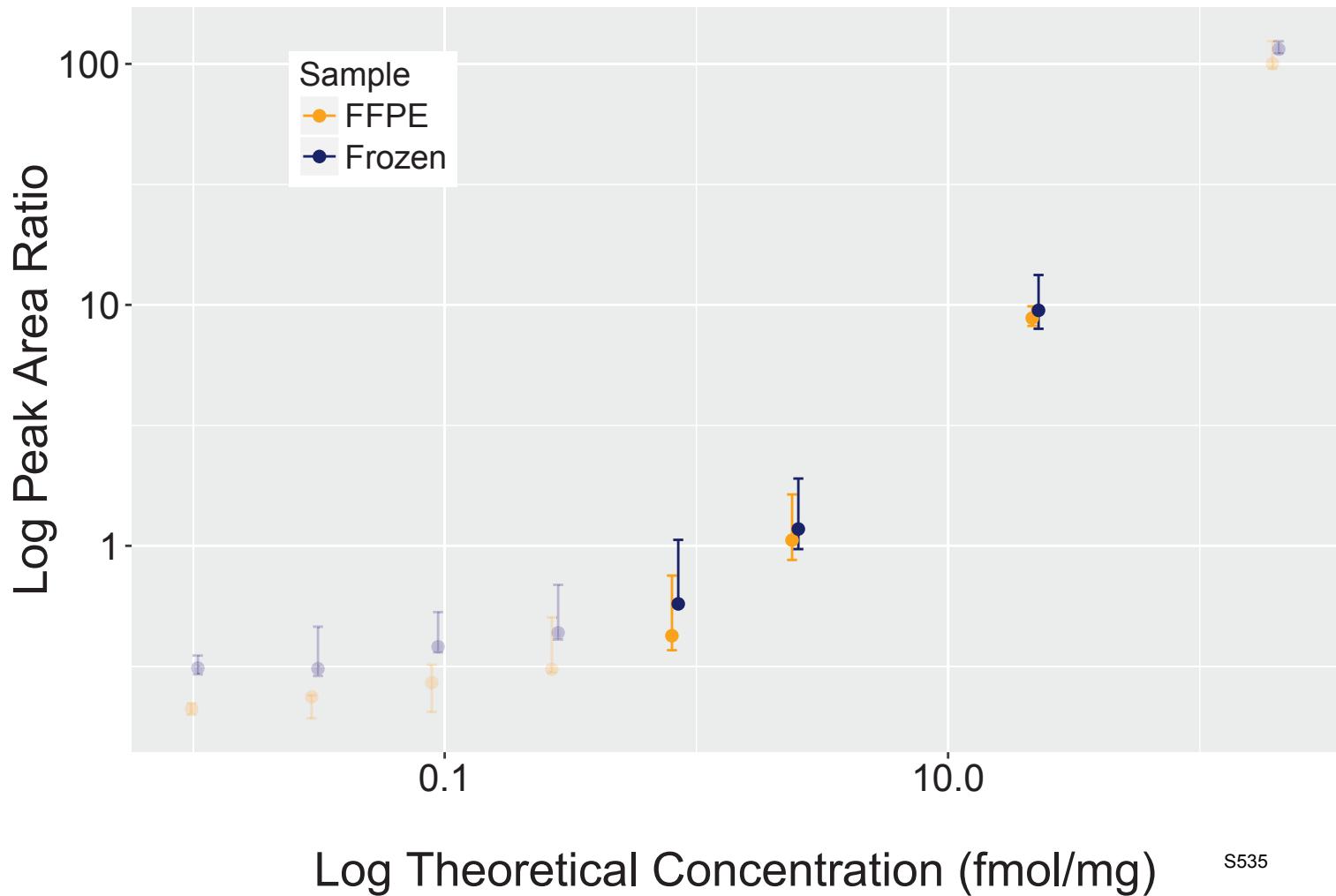


S533

Analyte: SLC2A1.TFDEIASGFR

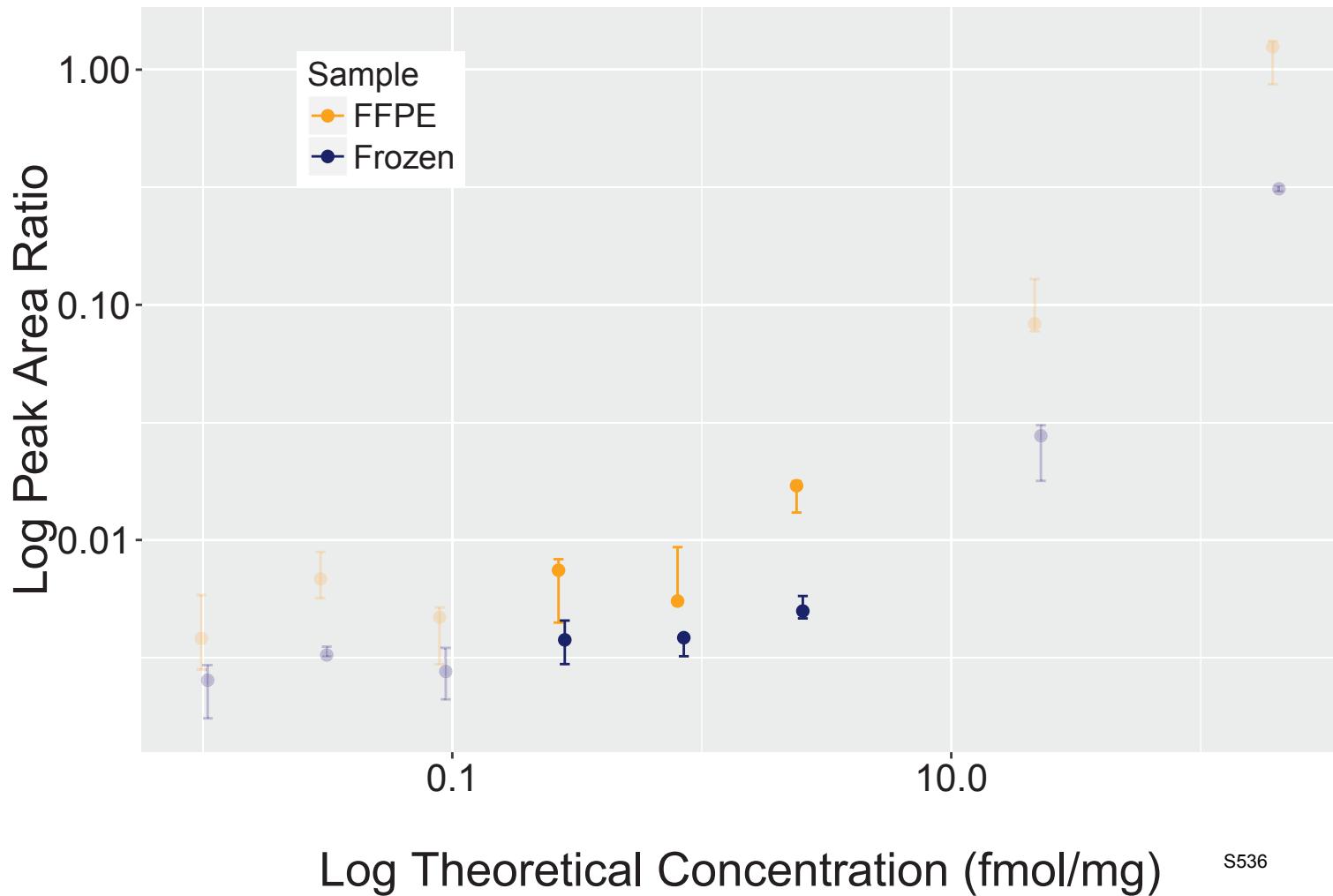


Analyte: DDX21.TFSFAIPLIEK



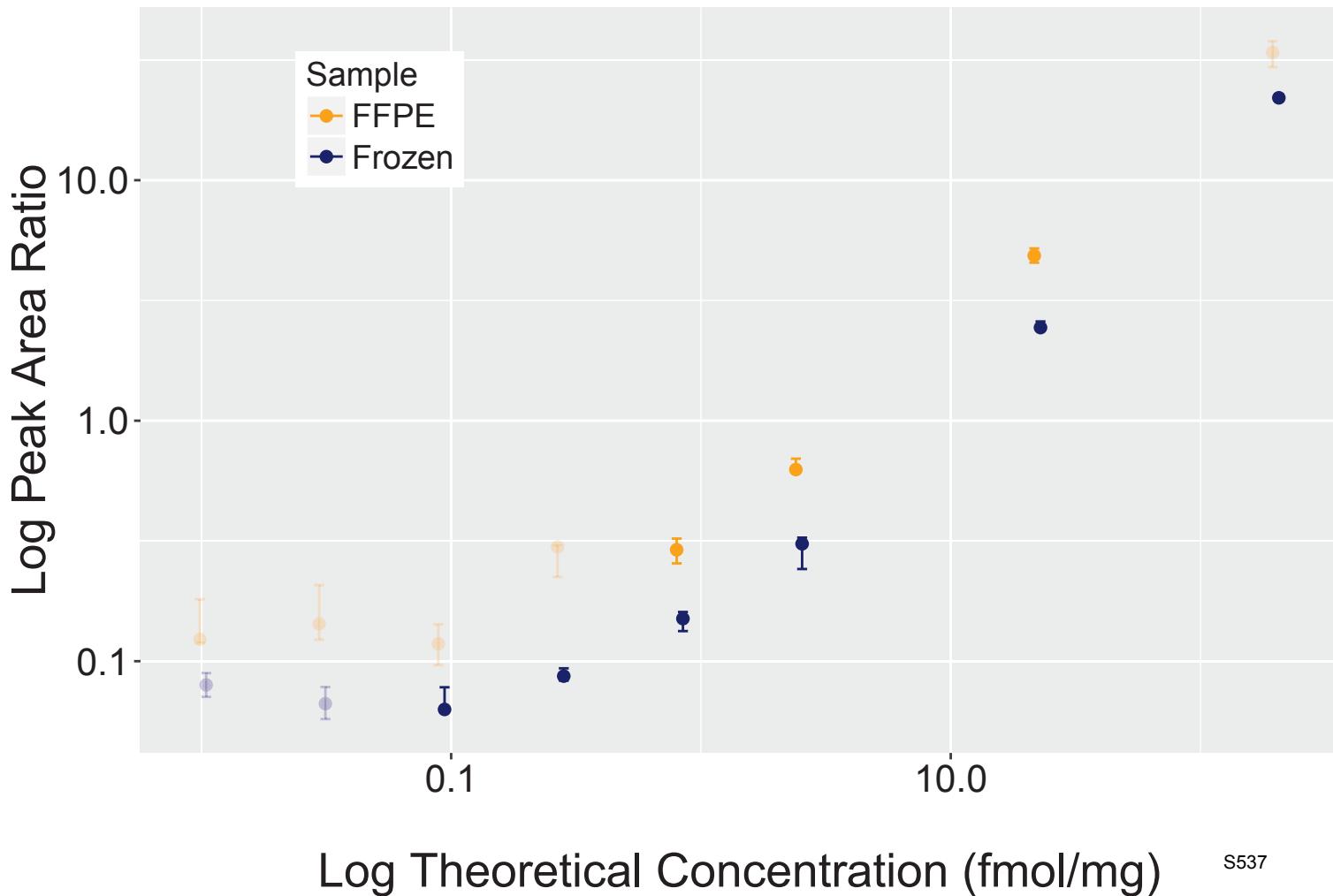
S535

Analyte: PFN1.TFVNITPAEVGVLVGK



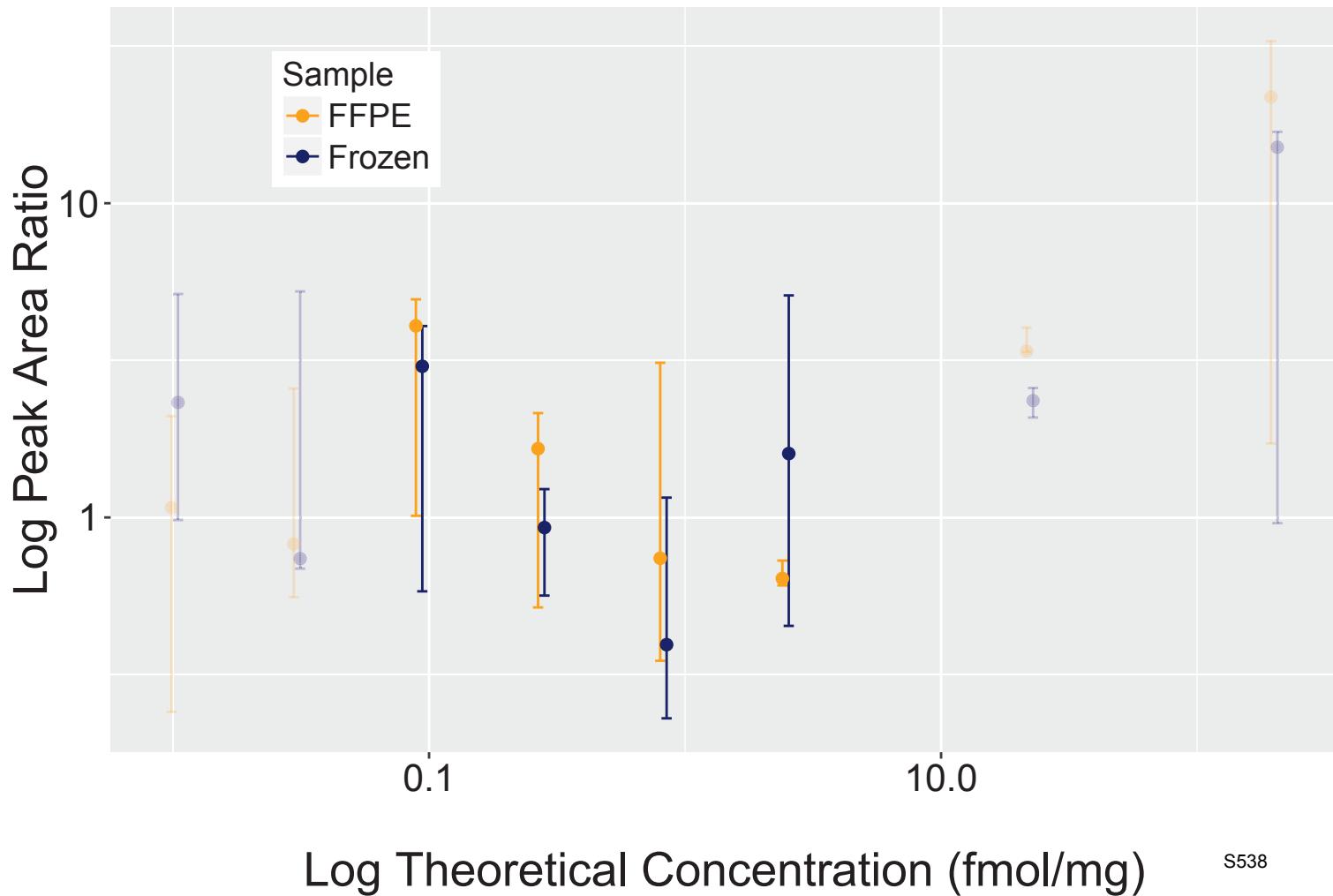
S536

Analyte: HADHA.TGIEQGSDAGYLC[+57]ESQK



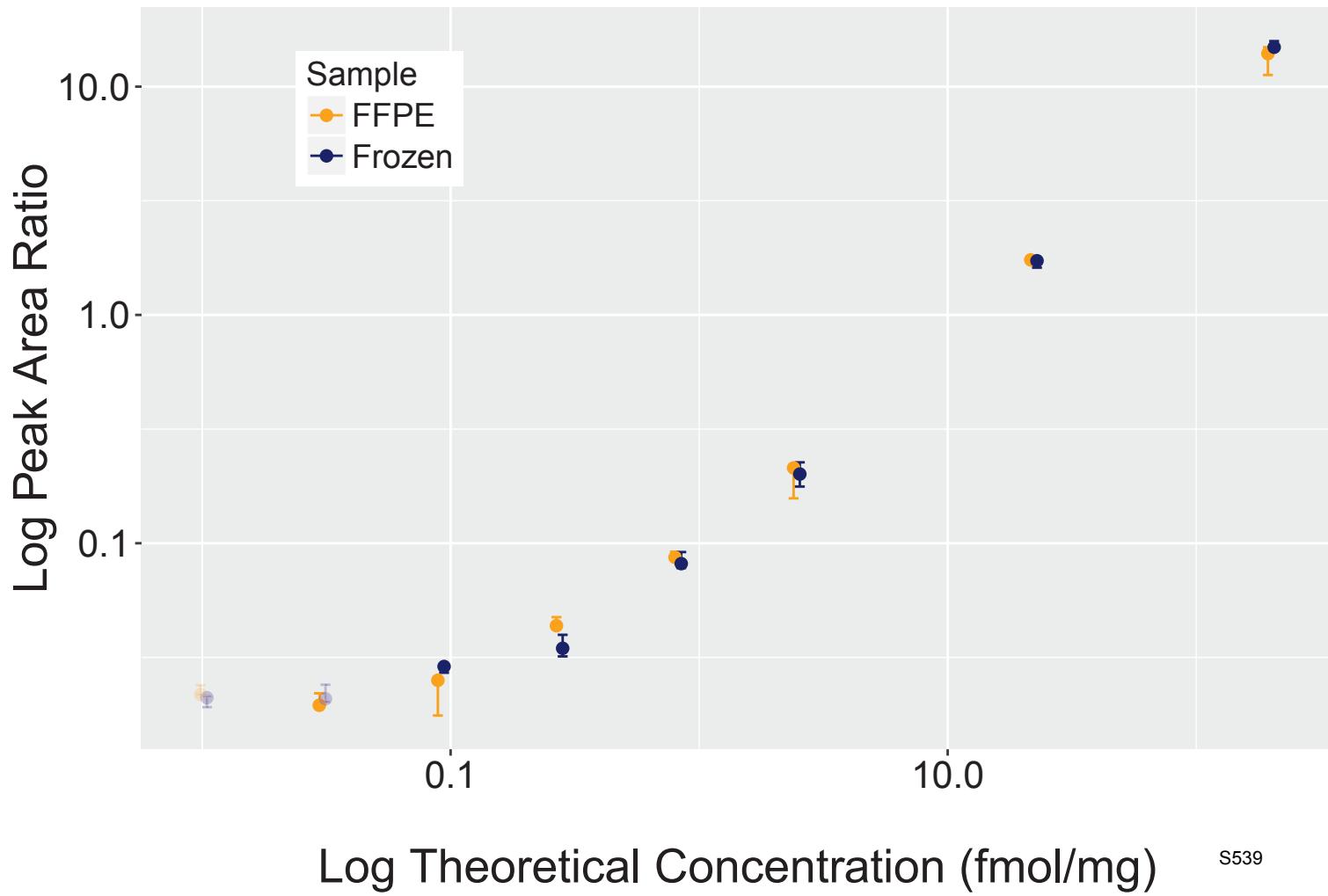
S537

Analyte: PPP2R4.TGPFAEHSNQLWNISAVPSWSK



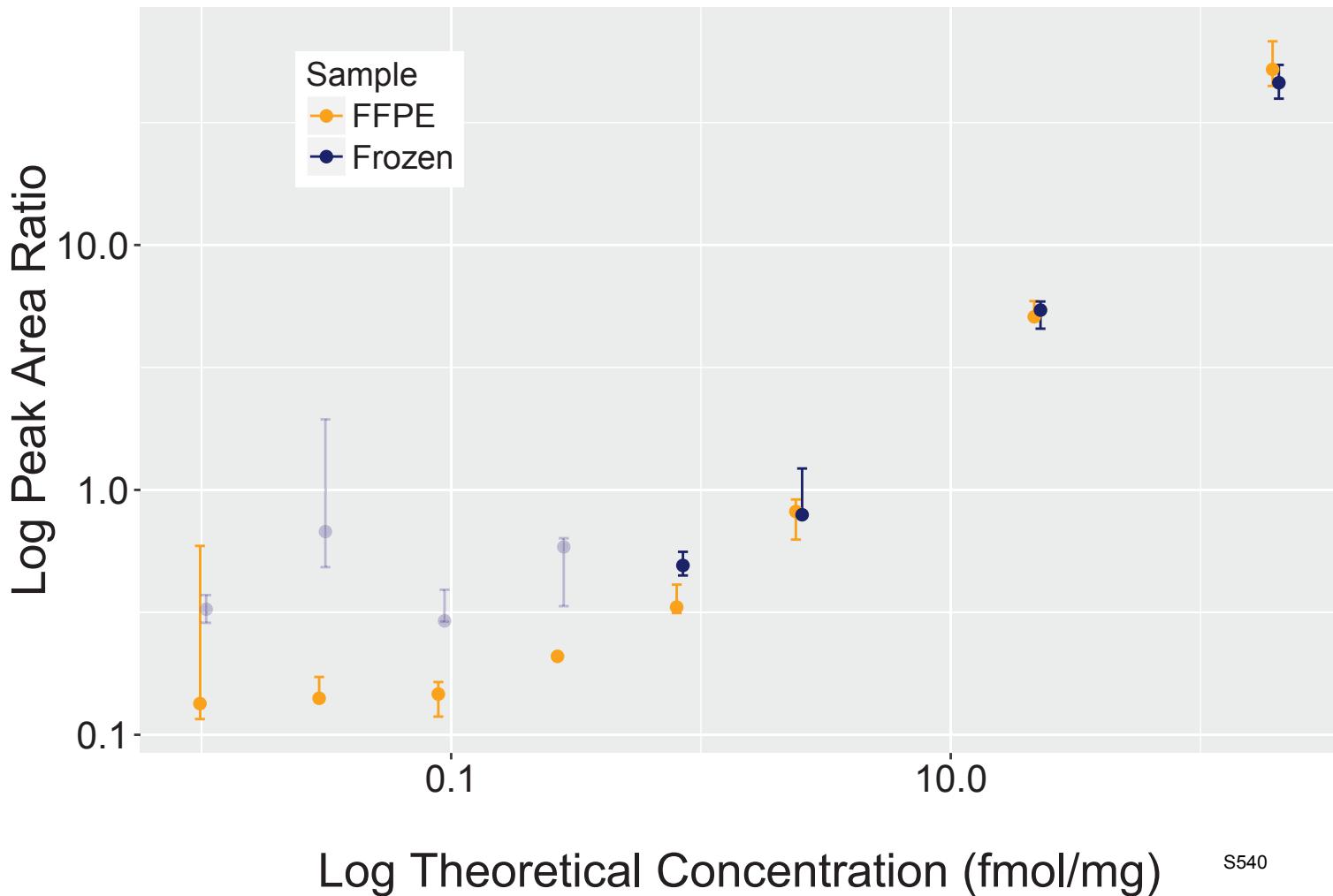
S538

Analyte: CAPNS1.THYSNIEANESEEVR



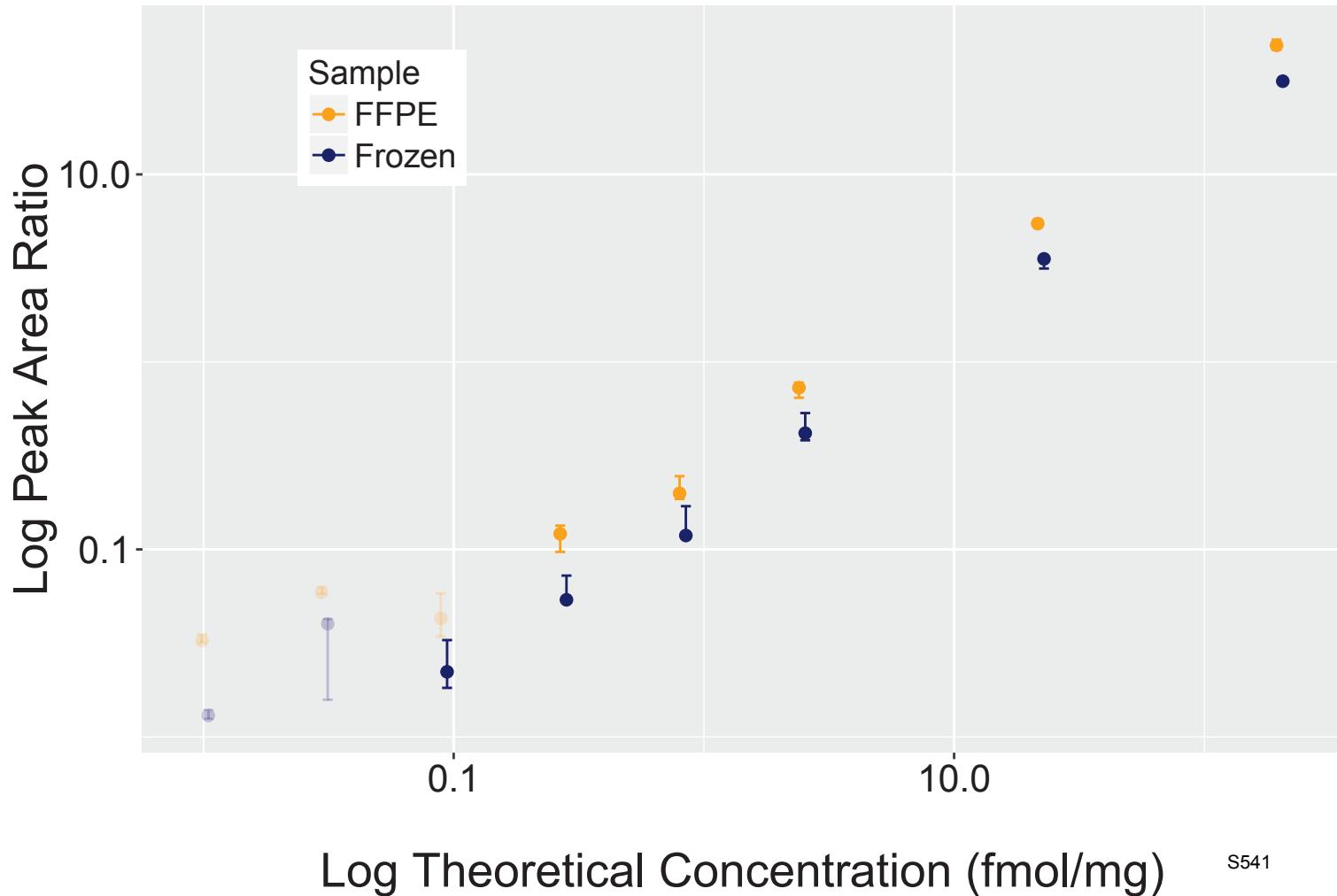
S539

Analyte: PSMD5.TIAEIFGNPNYLR

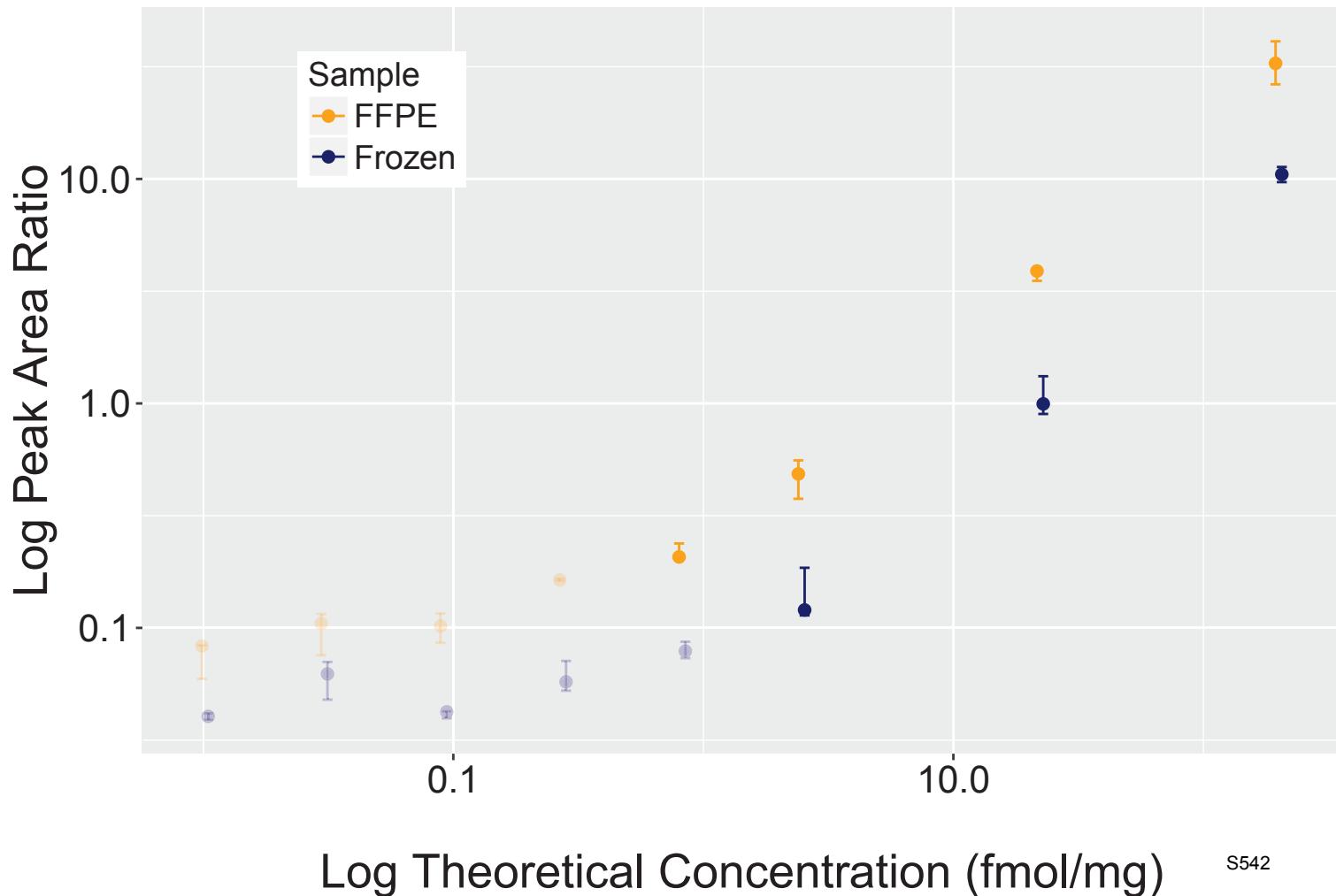


S540

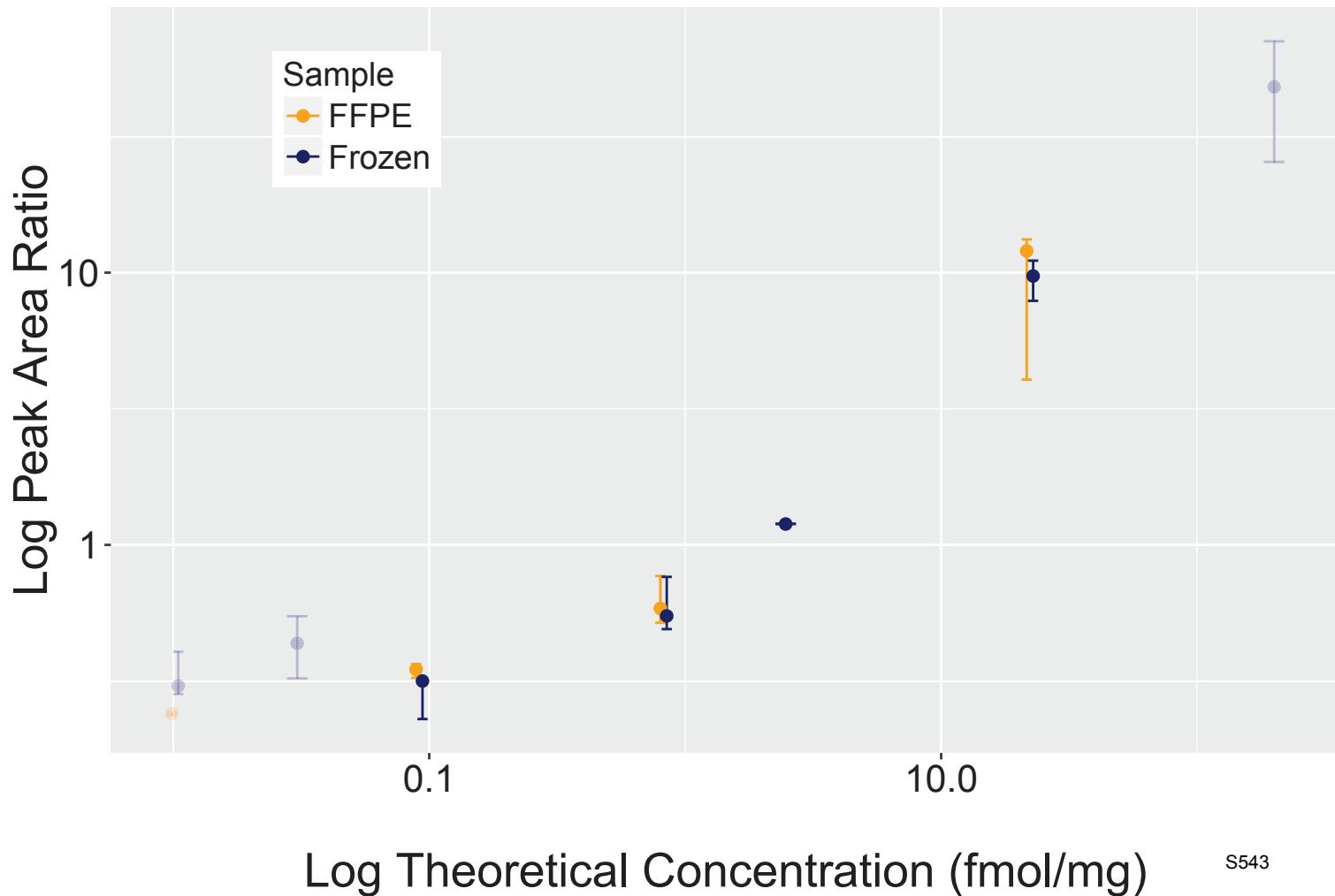
Analyte: UQCRC2.TIAQGNLNSNTDVQAAK



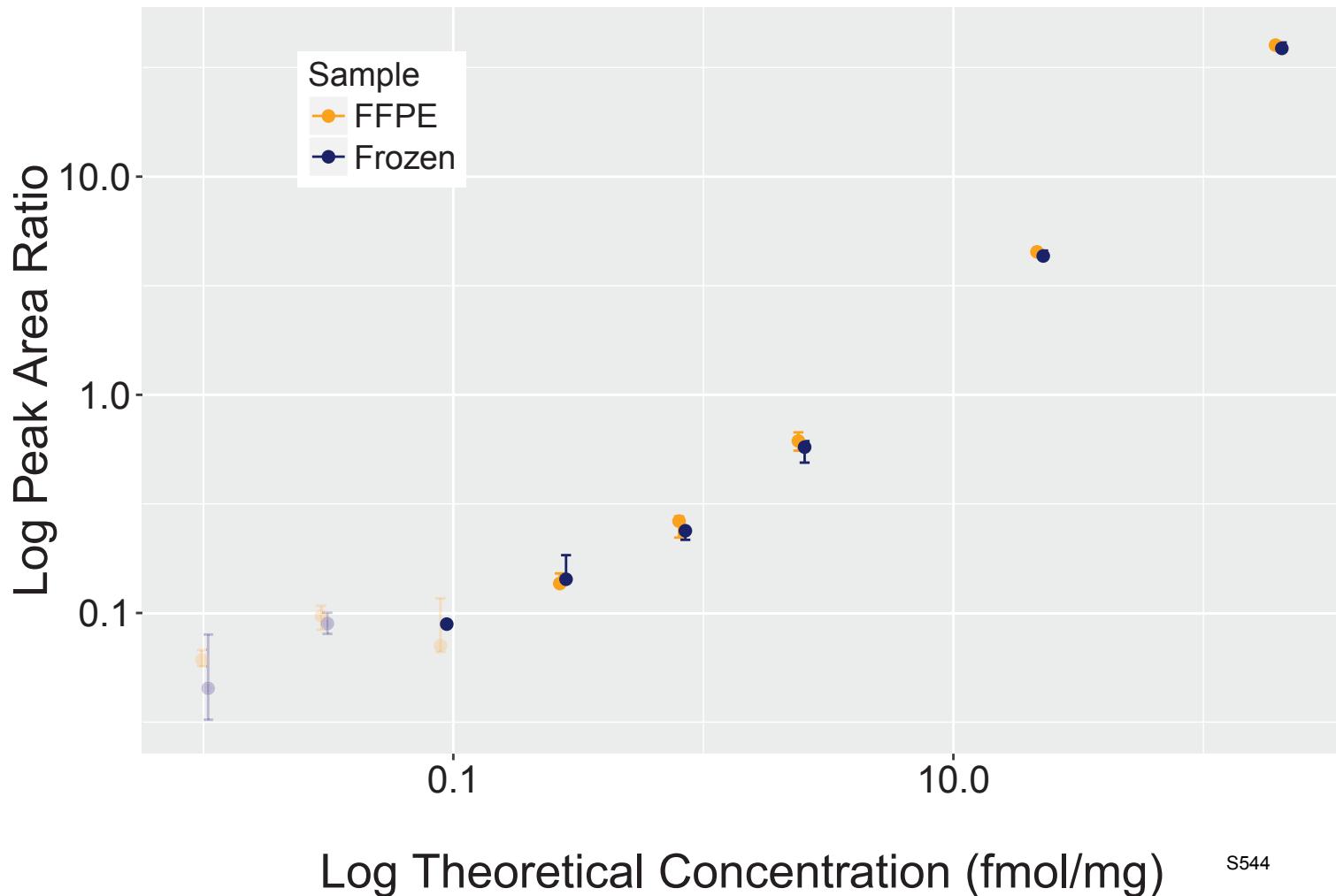
Analyte: TPM2.TIDDLEETLASAK



Analyte: HP1BP3.TIPSWATLSASQLAR

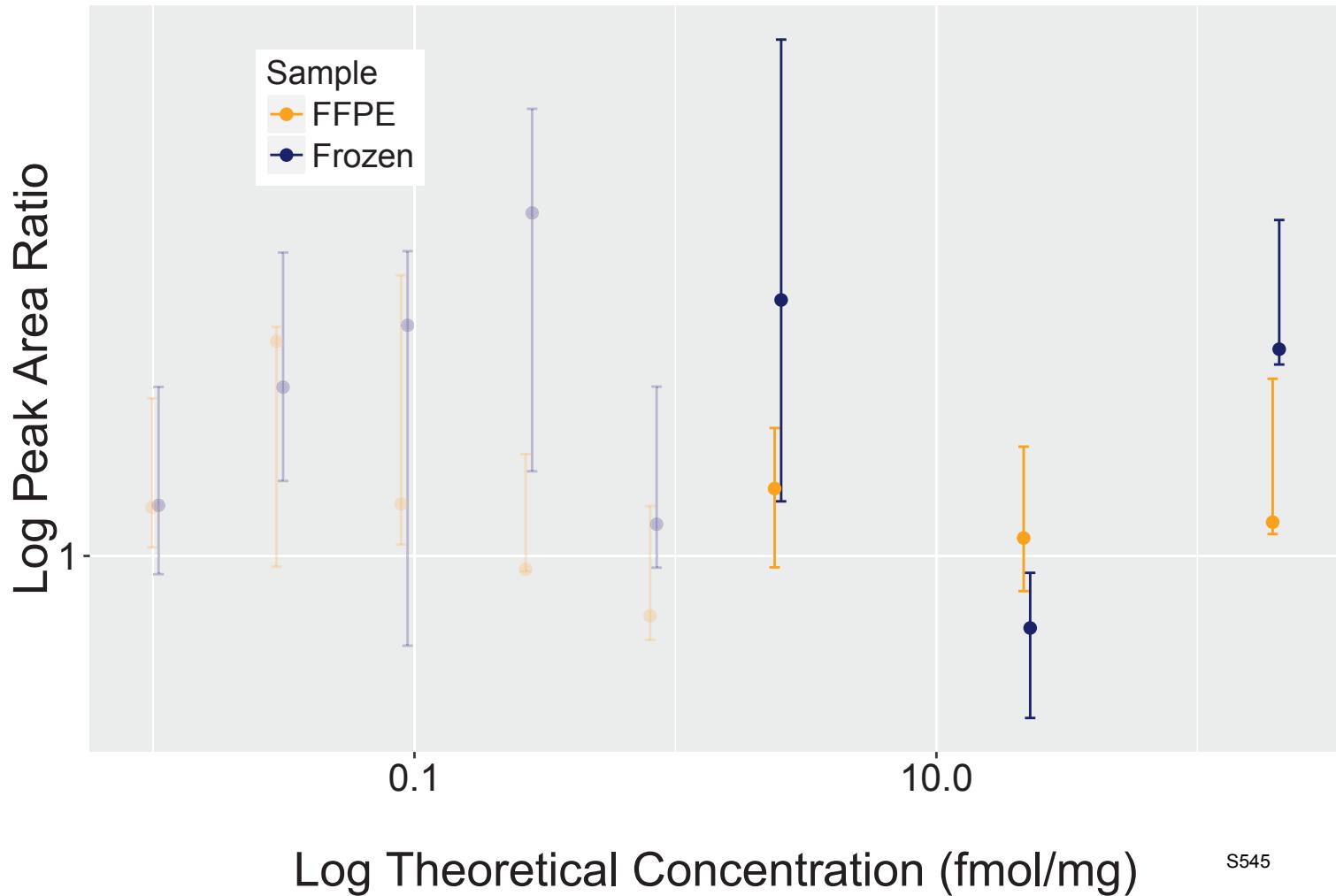


Analyte: AARS.TITVALADGGGRPNTGR



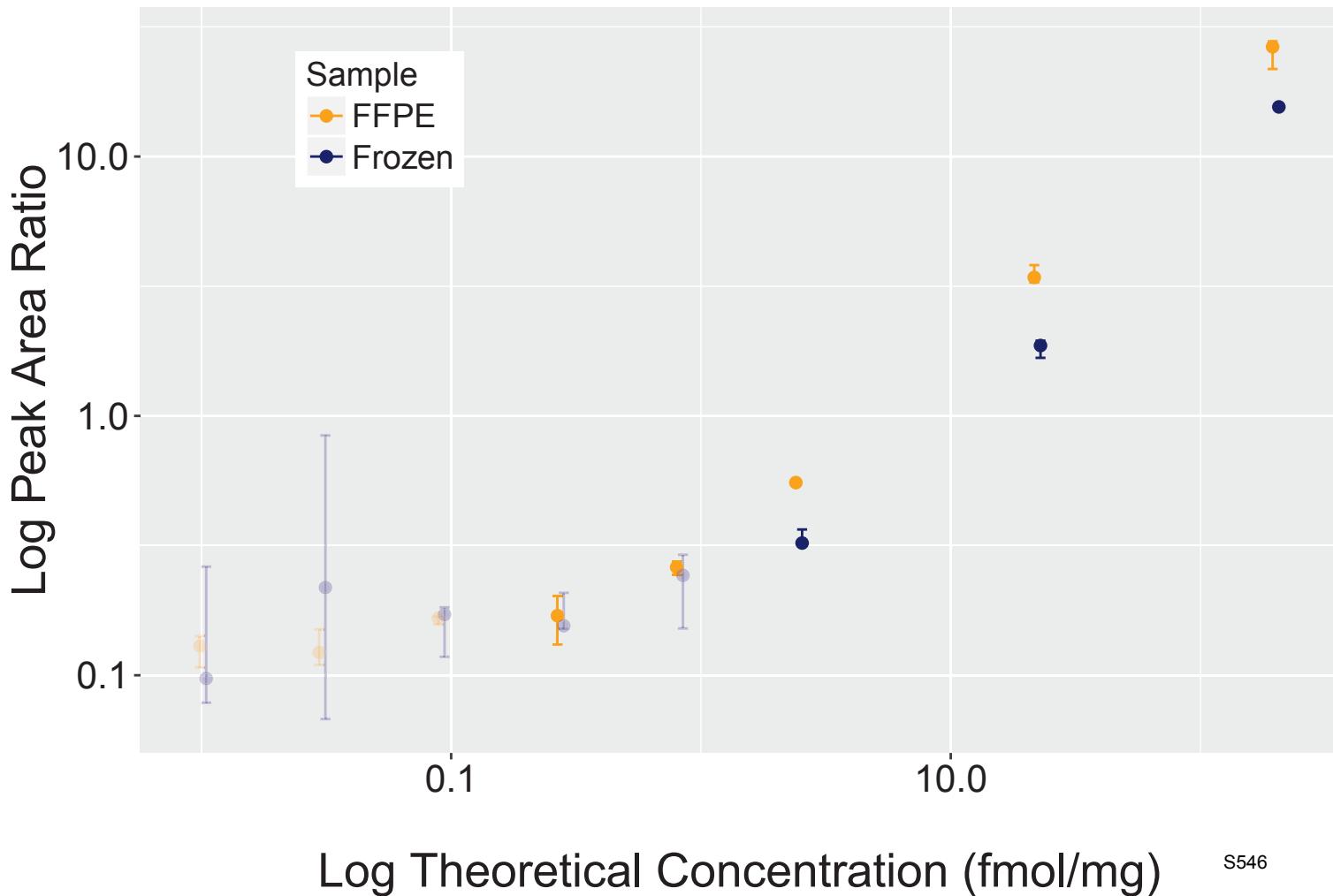
S544

Analyte: DNM1L.TLESVDPLGGGLNTIDILTAIR

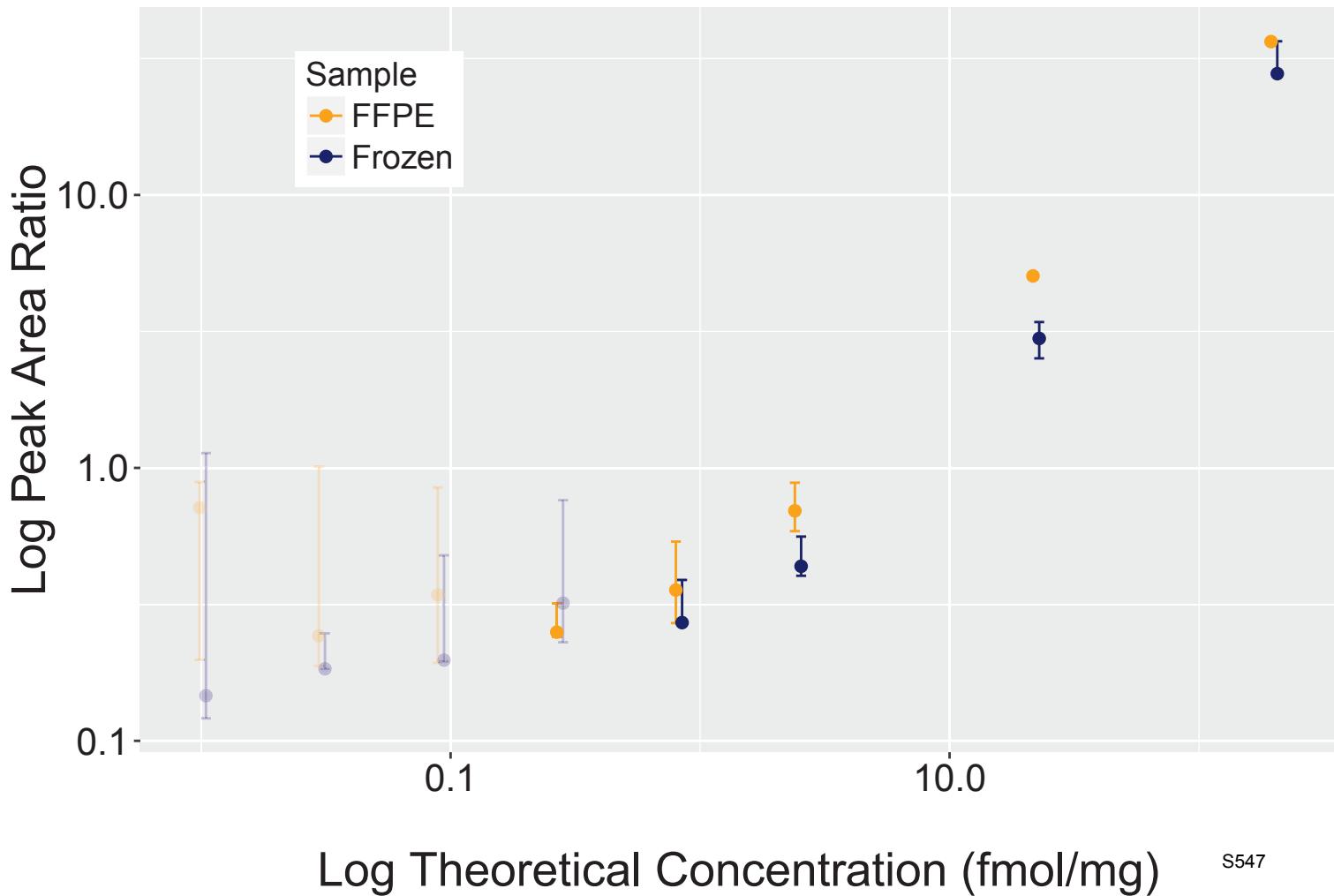


S545

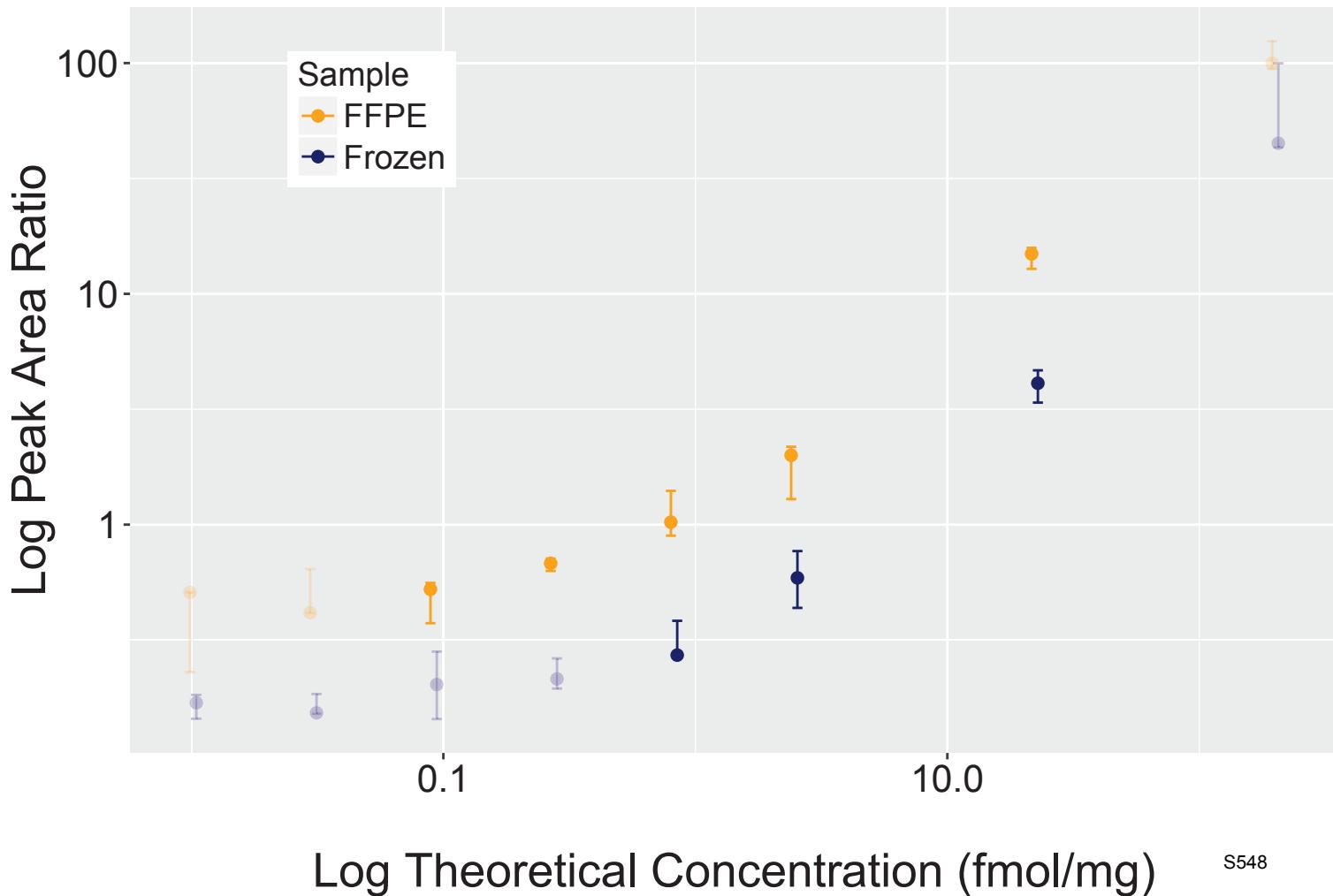
Analyte: HADHA.TLQEVTLQLSQEAQR



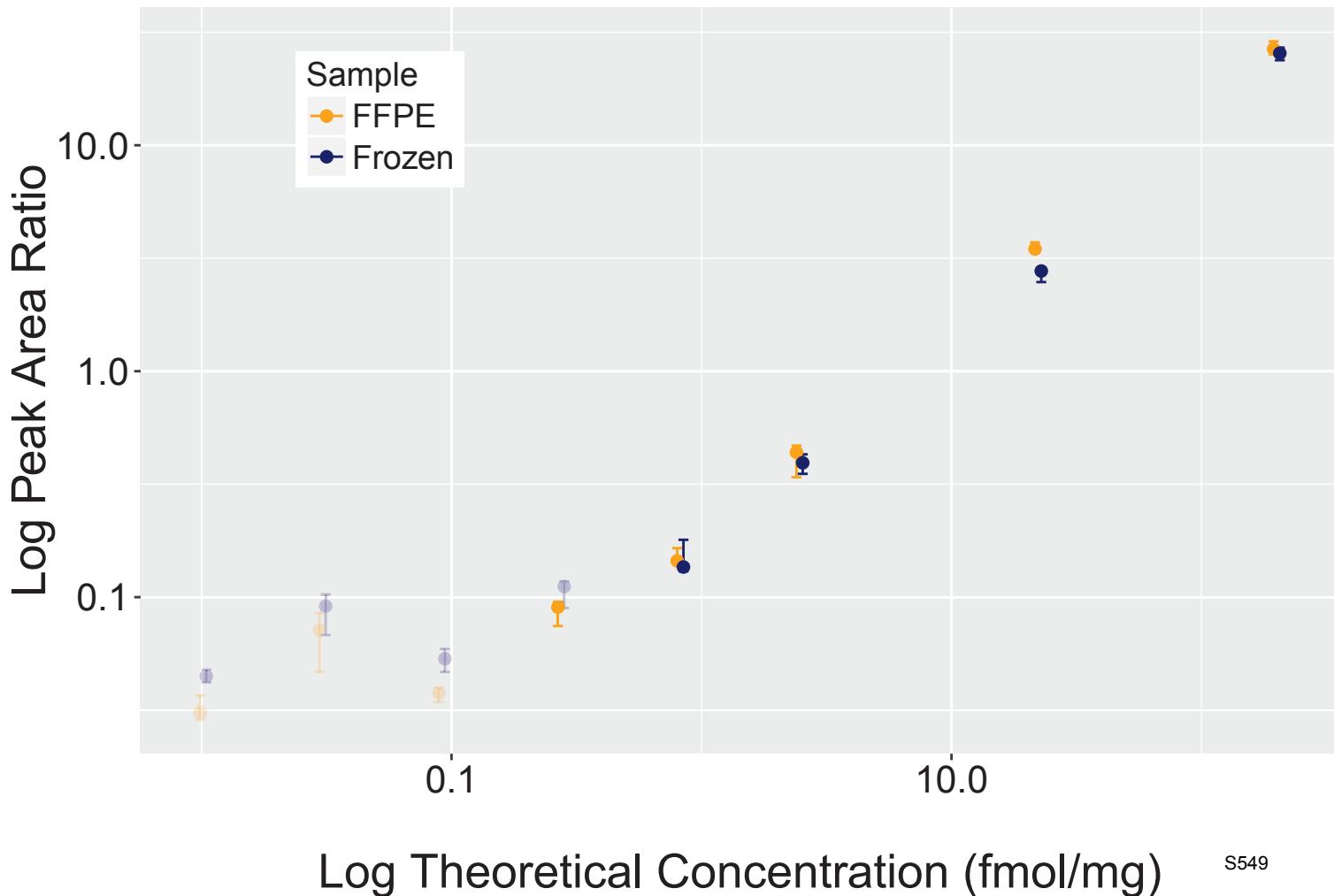
Analyte: PRPF19.TLQLDNNFEVK



Analyte: NIT2.TLSPGDSFSTFDTPYC[+57]R

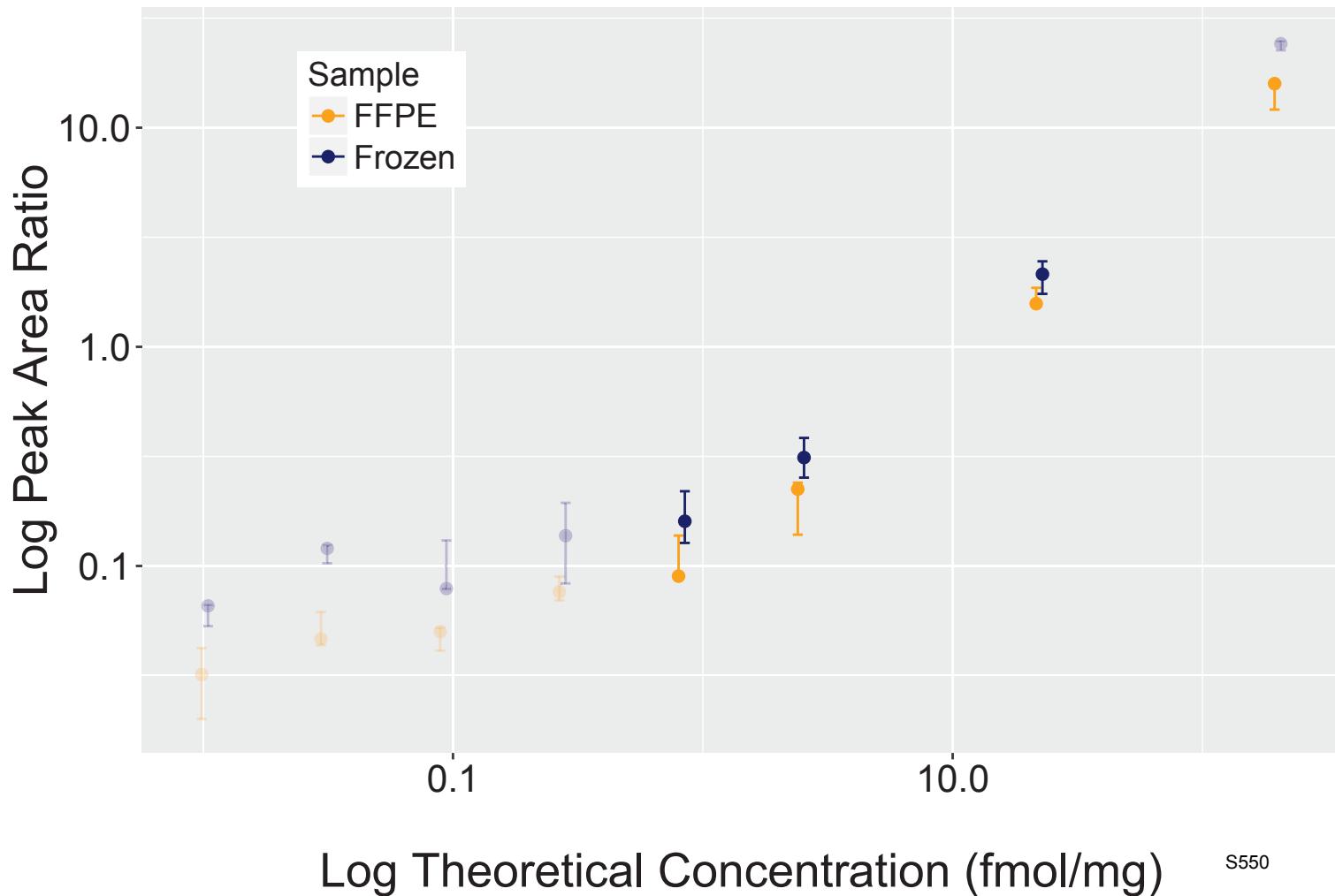


Analyte: PLIN3.TLTAAVSGAQPILSK



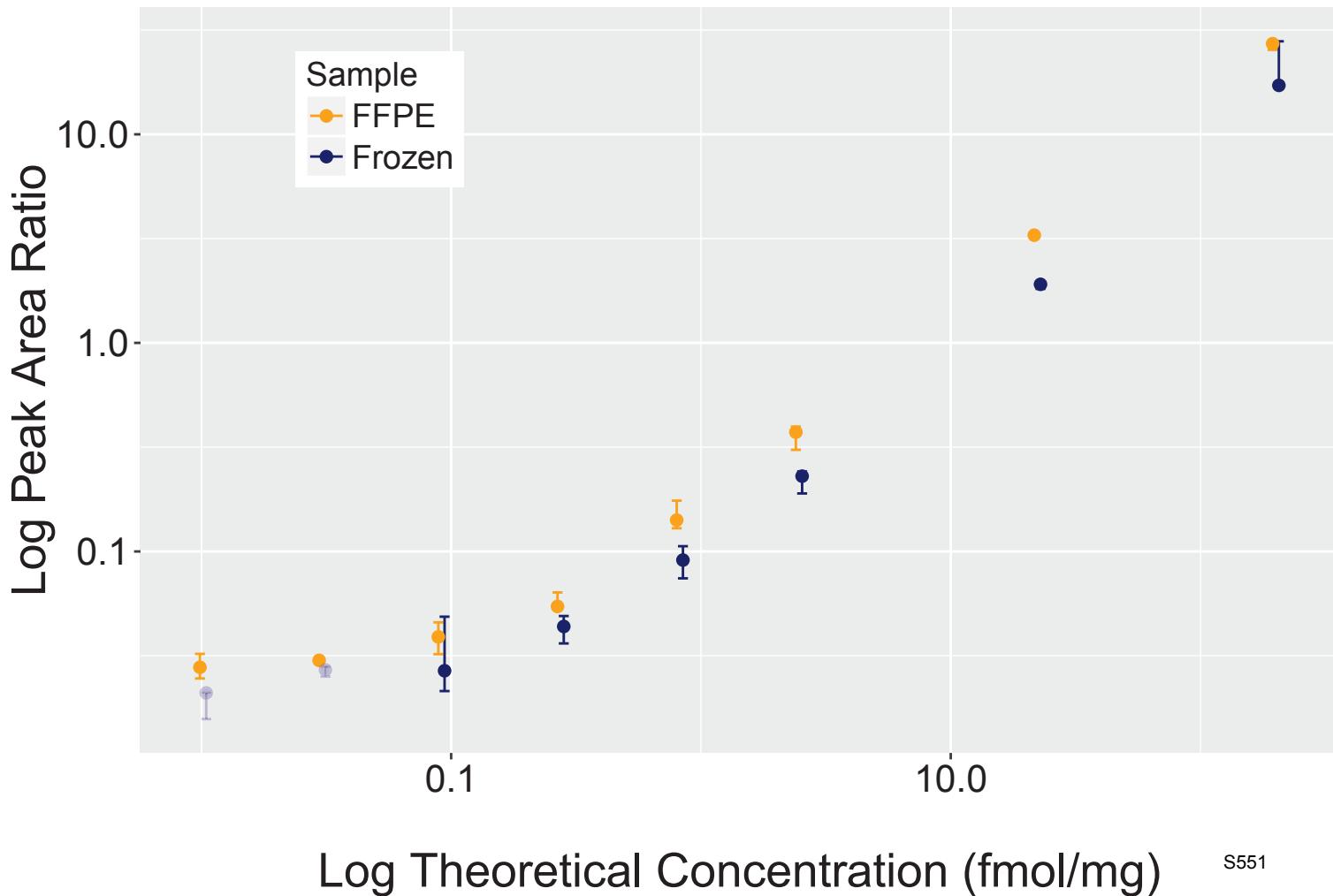
S549

Analyte: DDOST.TLVLLDNLNVR



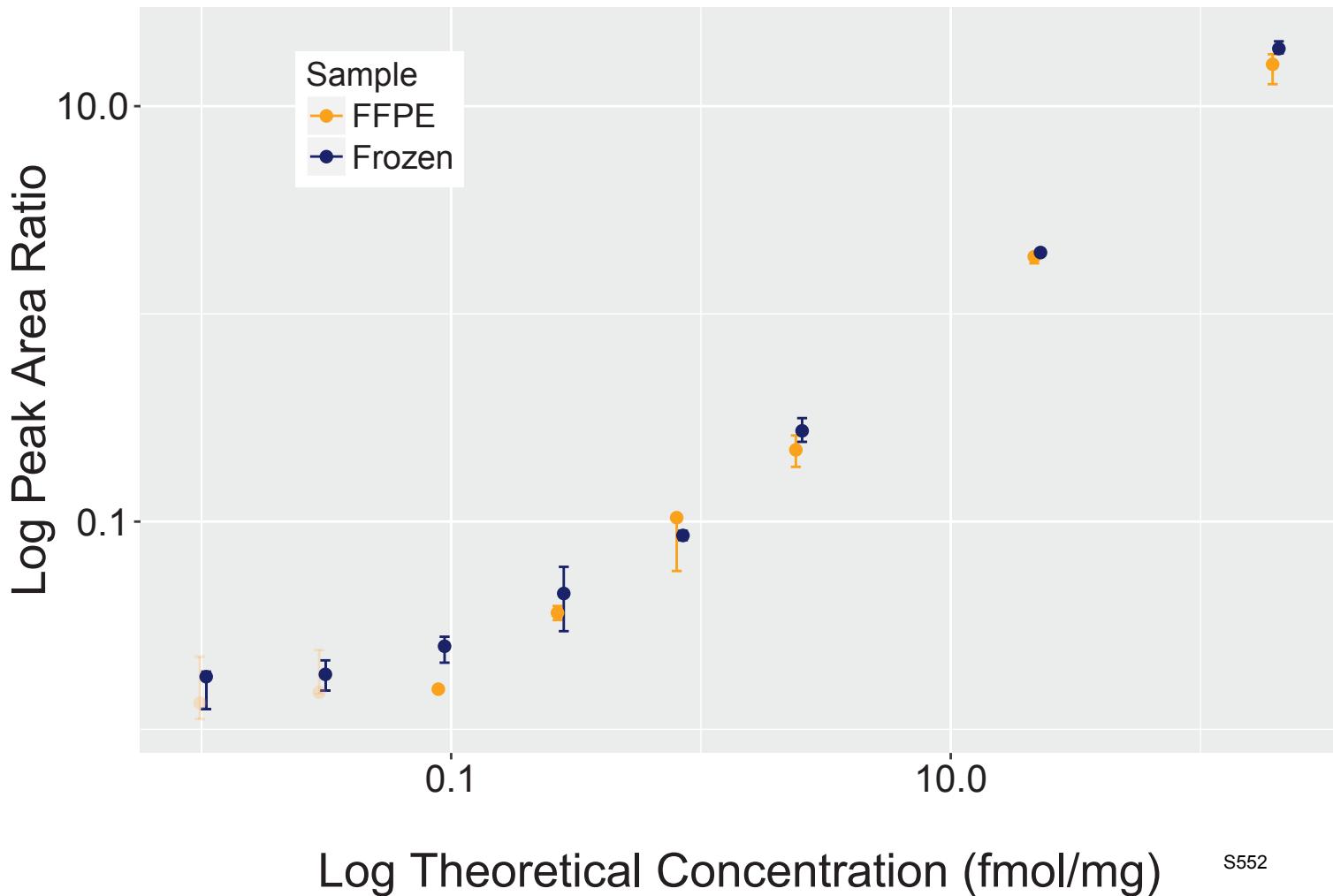
S550

Analyte: LYPLA1.TLVNPANVTFK



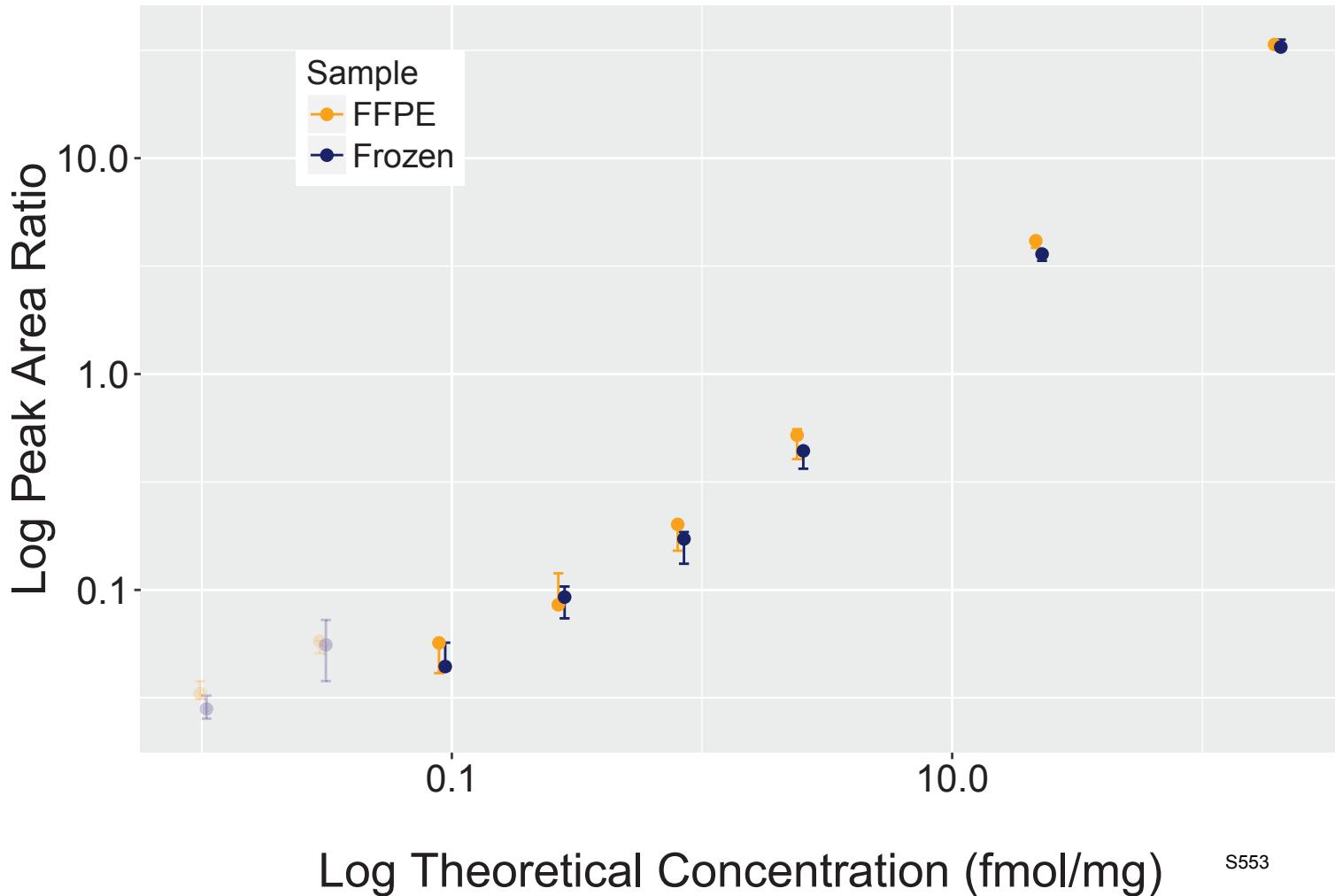
S551

Analyte: RPL18.TNRPPLSLSR

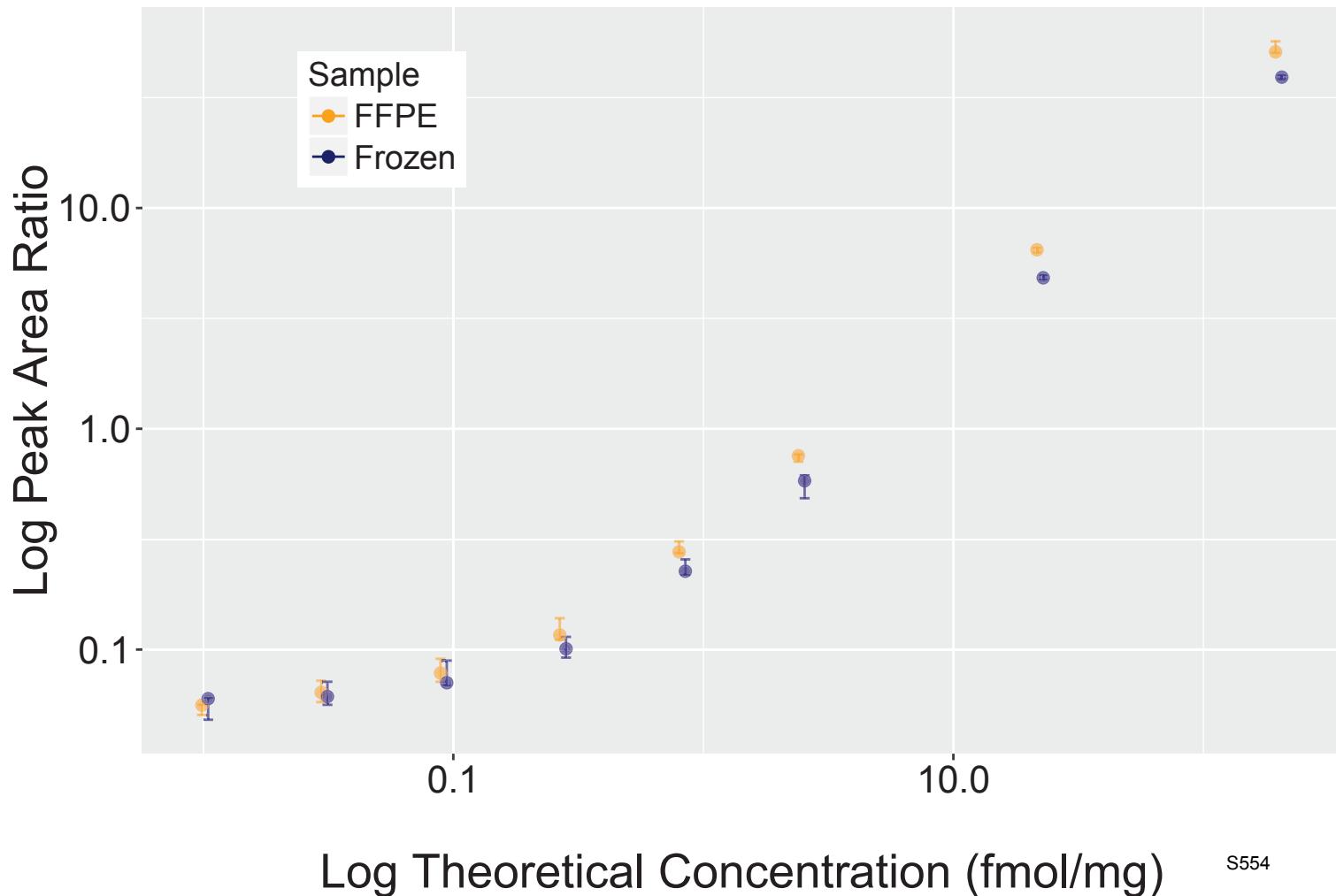


S552

Analyte: PFKL.TNVLGHLQQGGAPTPFDR

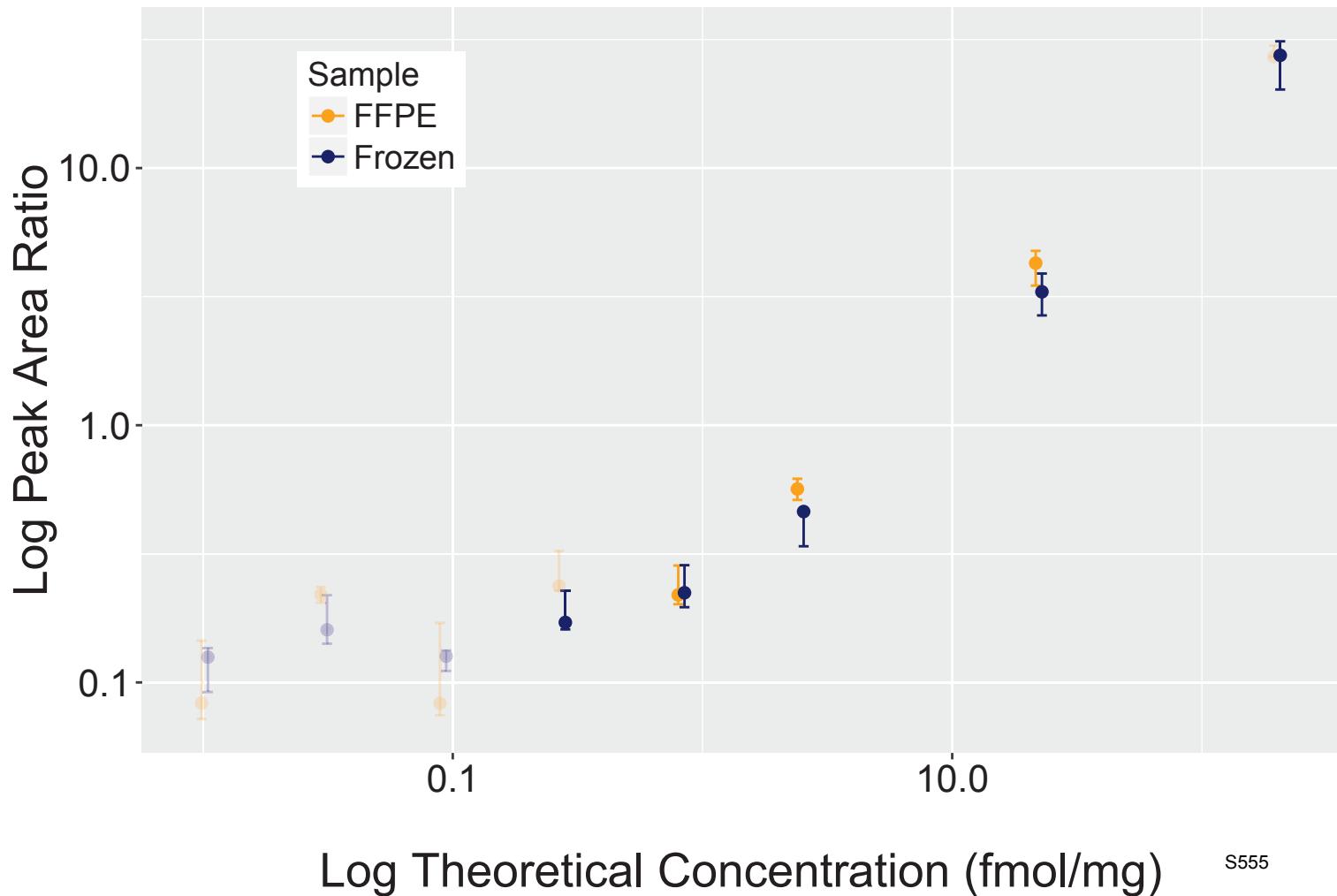


Analyte: ACAA2.TNVNGGAIALGHPLGGSGSR



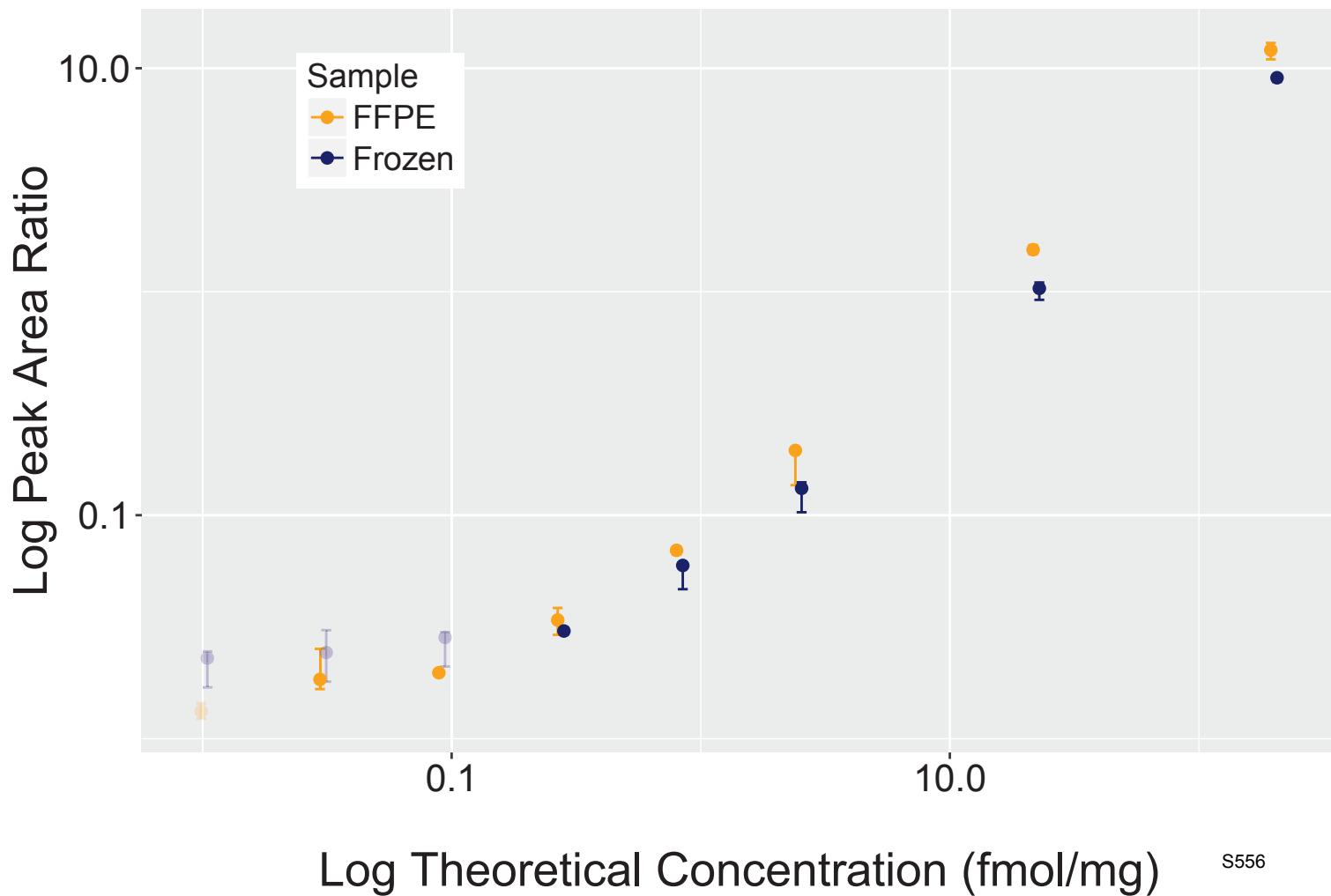
S554

Analyte: ERP44.TPADC[+57]PVIAIDSFR



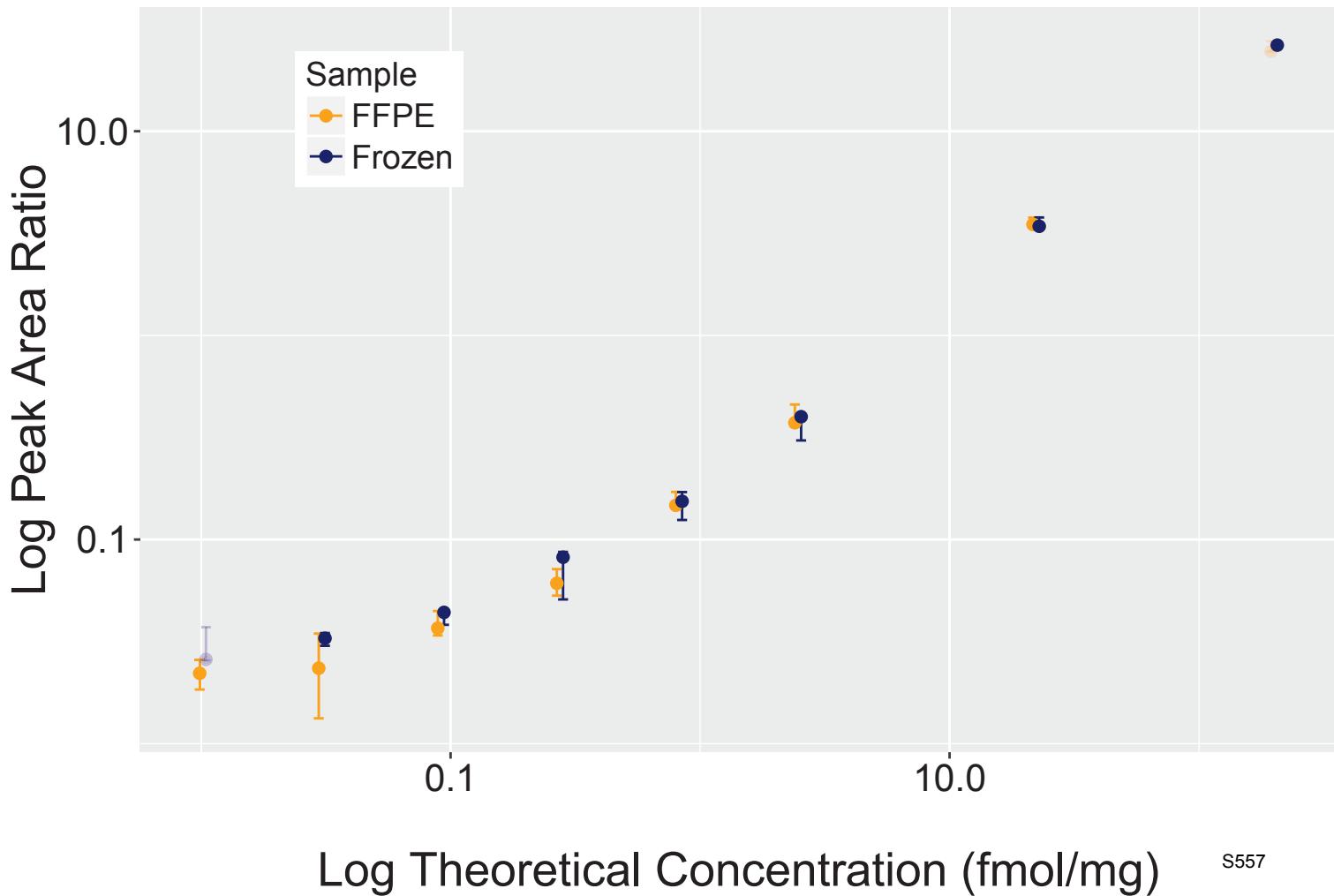
S555

Analyte: ANXA1.TPAQFDAAELR

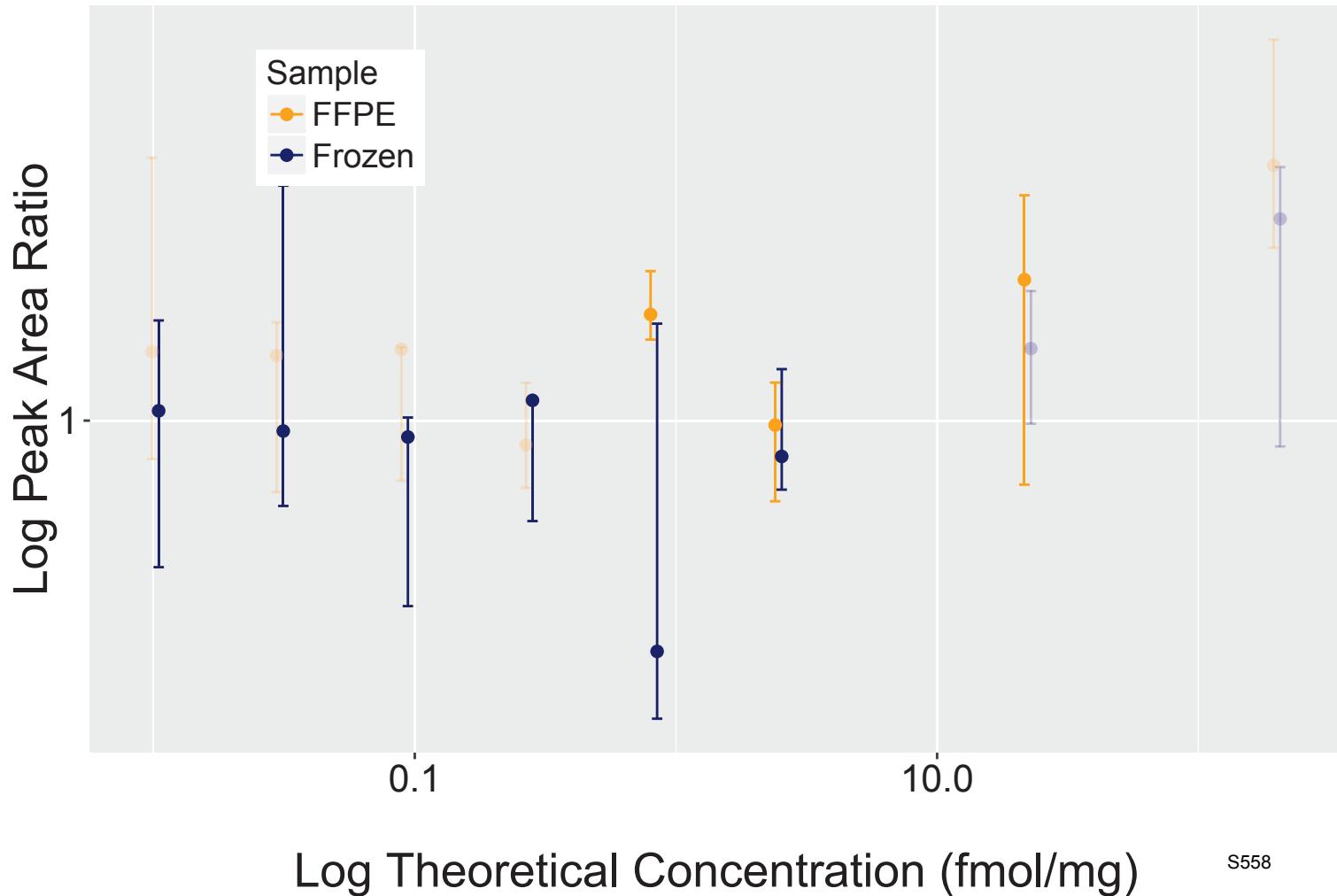


S556

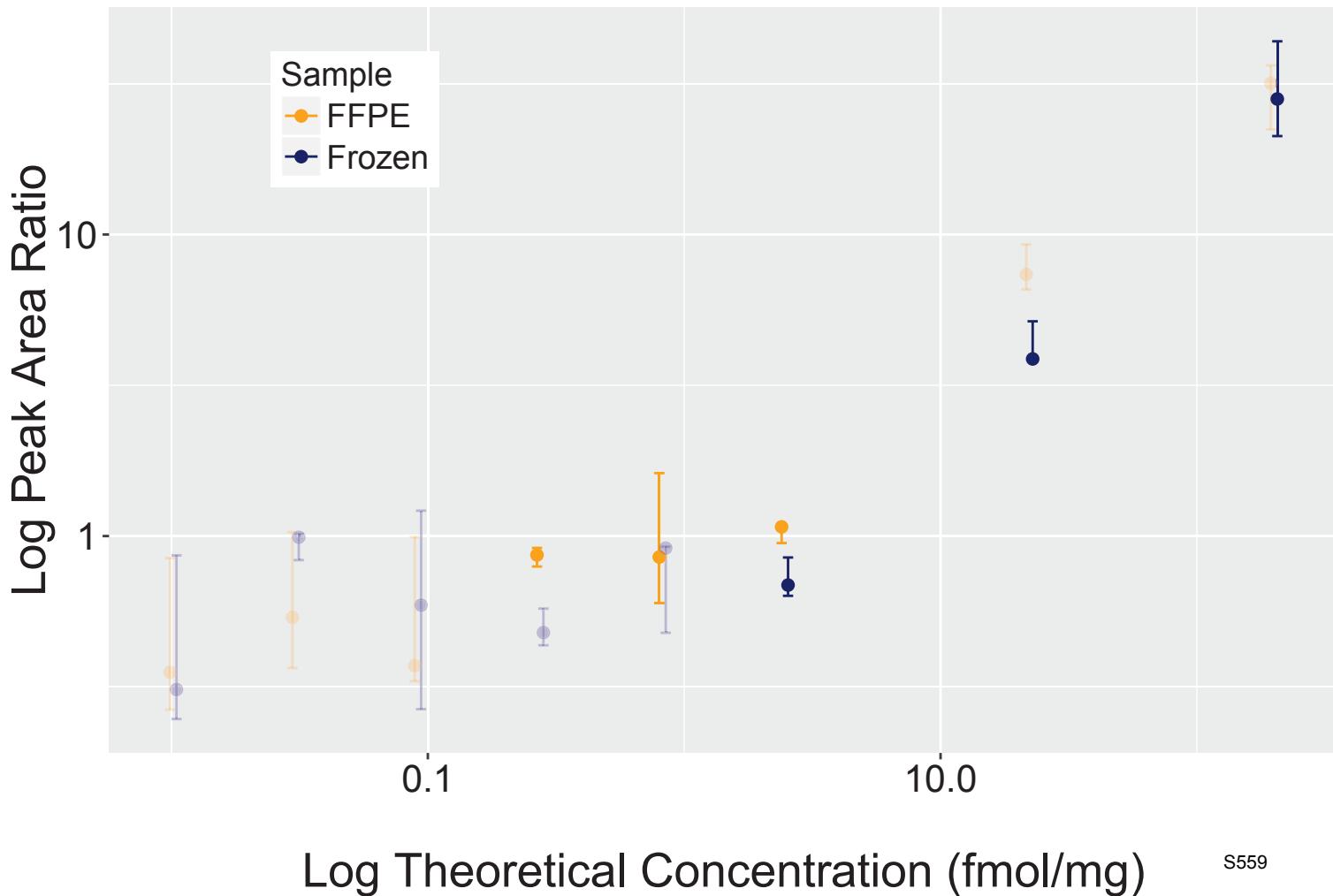
Analyte: GLT25D1.TPAYIPIR



Analyte: HK1.TPDGTENGDFLALDLGGTNFR

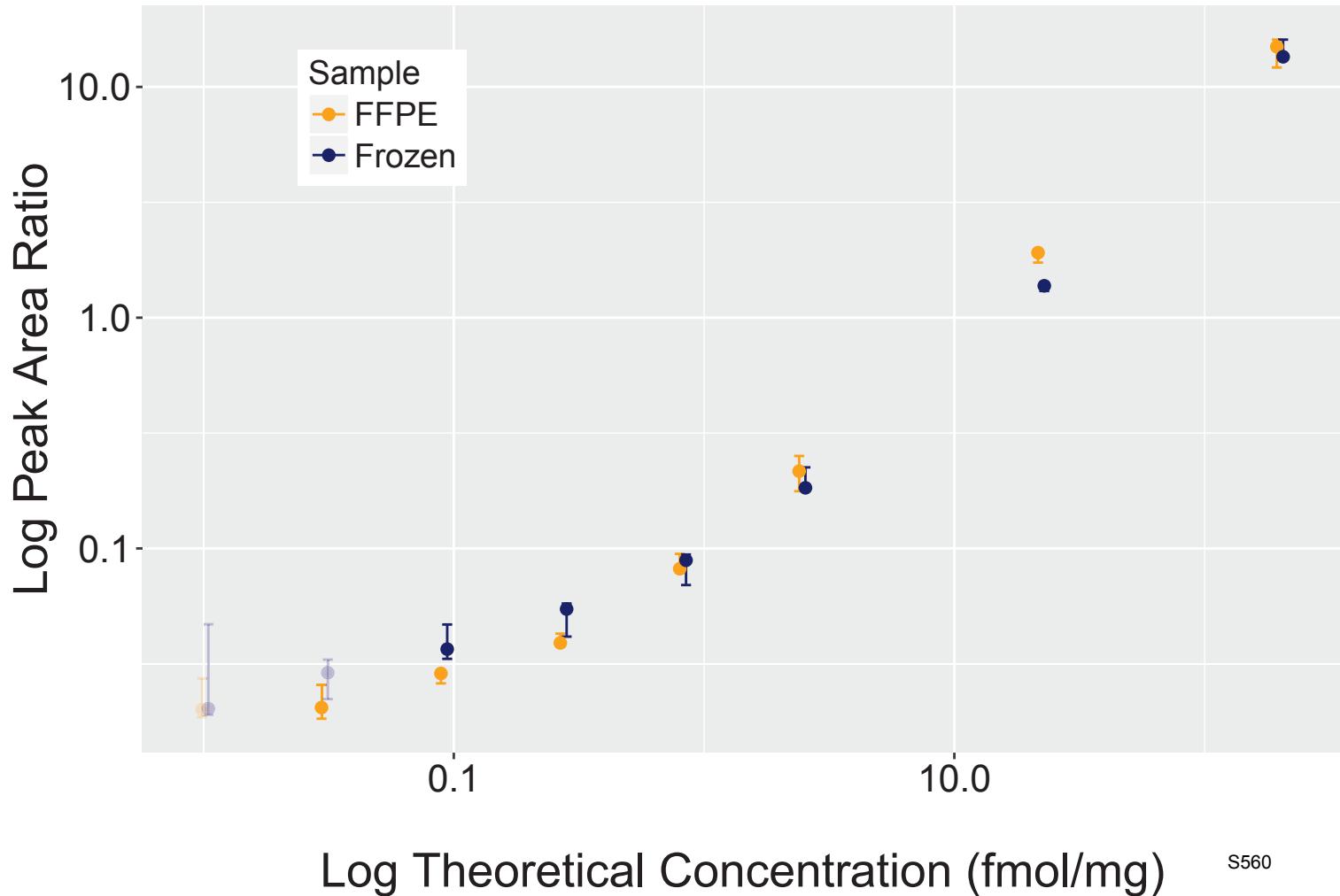


Analyte: PSMD1.TPEQC[+57]PSVVSLLSESYNPHVR



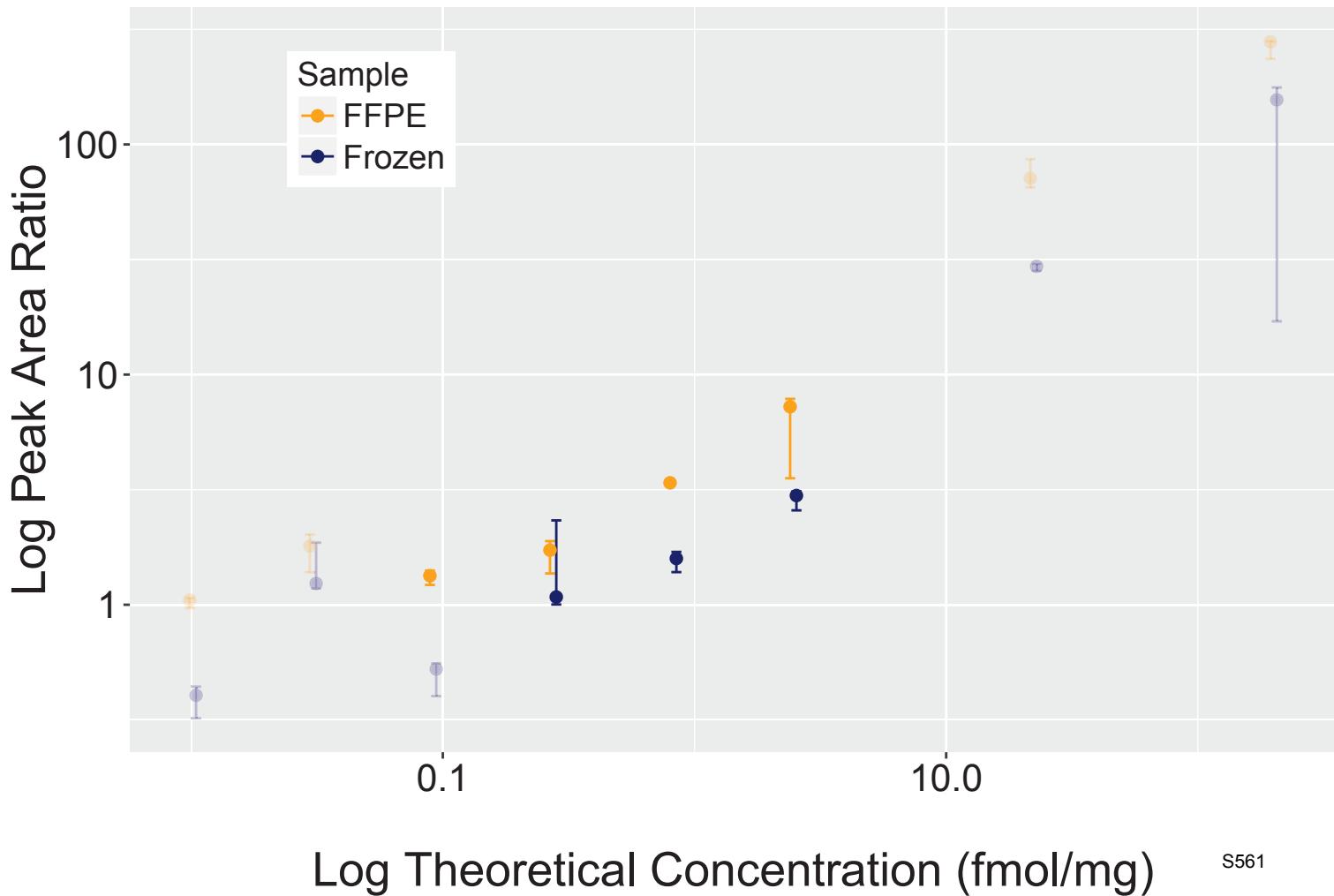
S559

Analyte: DCXR.TQADLDLVR

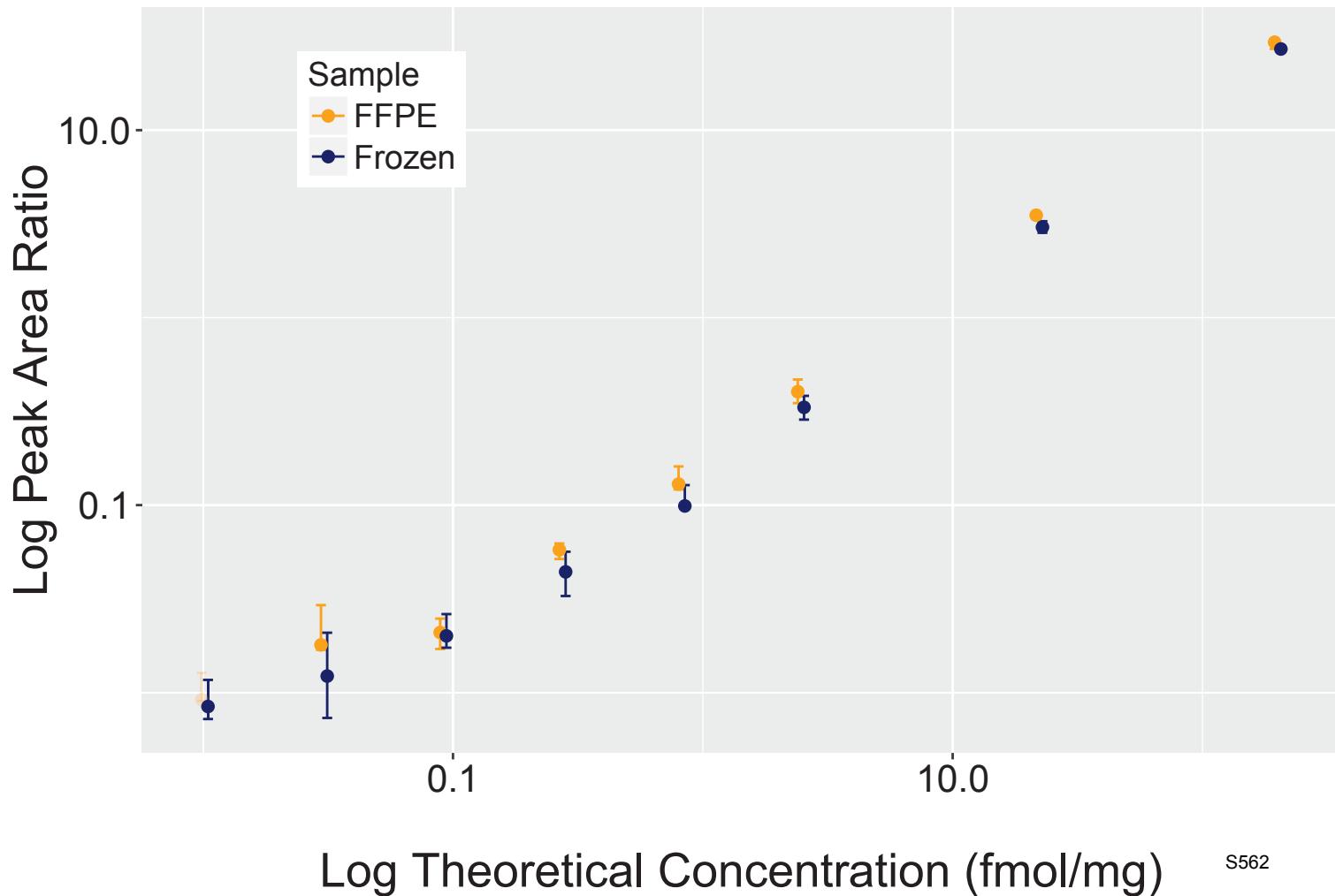


S560

Analyte: ACSF2.TQQYYNVLK

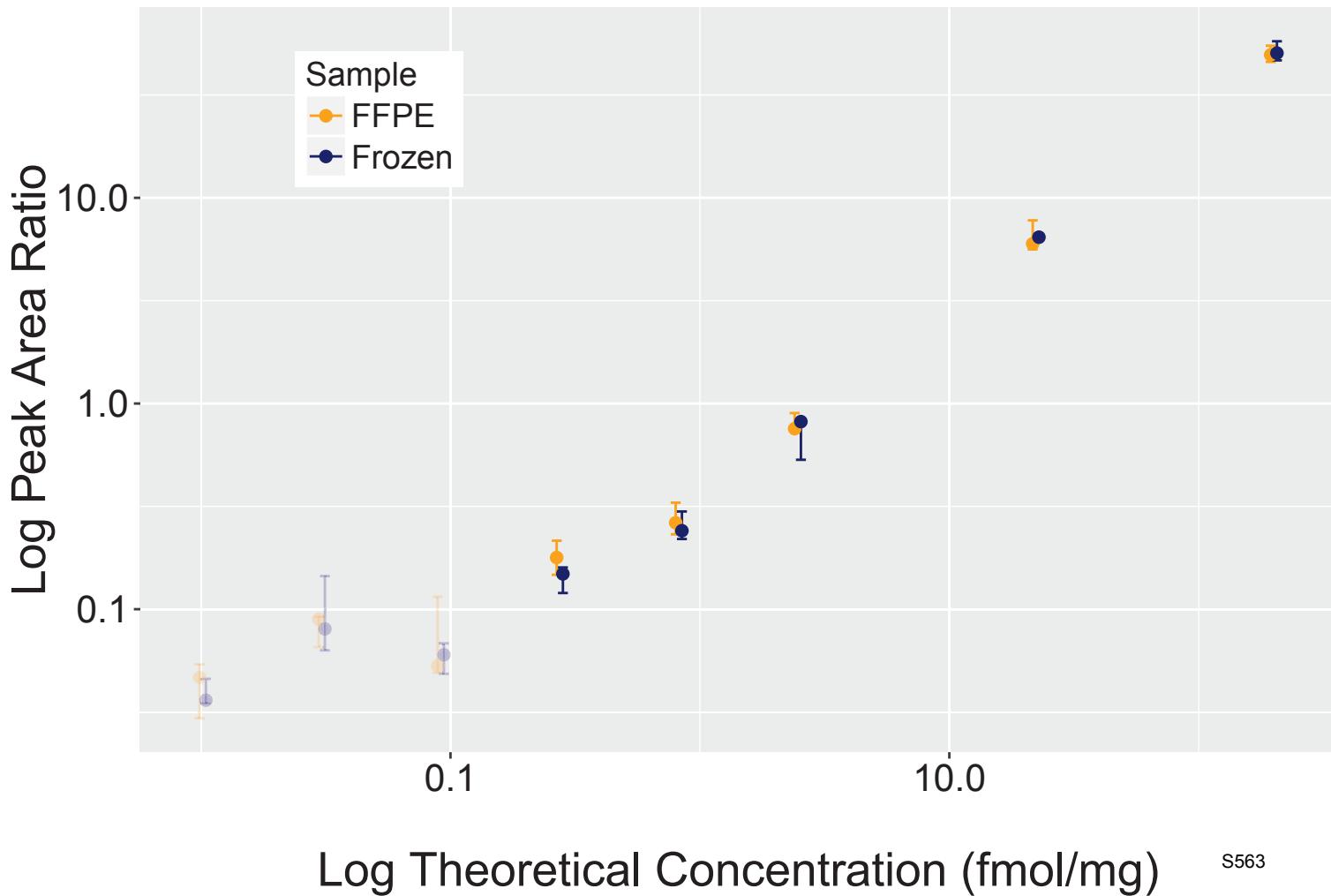


Analyte: CTTN.TQTPPVSPAPQPTEER

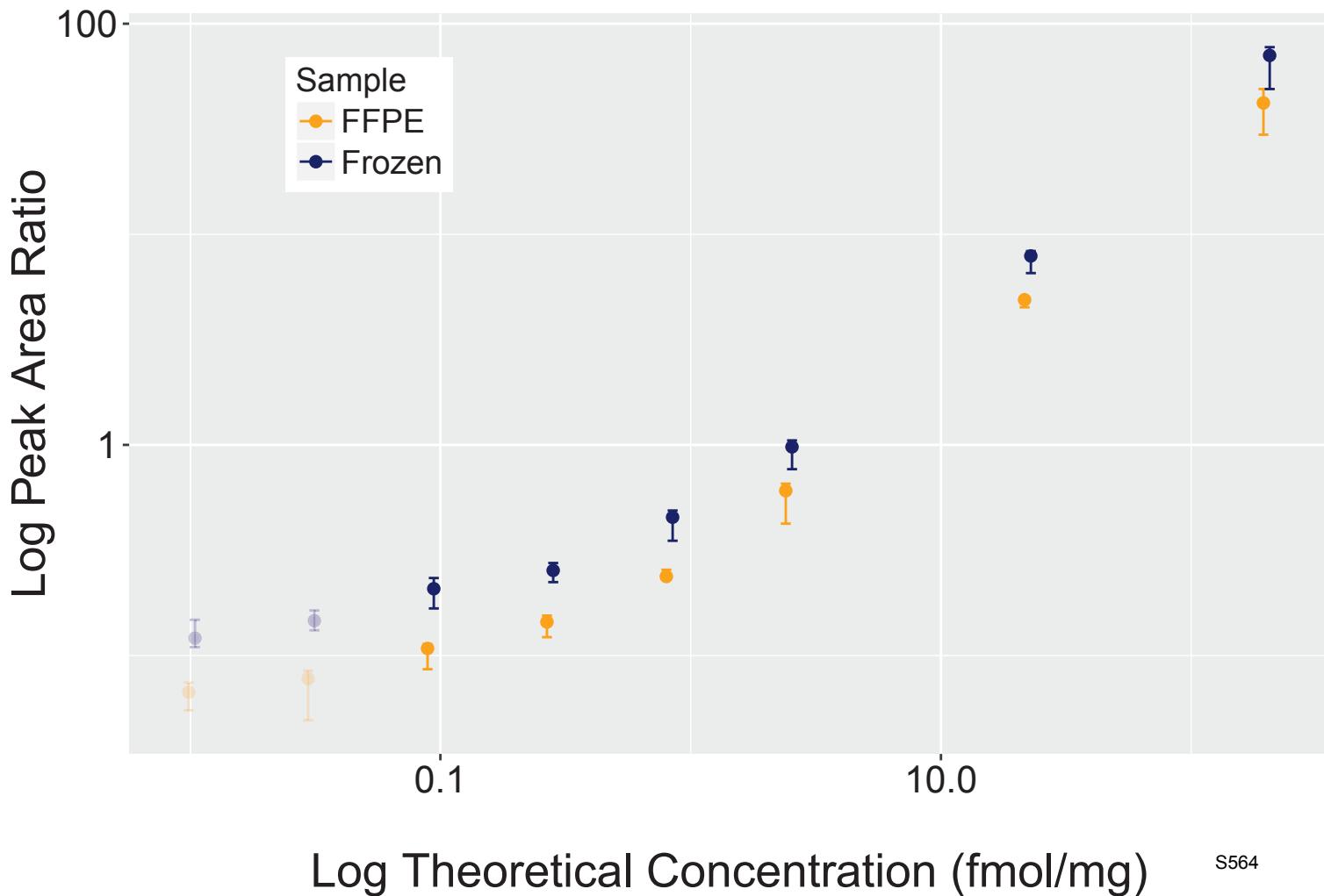


S562

Analyte: PDLM7.TSIVQAAAGGVPGGGSNNGK

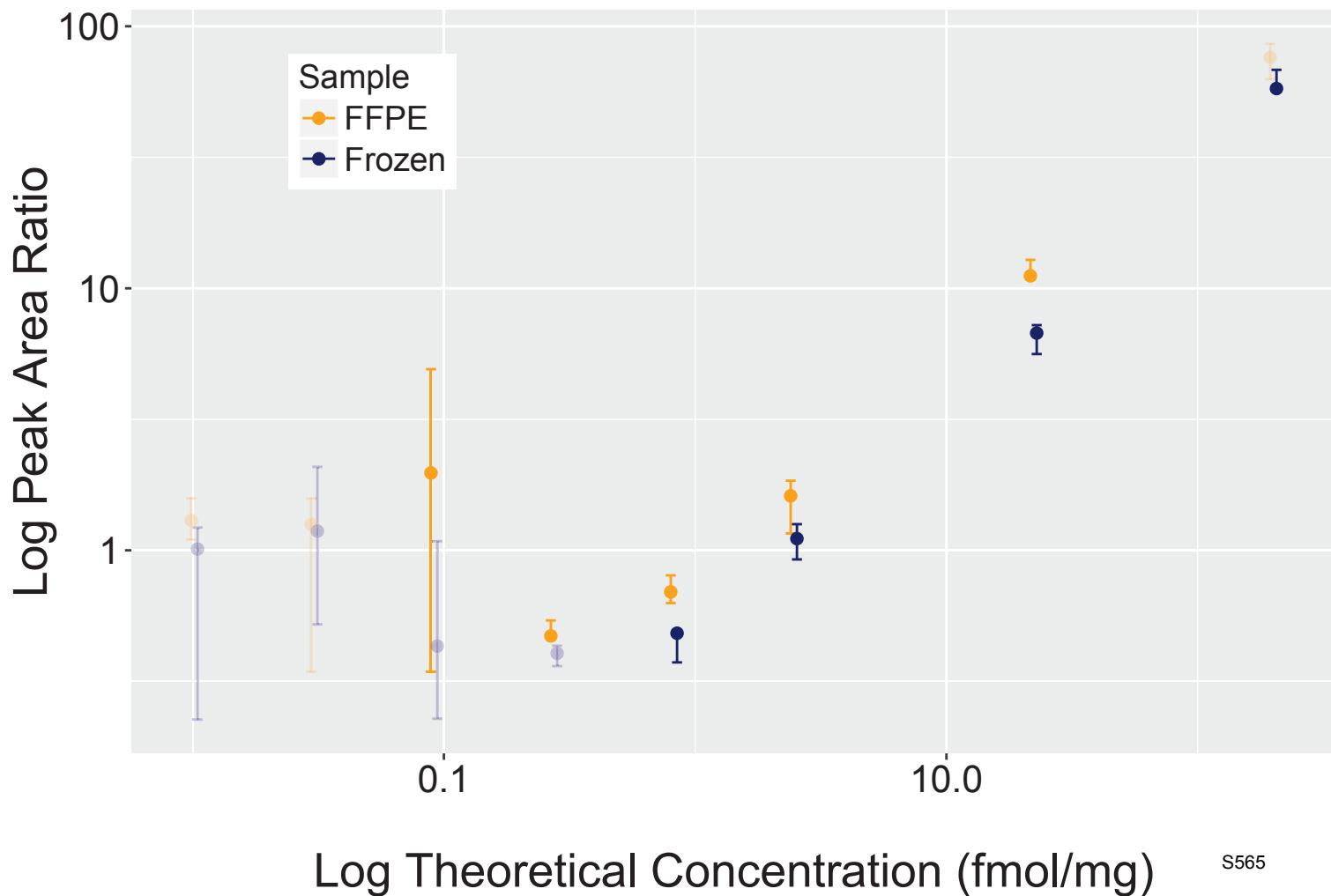


Analyte: PARP1.TTNFAGILSQGLR



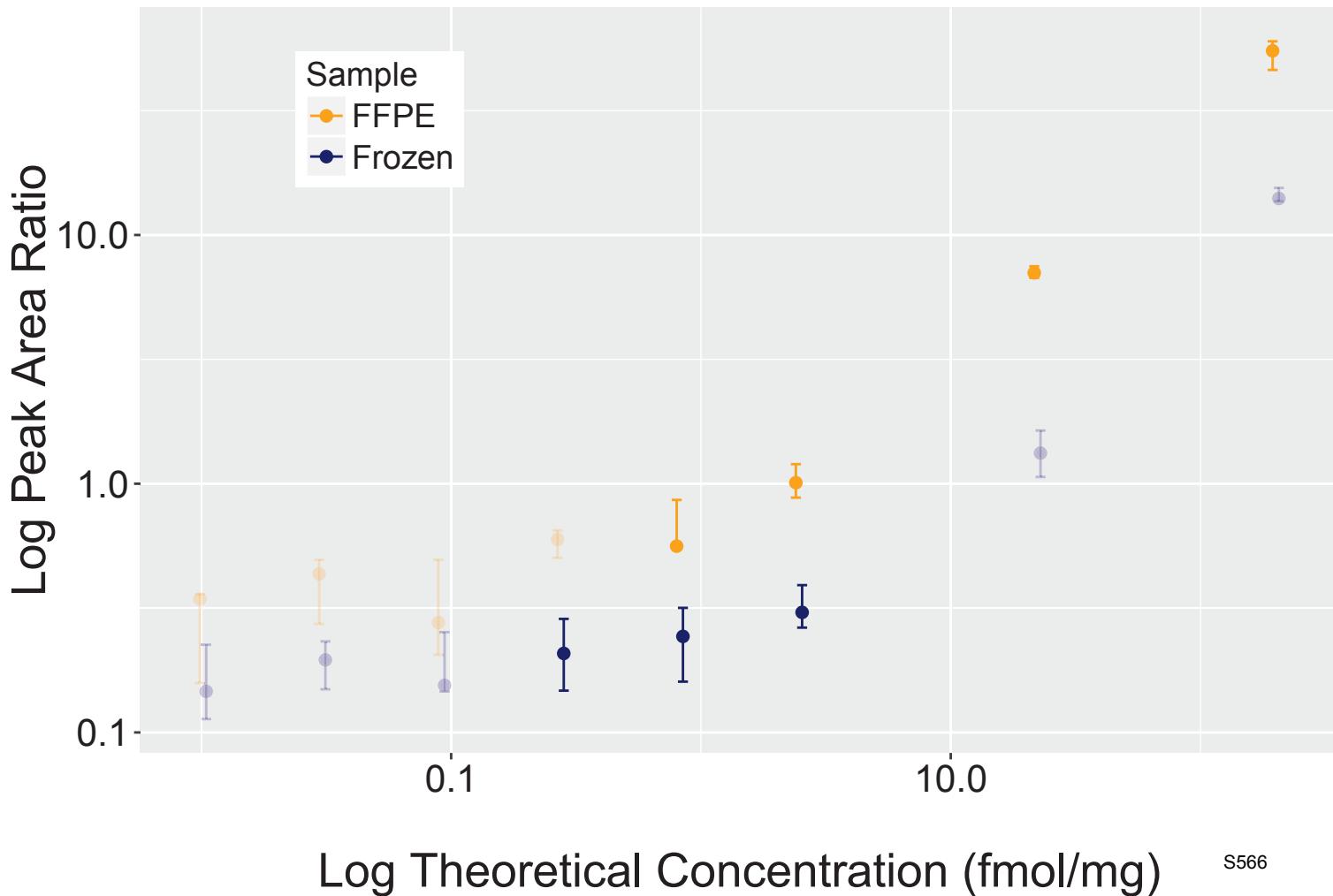
S564

Analyte: SNCG.TVEEAENIAVTSGVVR



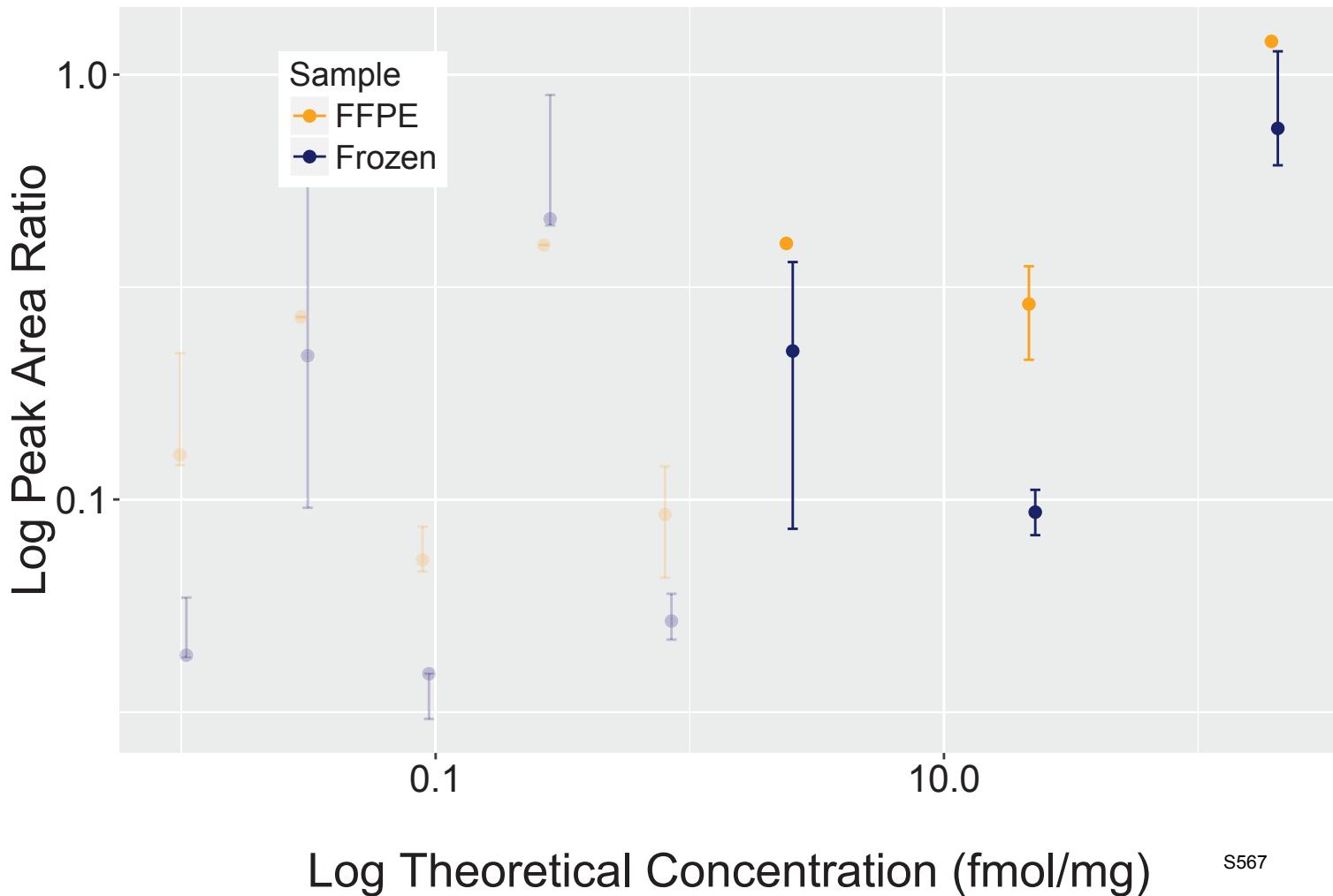
S565

Analyte: CAPRIN1.TVLELQYVLDK

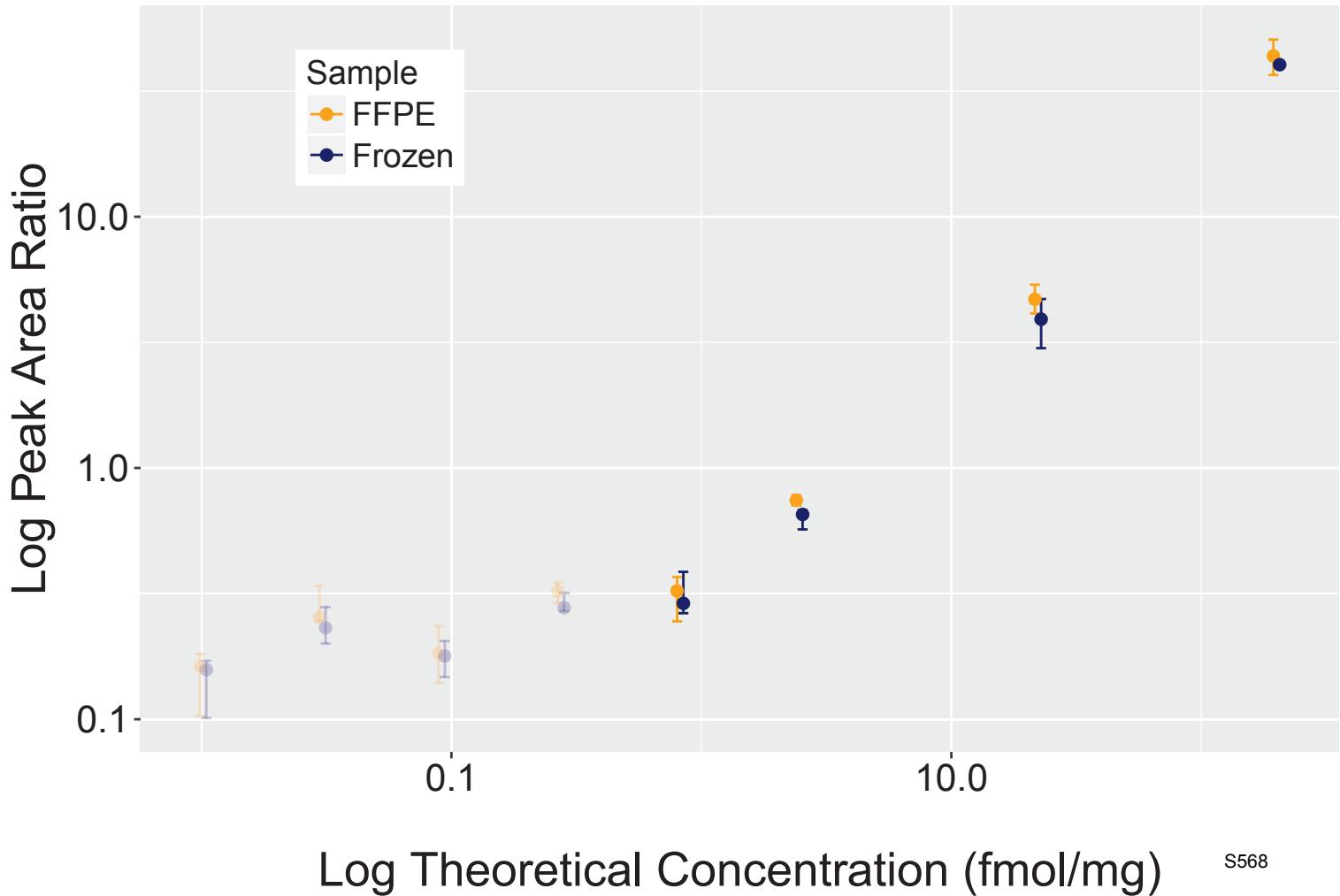


S566

Analyte: CNN2.TWIEGLTGLSIGPDFQK

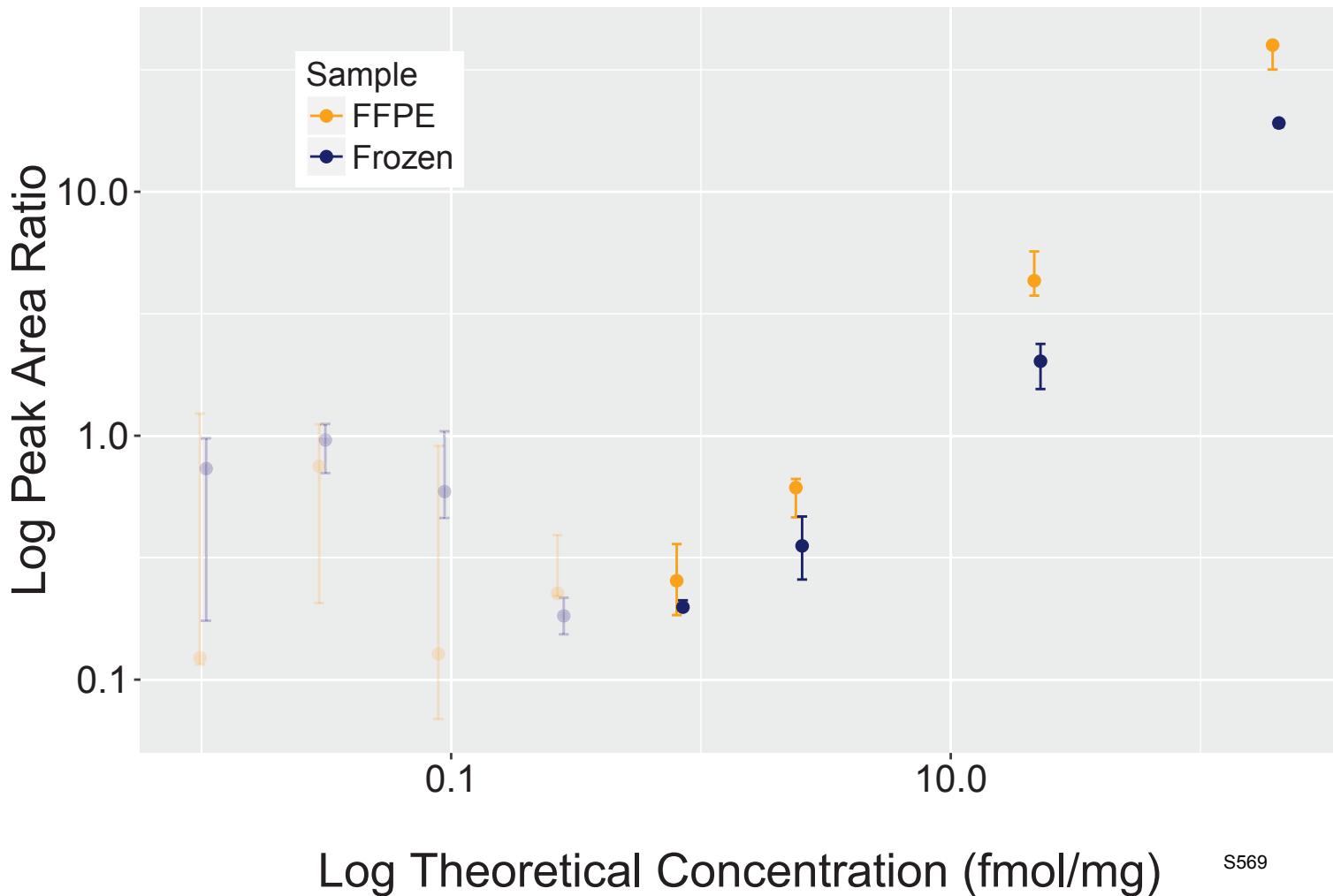


Analyte: TOM1L1.TWSQGFPGGVDVSEVK

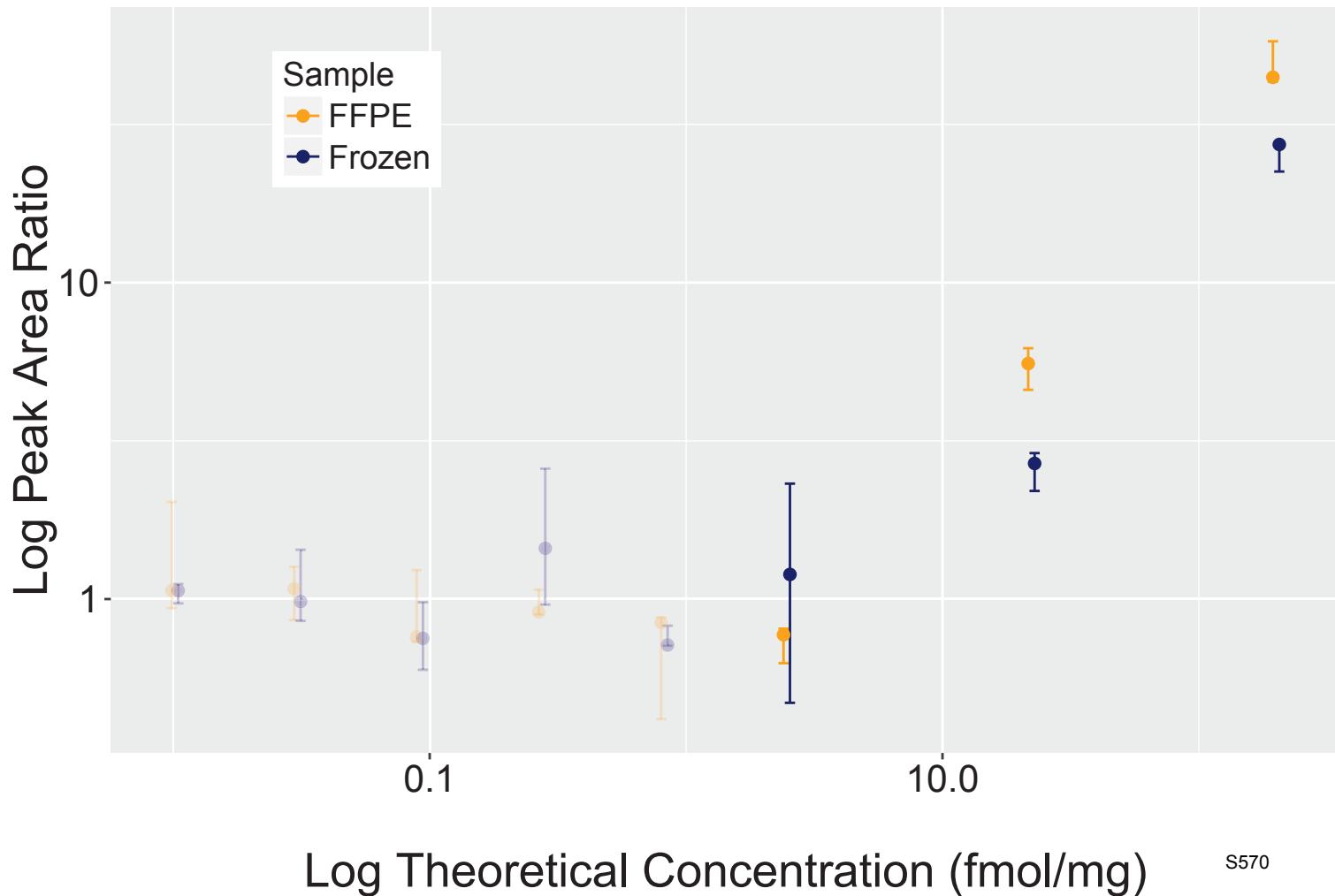


S568

Analyte: SERPINB1.TYNFLPEFLVSTQK

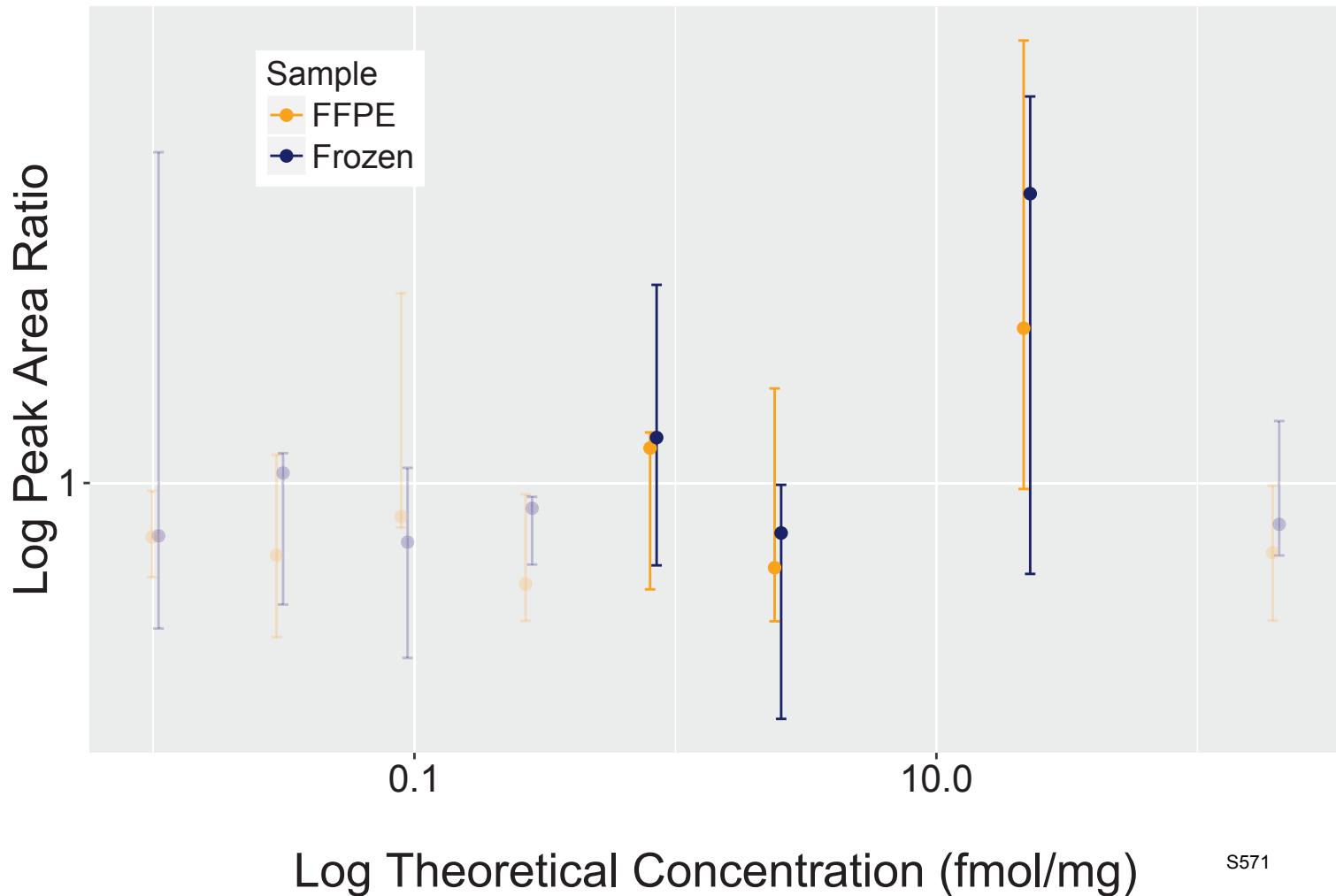


Analyte: NDUFS3.TYTDELPIESAVSVFK



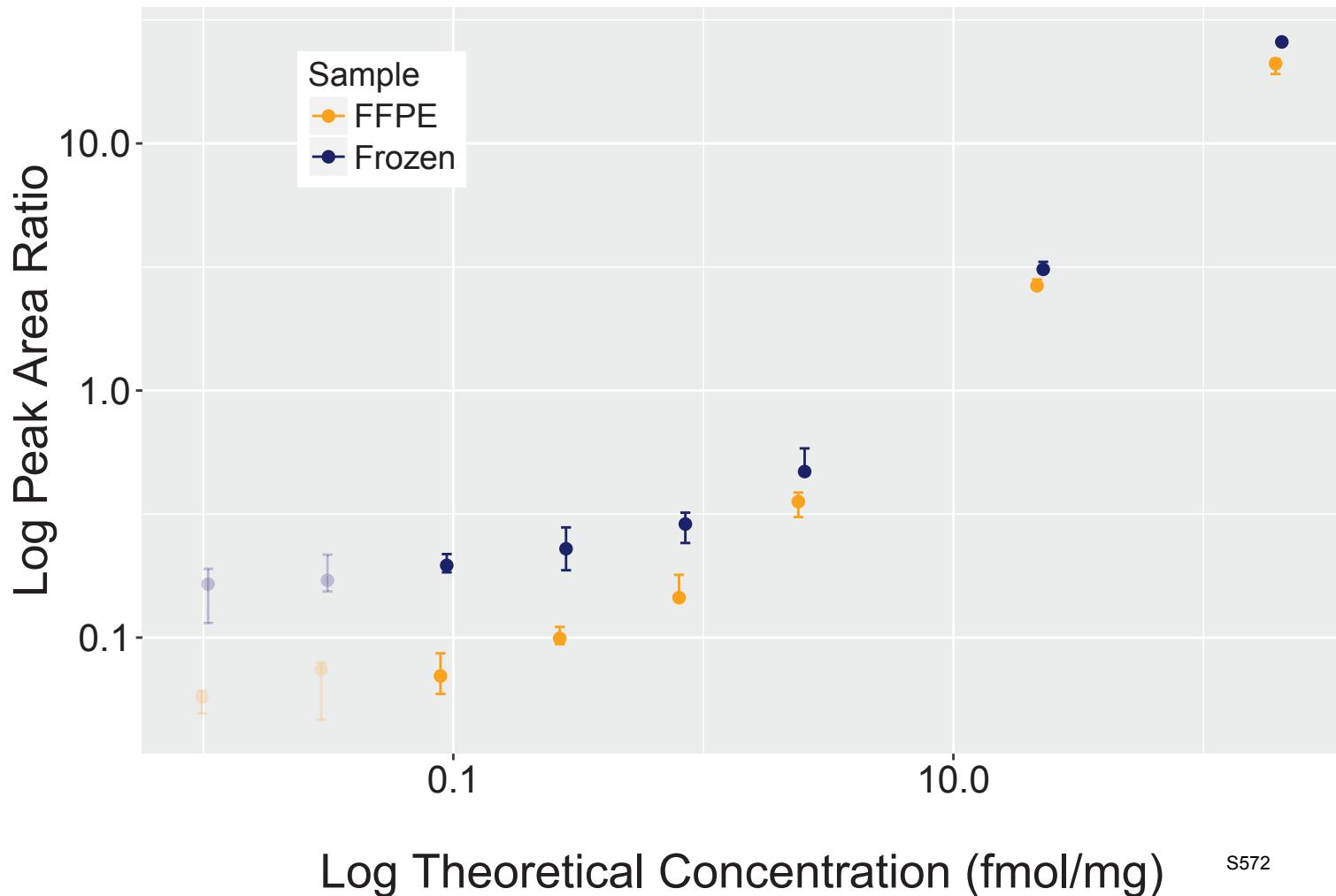
S570

Analyte: ALDH2.VAEQTPLTALYVANLIK



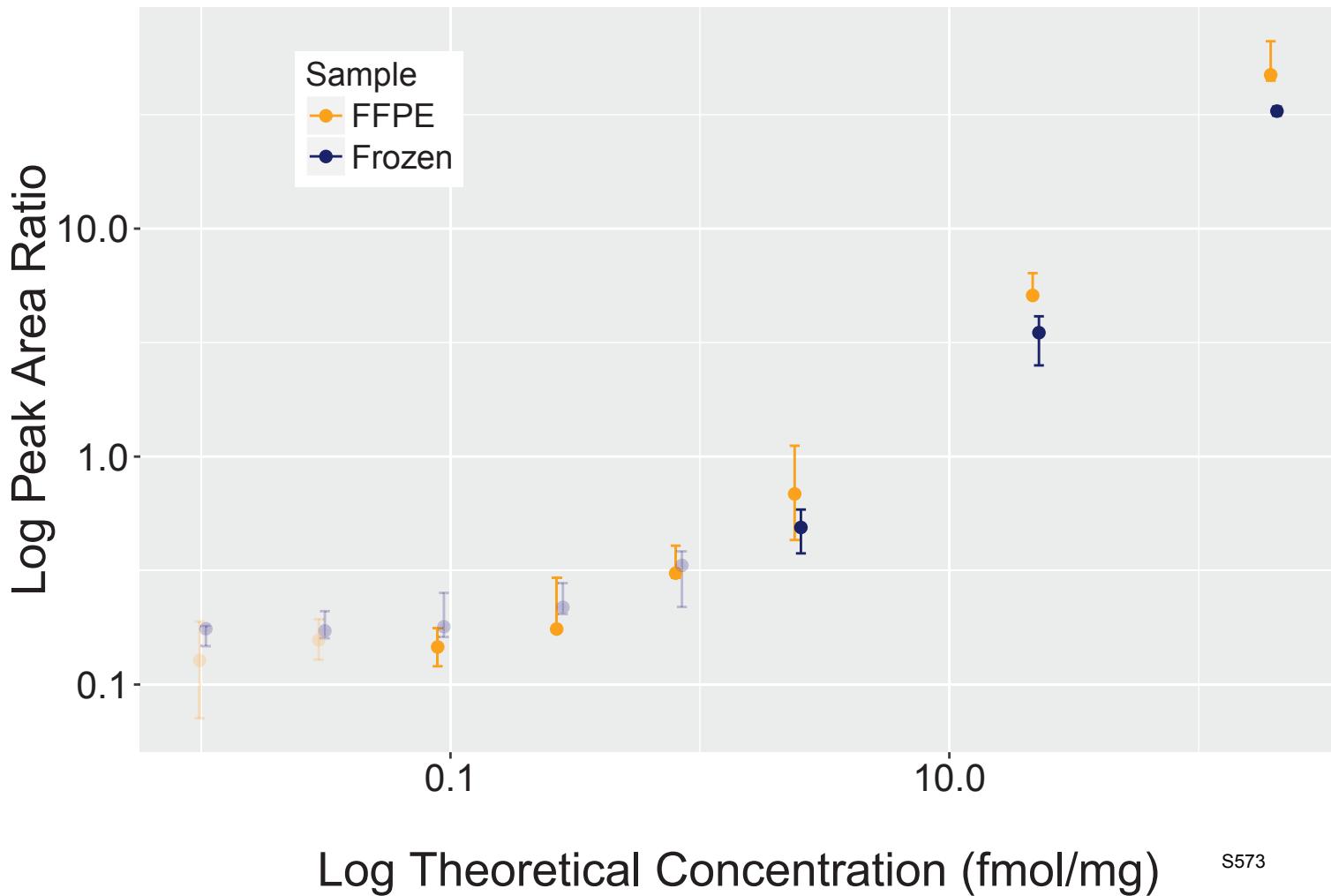
S571

Analyte: ALDH2.VAFTGSTEIGR



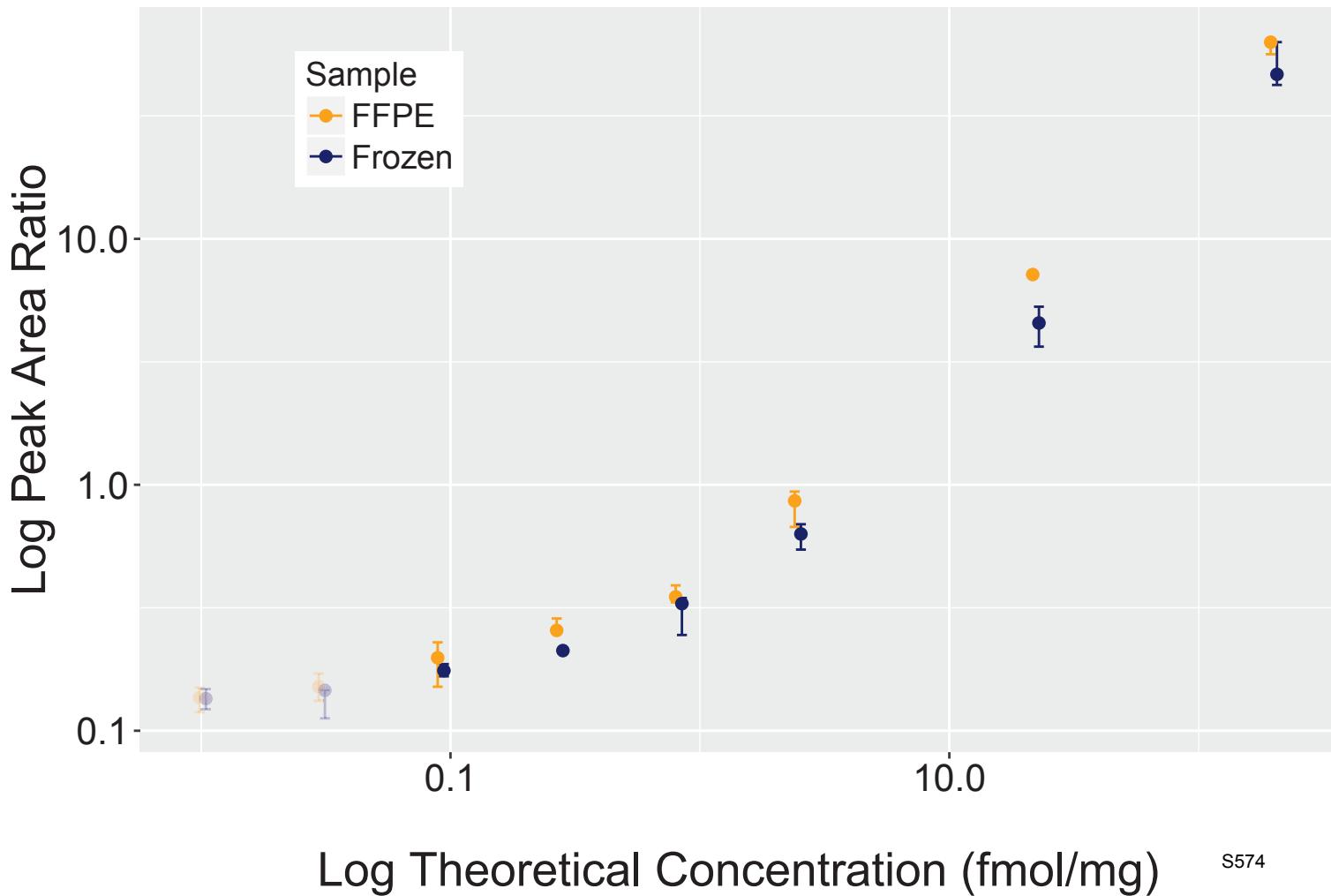
S572

Analyte: DAK.VAGALAEAGVGLEEIAK



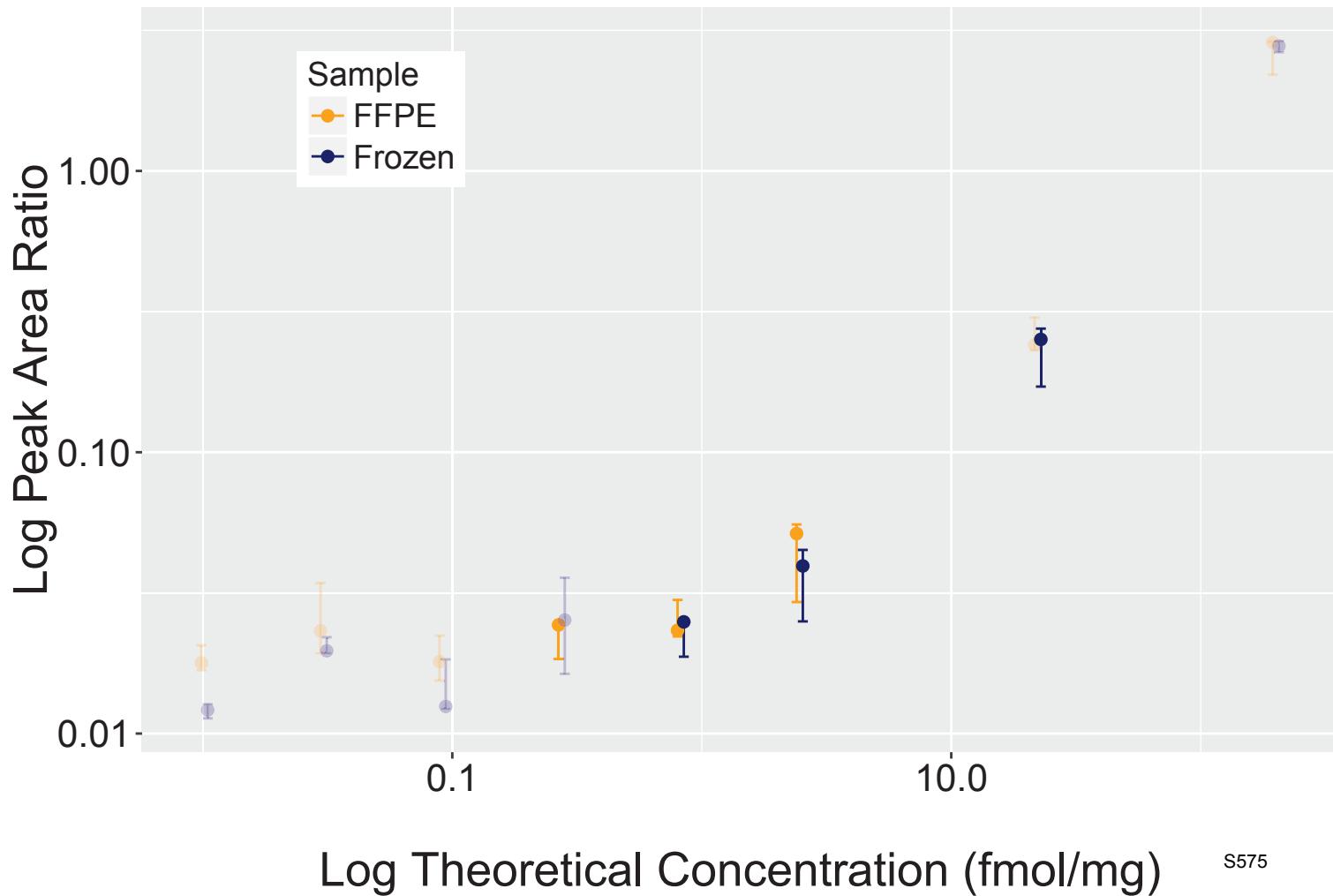
S573

Analyte: NAPA.VAGYAALLEQYQK

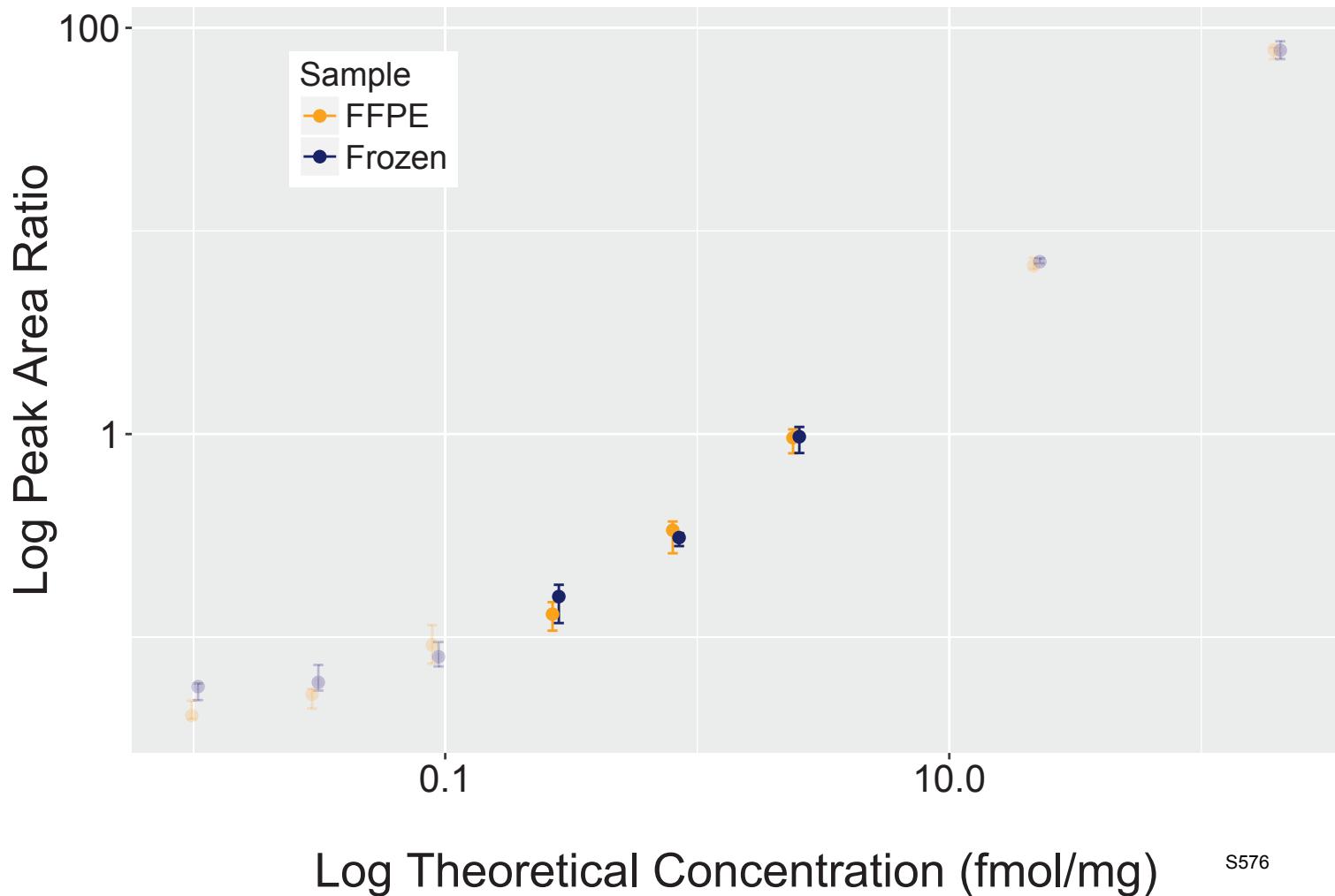


S574

Analyte: ATP5B.VALTGLTVAEYFR

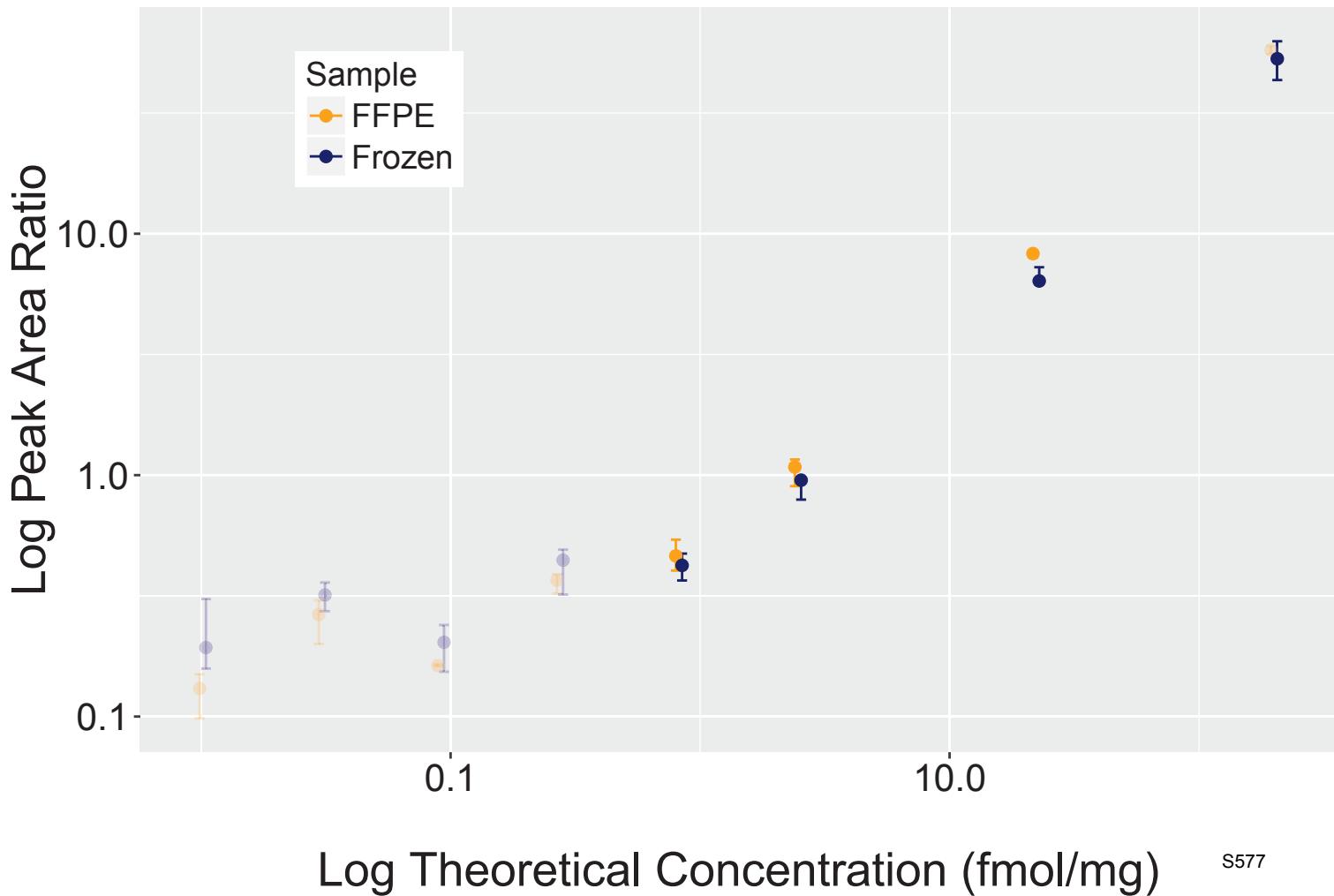


Analyte: ITGB4.VAPGYYTLTADQDAR

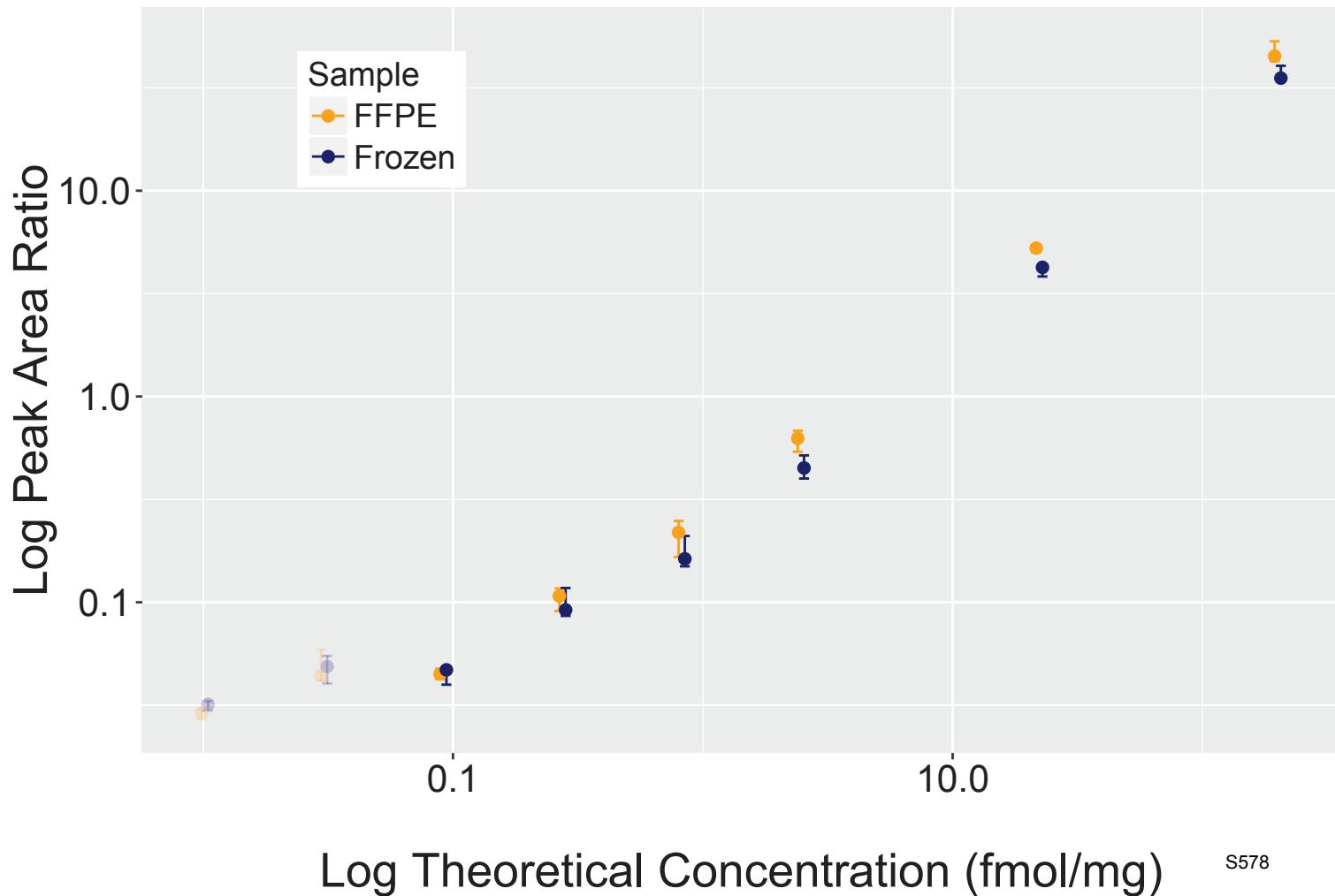


S576

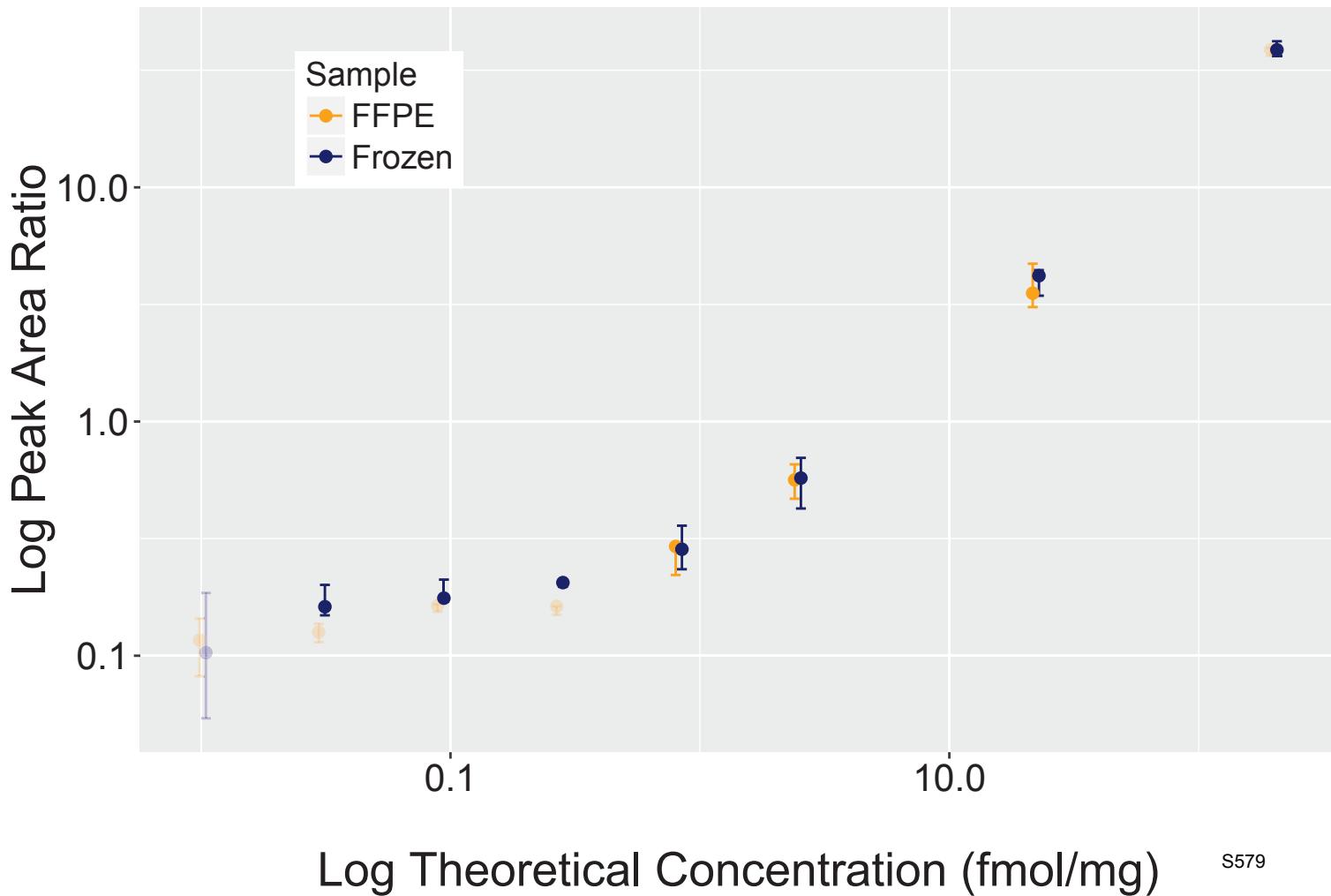
Analyte: ATP1B1.VAPPGLTQIPQIQQK



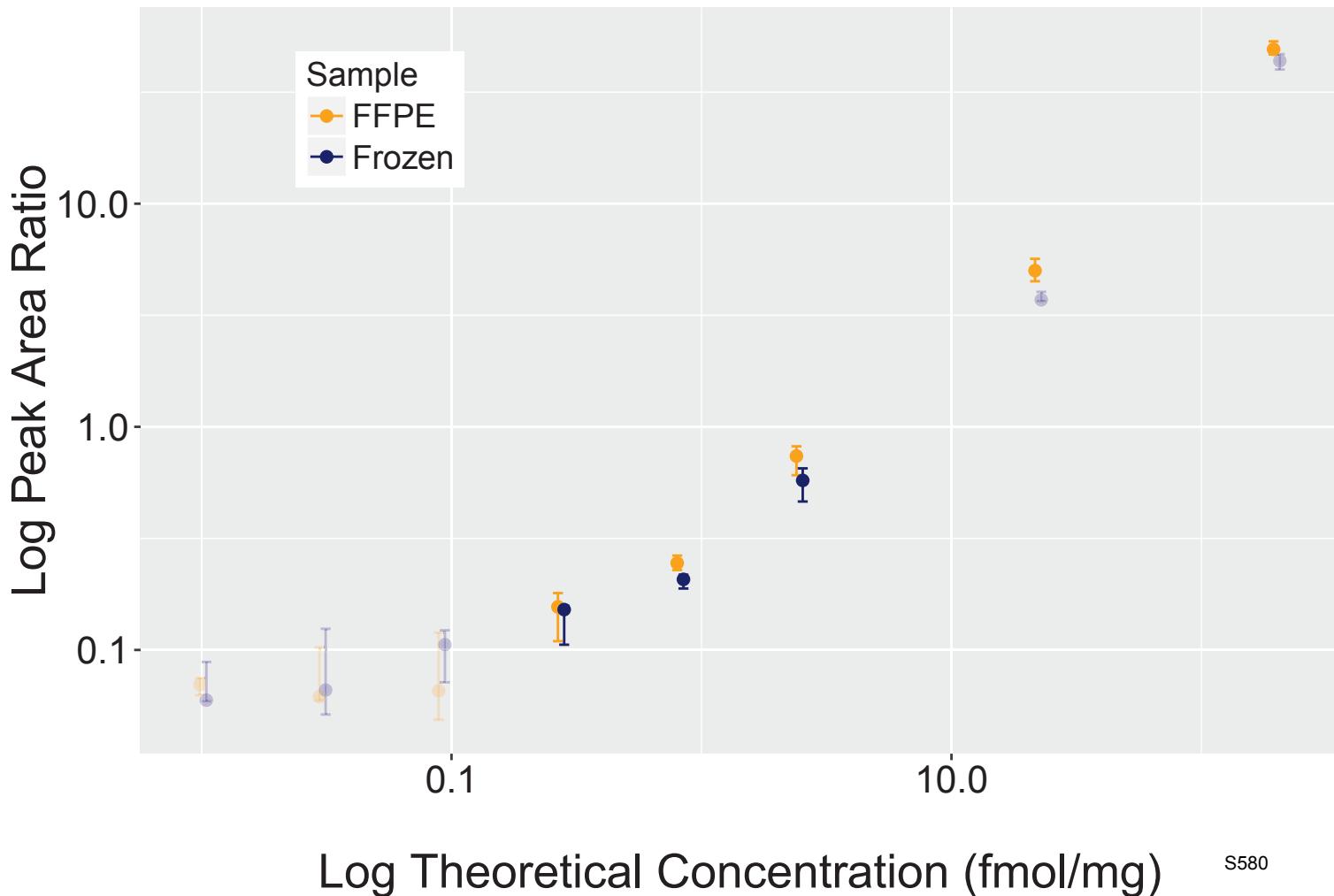
Analyte: ERLIN2.VAQVAEITYGQK



Analyte: NUP155.VASVSQLNAIVSAAGNIAR

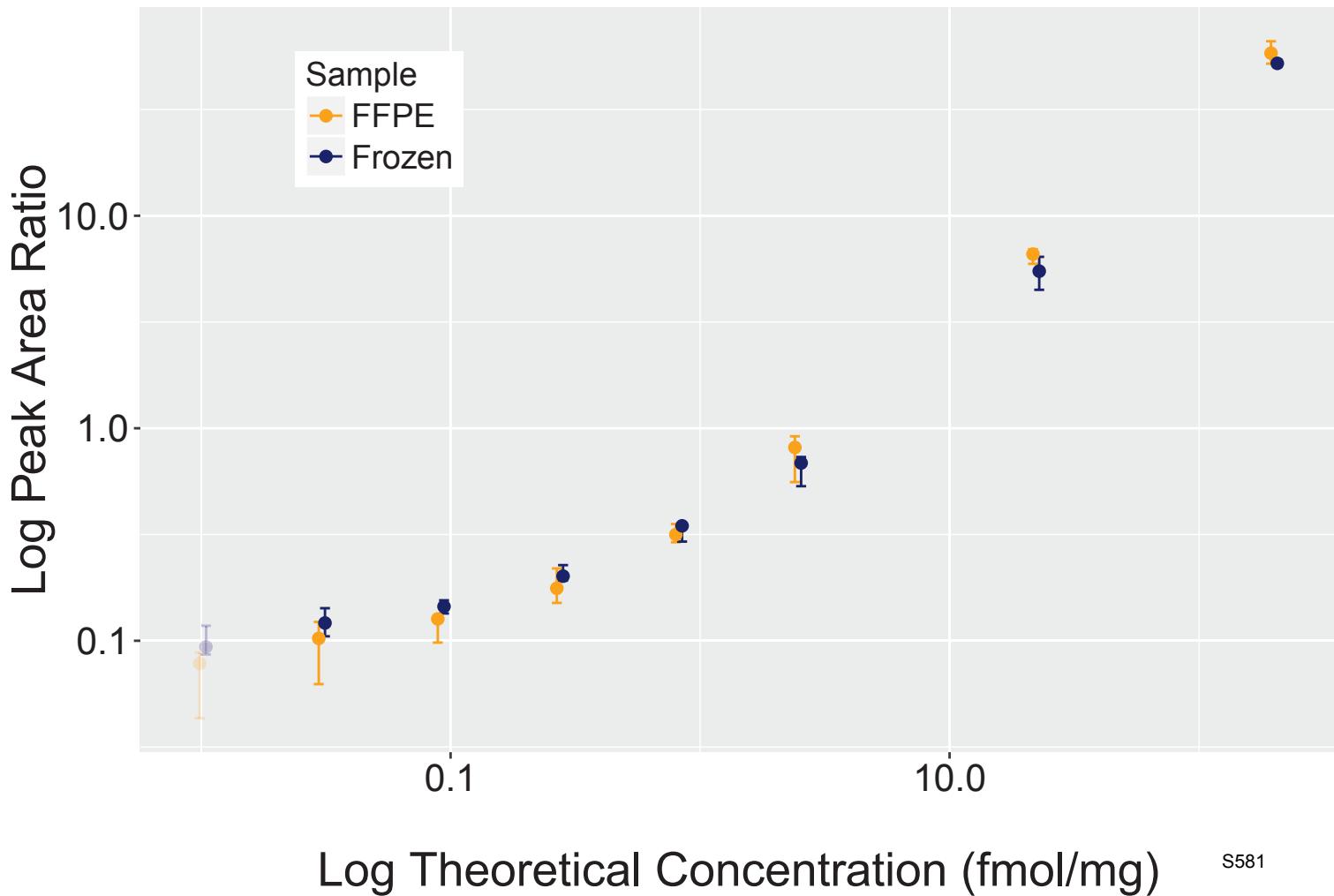


Analyte: BUB3.VAVEYLDPSPEVQK



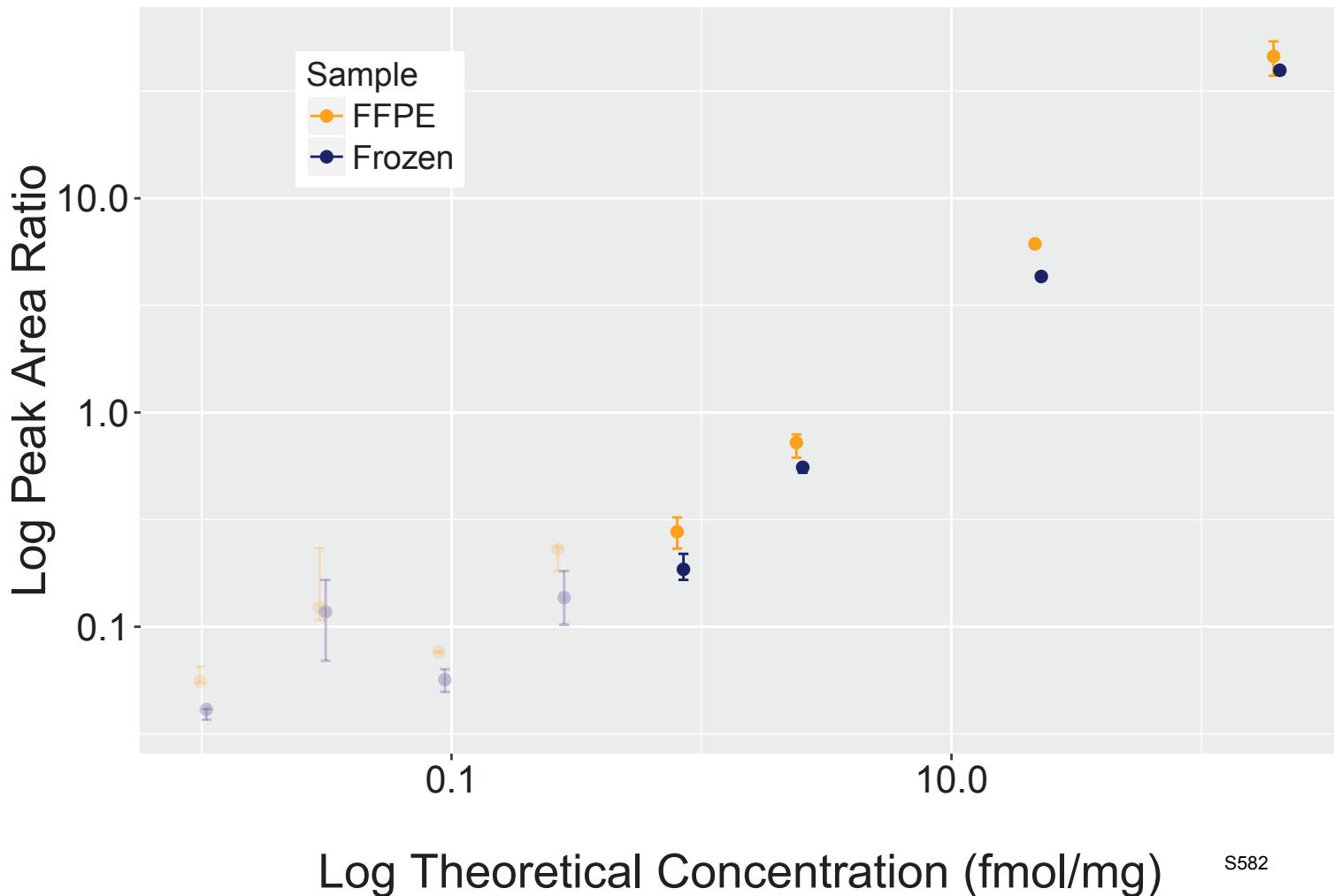
S580

Analyte: BCAM.VAYLDPLELSEGK



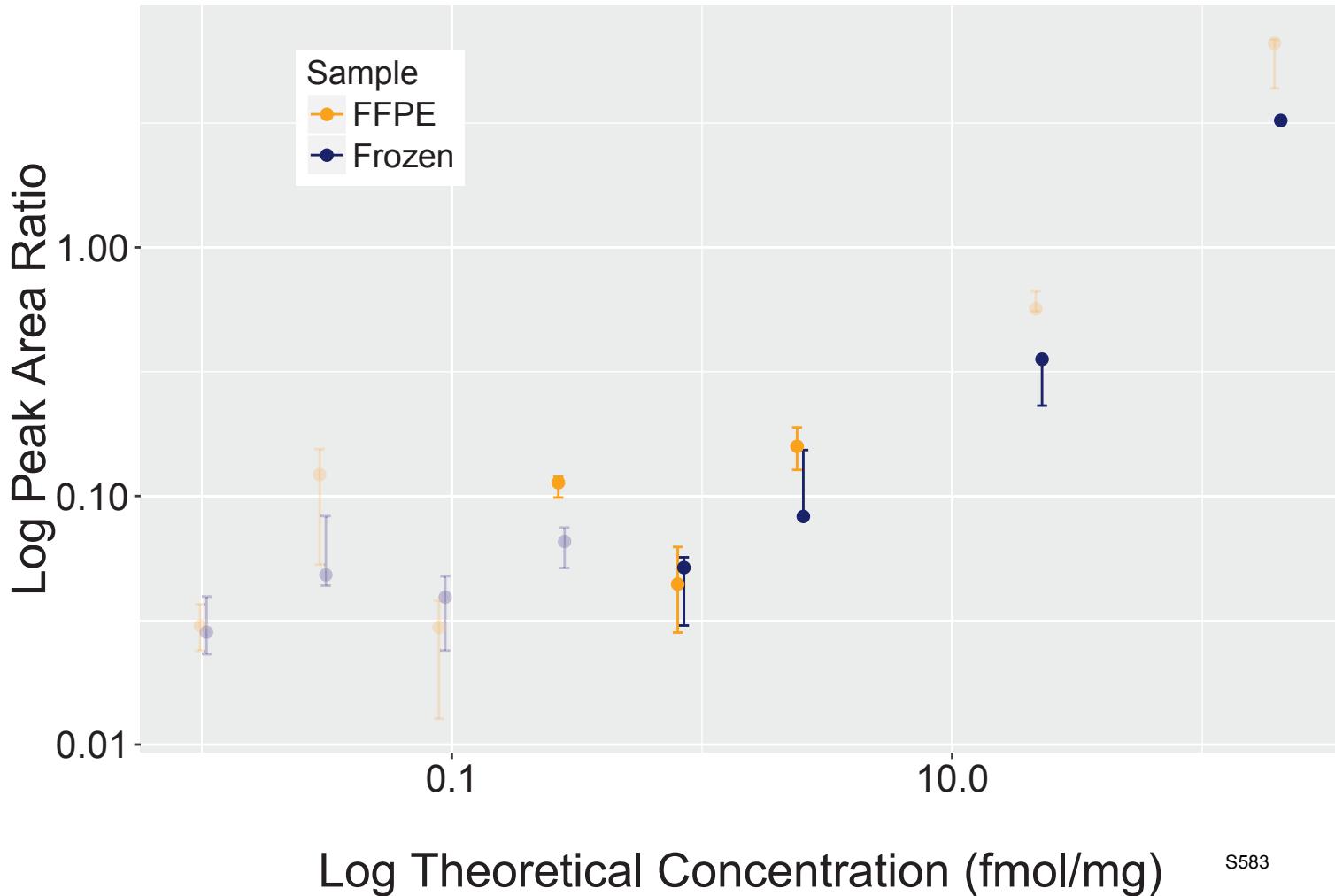
S581

Analyte: VDAC3.VC[+57]NYGLTFTQK



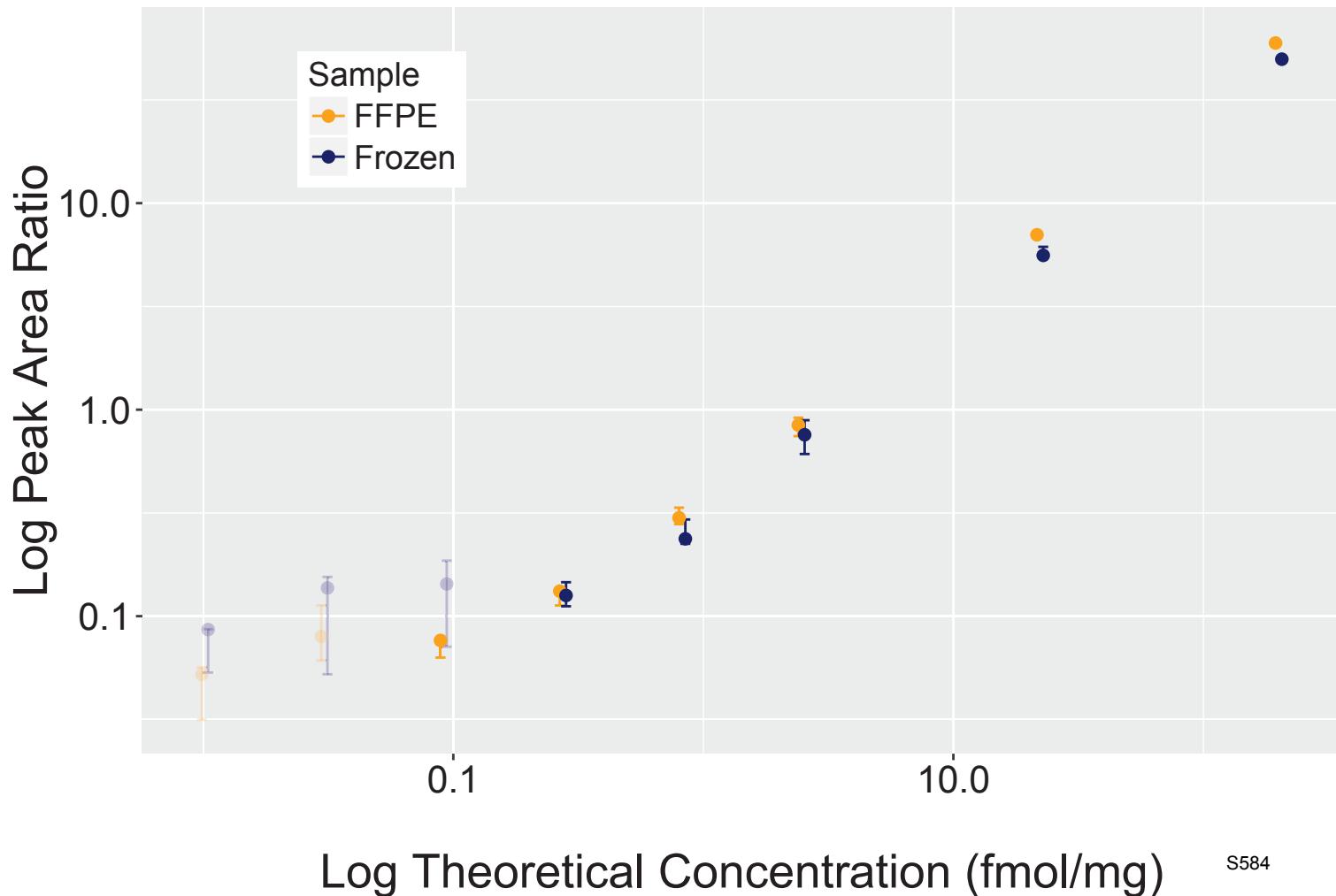
S582

Analyte: RPL30.VC[+57]TLAIIDPGDSDIIR



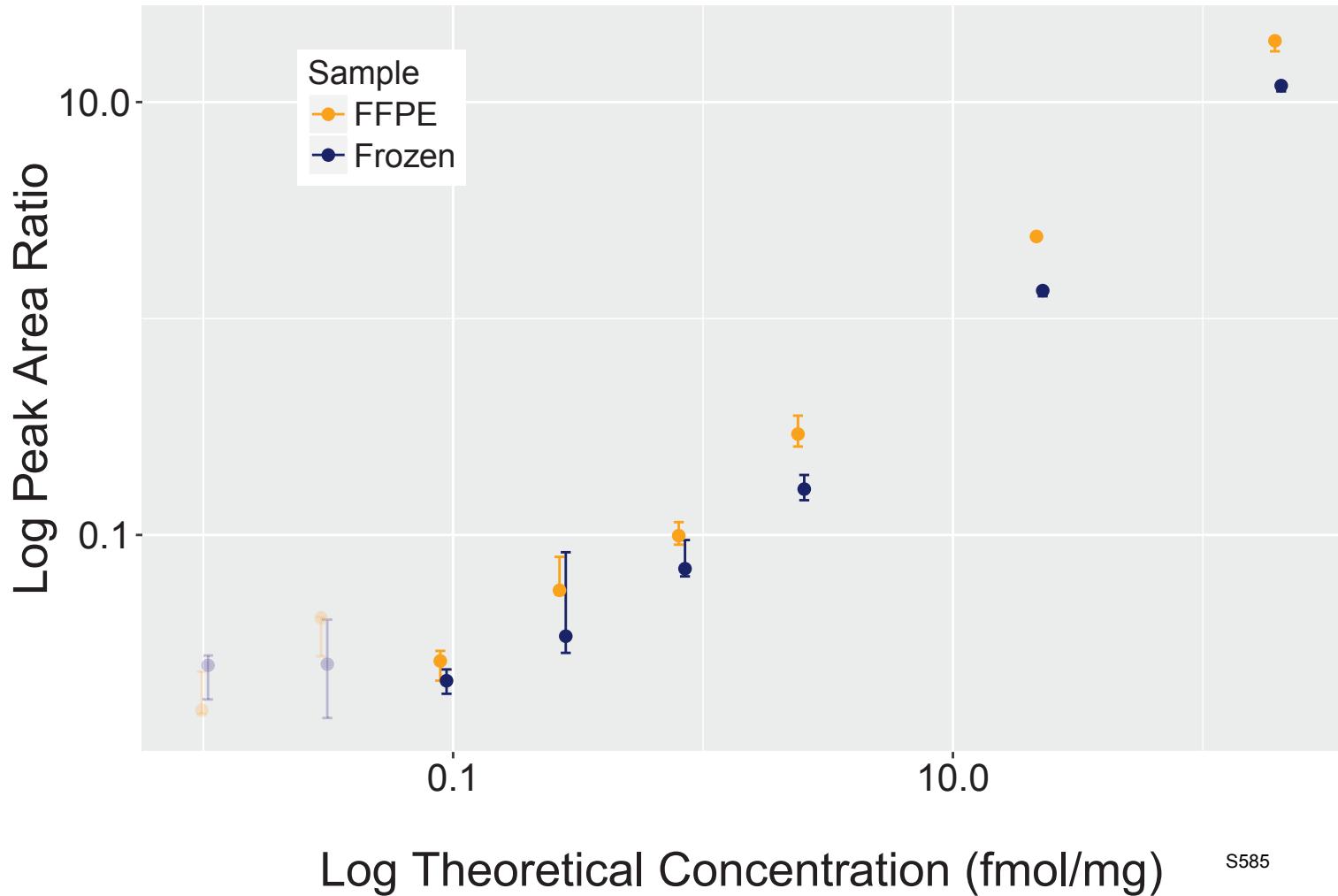
S583

Analyte: YARS.VDAQFGGIDQR

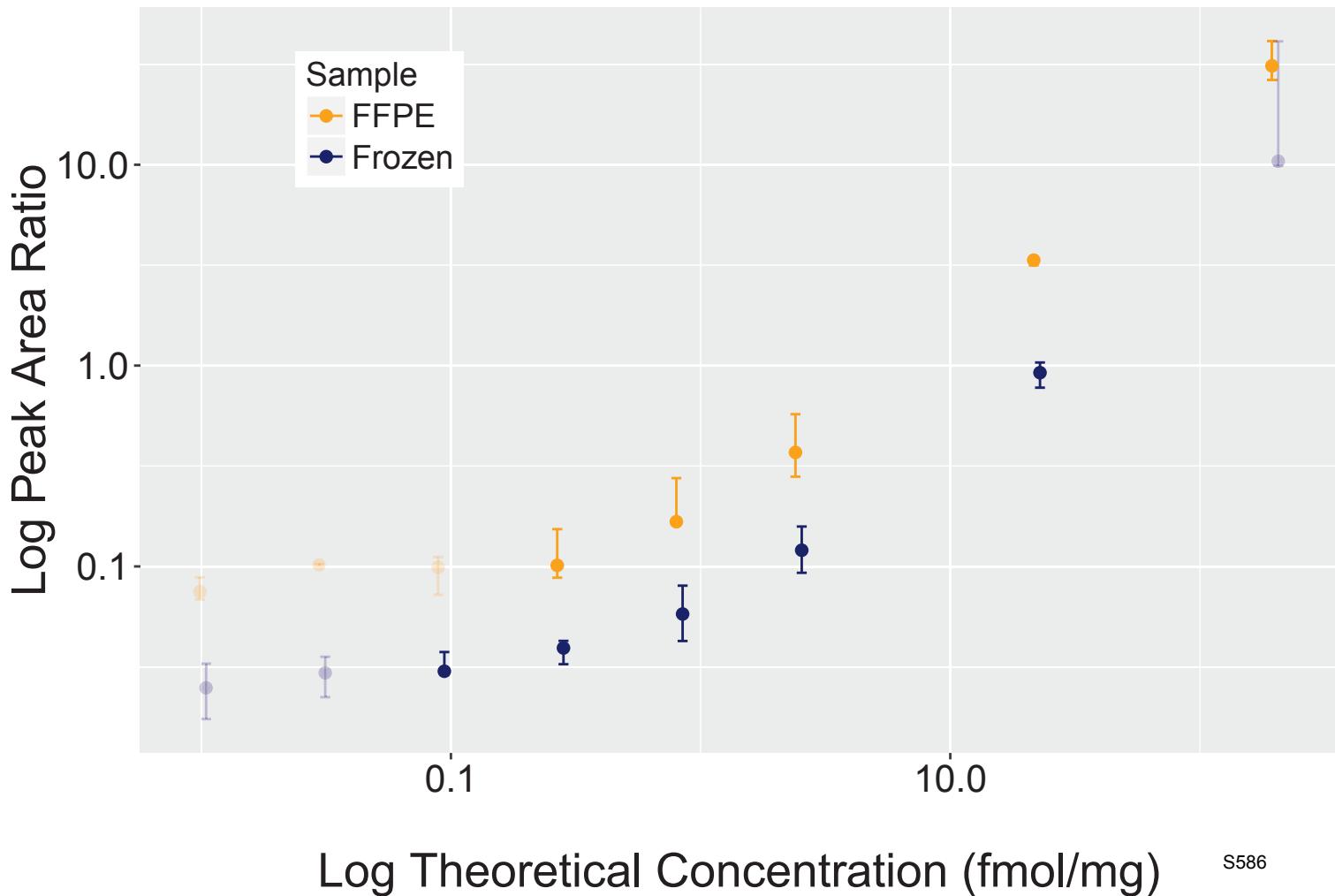


S584

Analyte: PDIA4.VDATAETDLAK

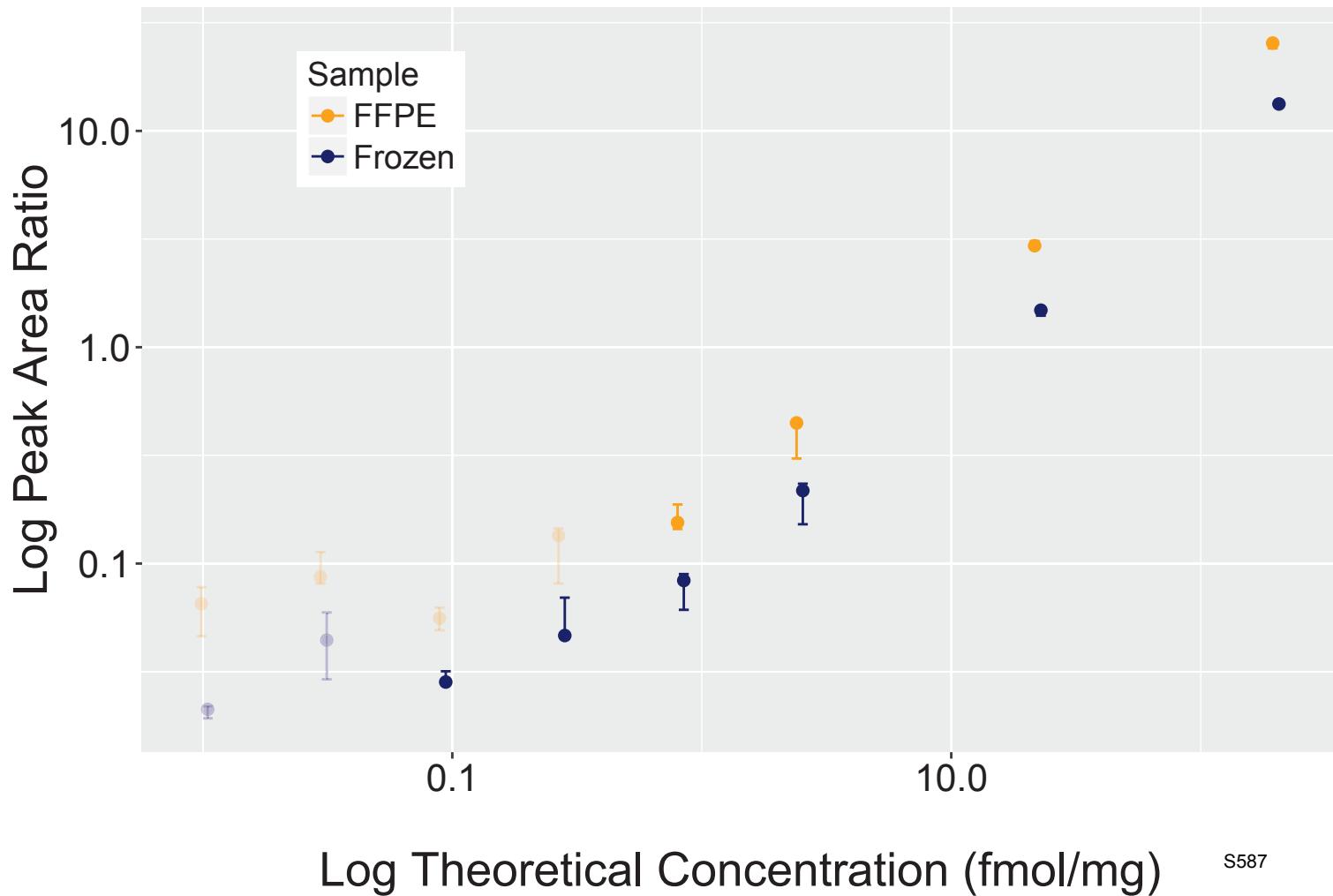


Analyte: AHNAK.VDIEAPDVSLEGPEGK

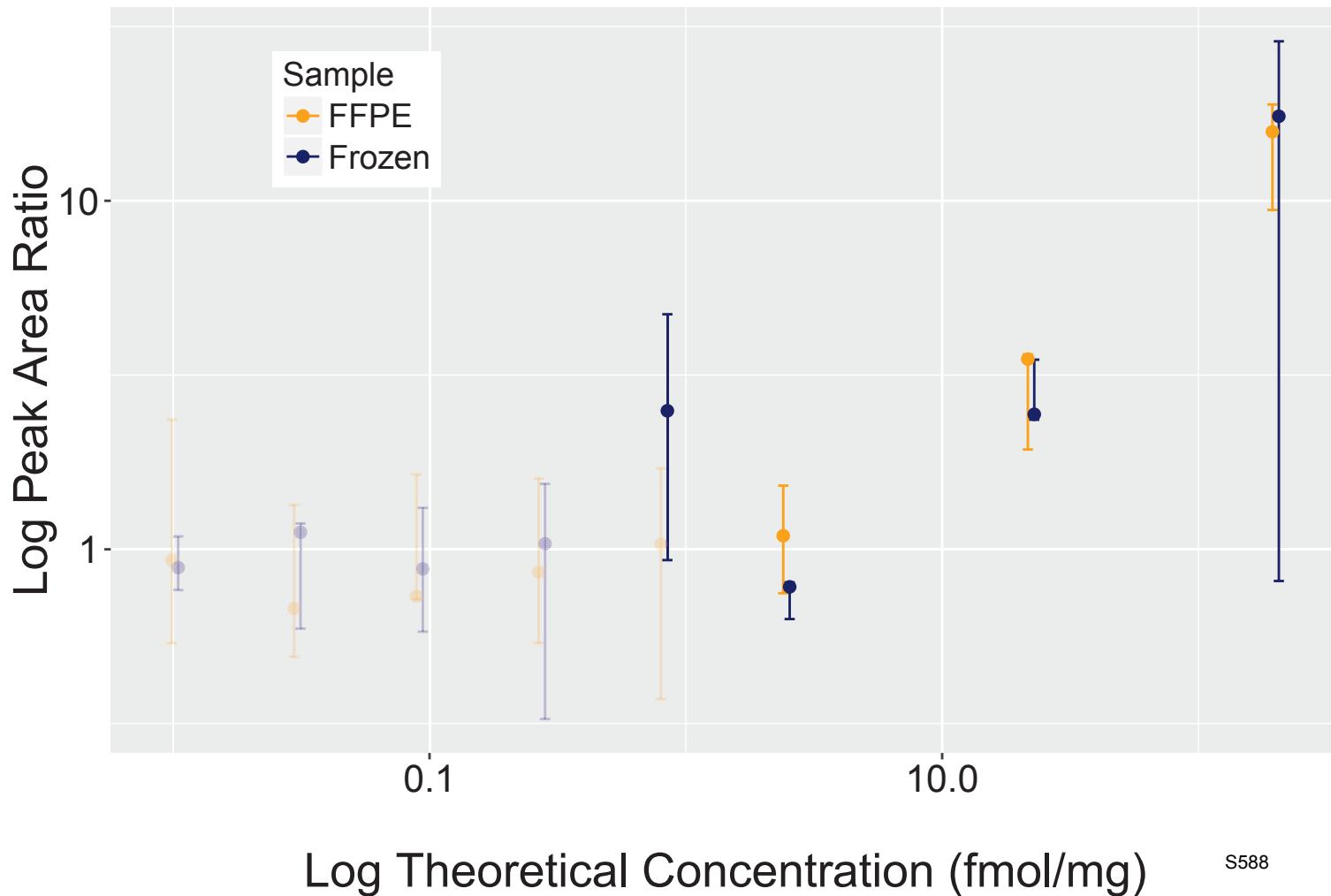


S586

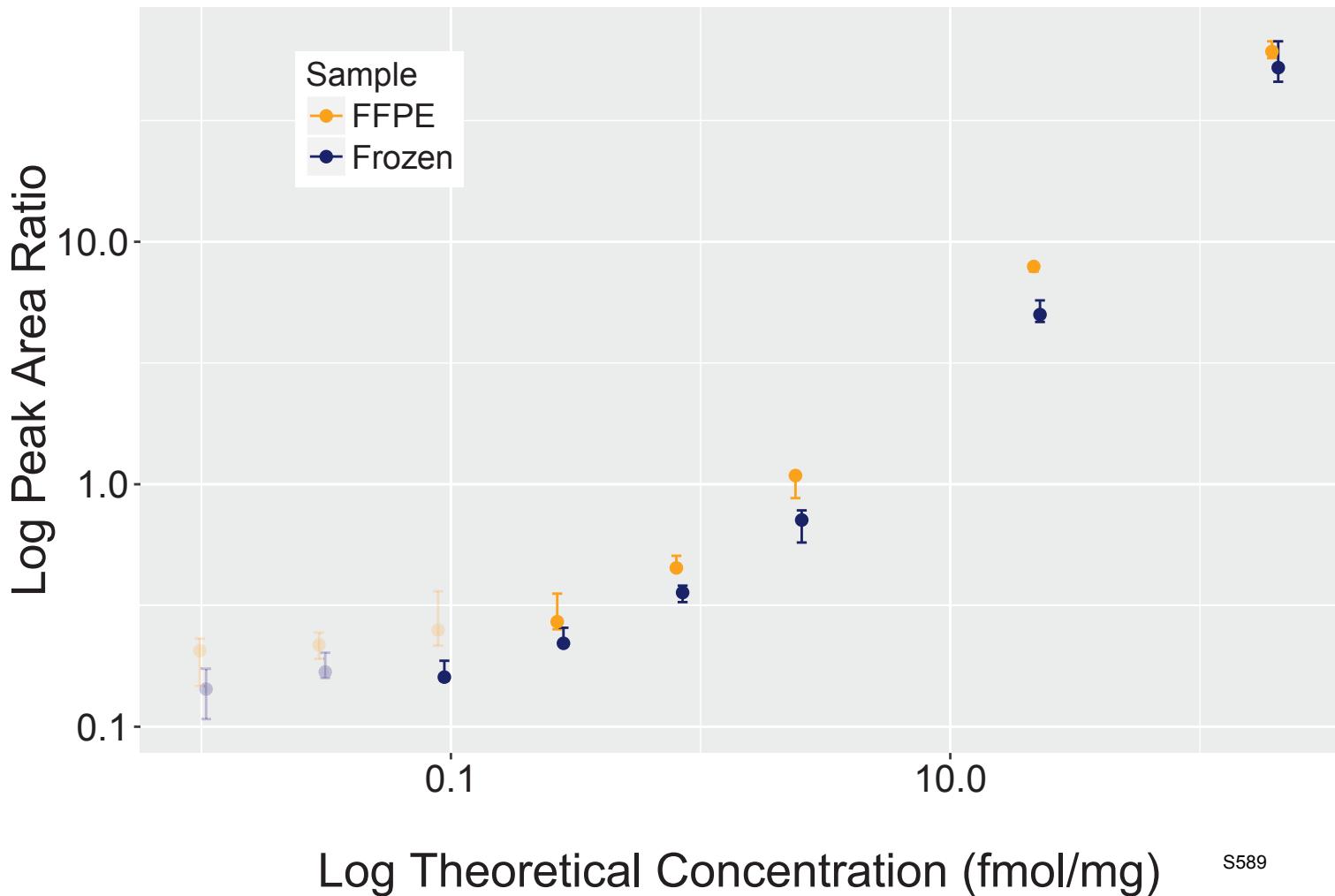
Analyte: CTTN.VDQSAVGFEYQGK



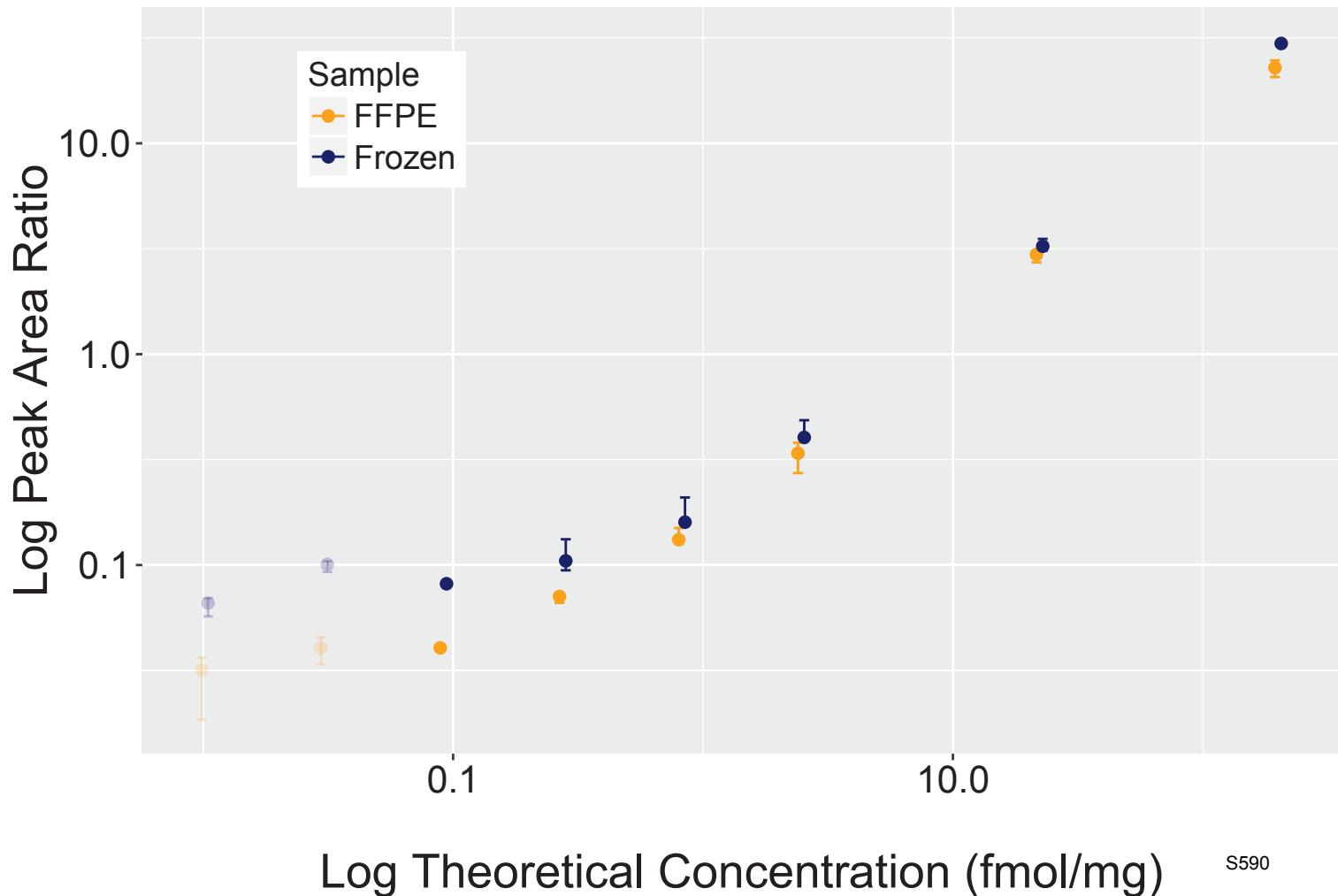
Analyte: NDUFS1.VDSDTLC[+57]TEEVFPTAGAGTDLF



Analyte: HSPH1.VEDVSAVEIVGGATR

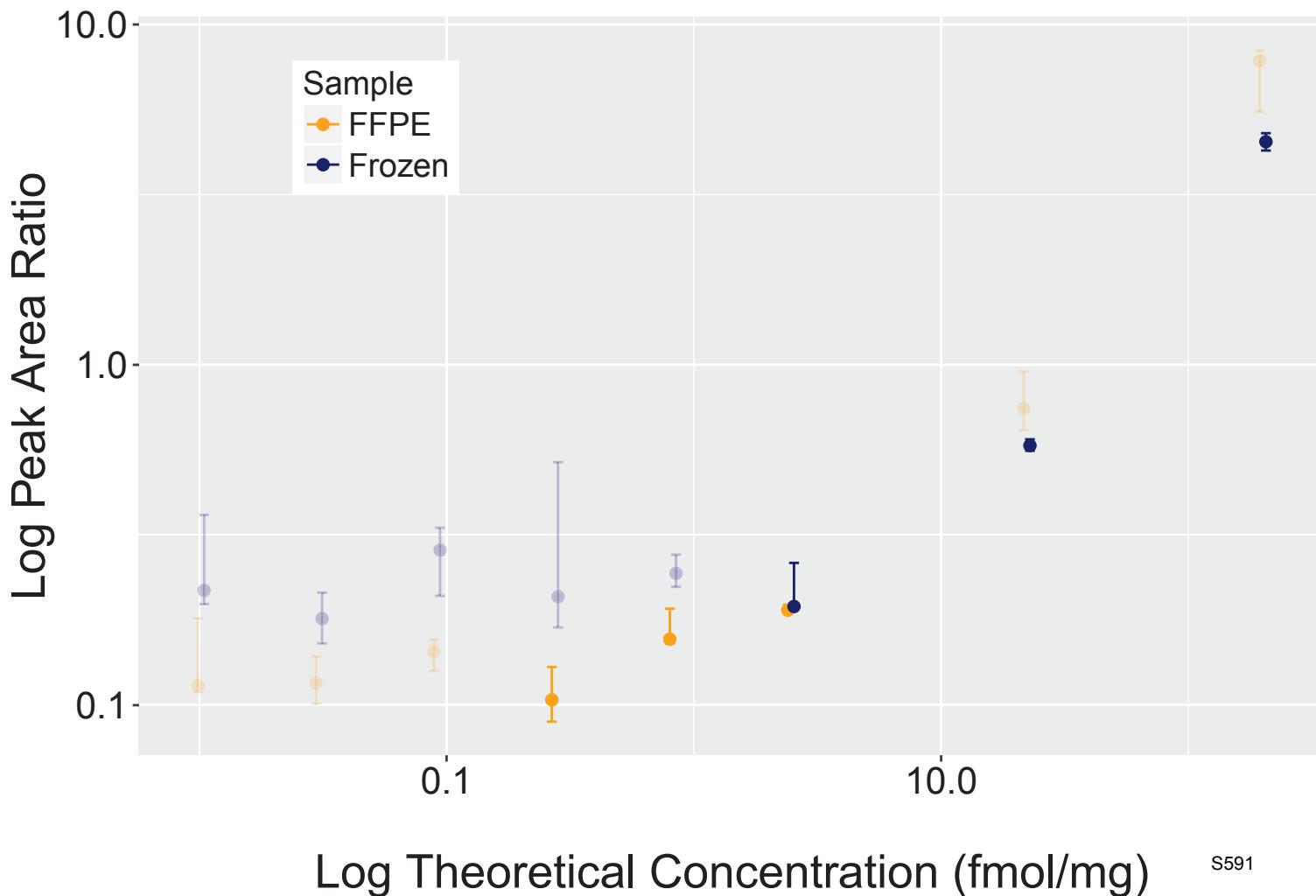


Analyte: TPD52L2.VEEEIVTLR

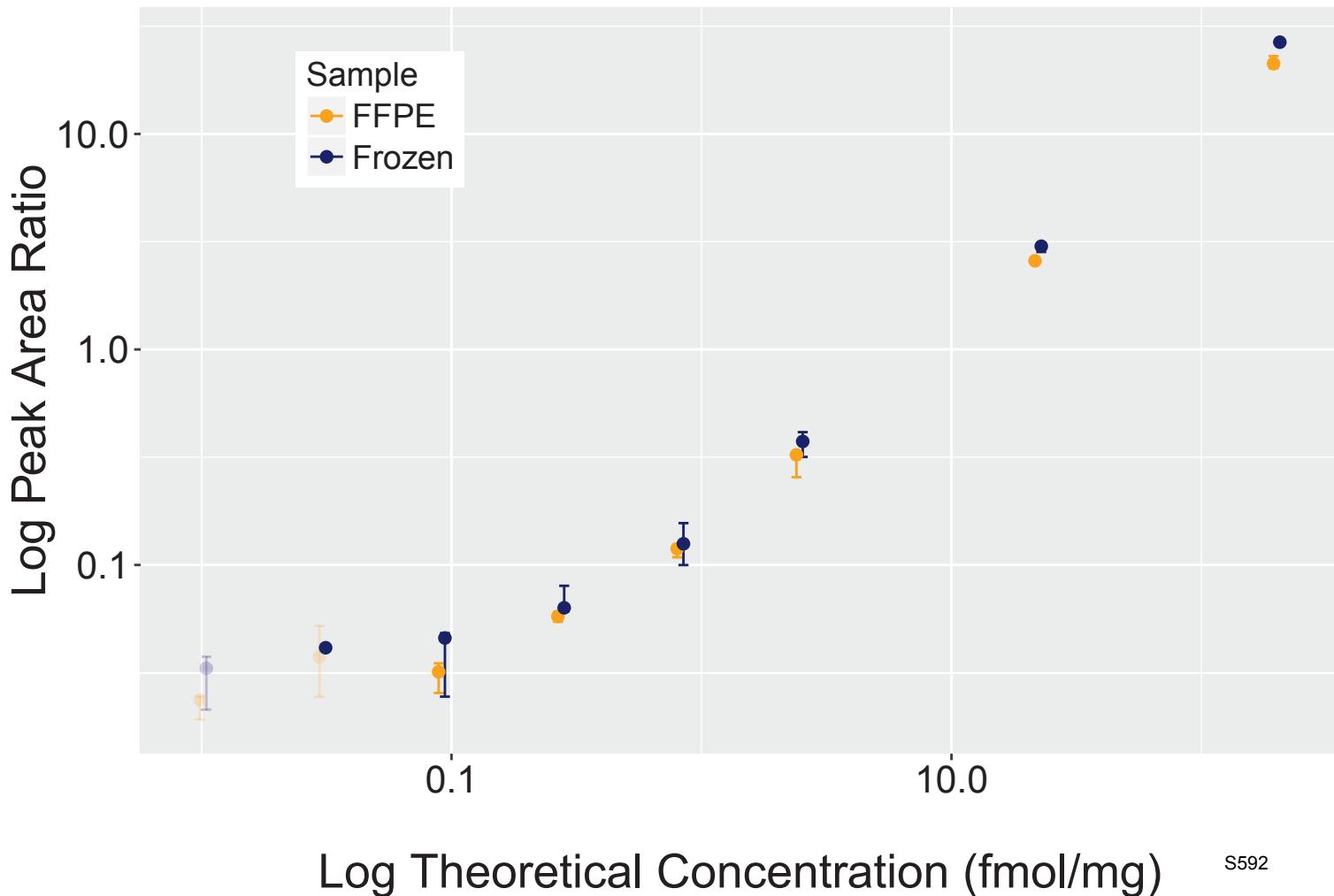


S590

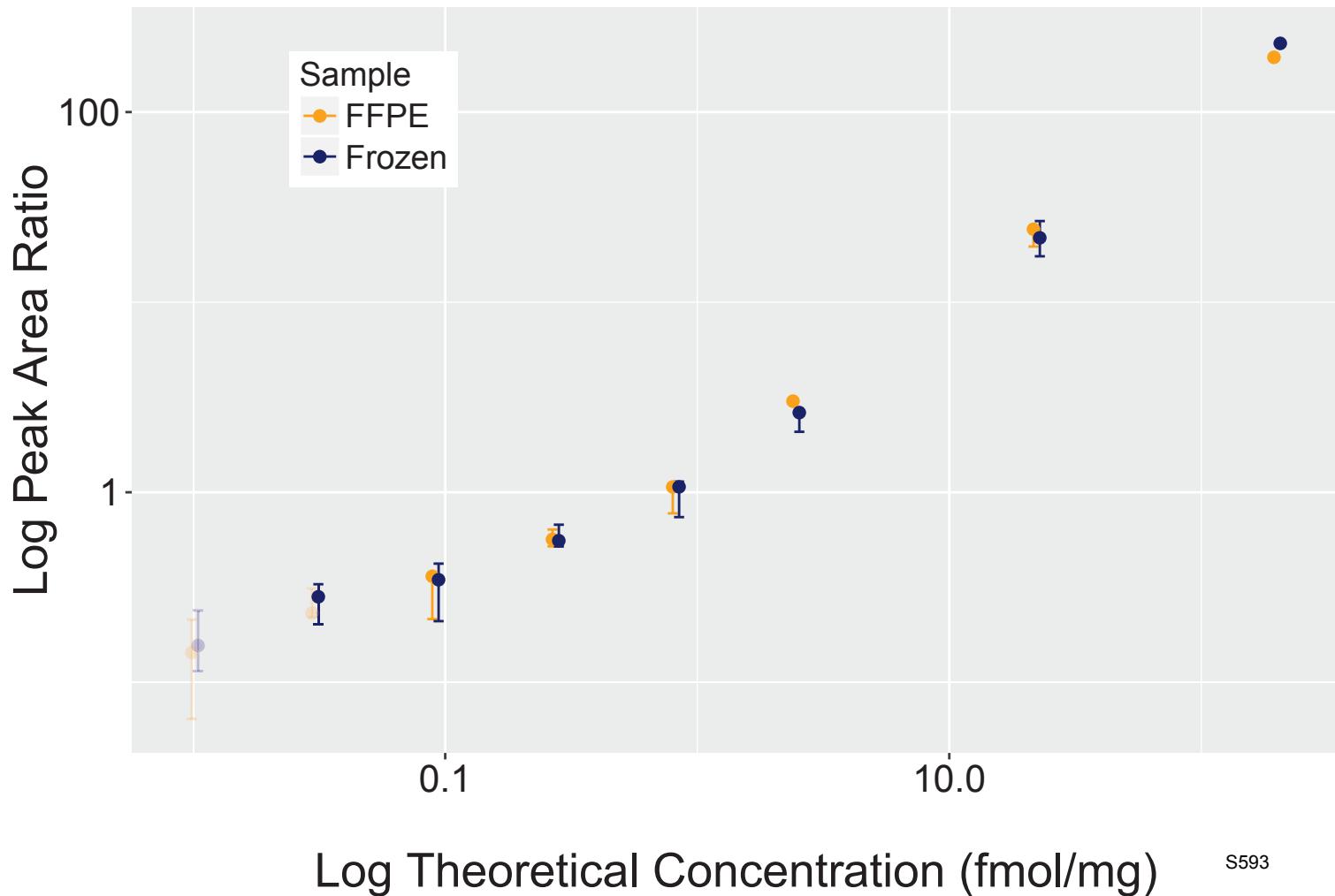
Analyte: C1QBP.VEEQEPELTSTPNFVVEVIK



Analyte: SCARB2.VEEVGPYTYR

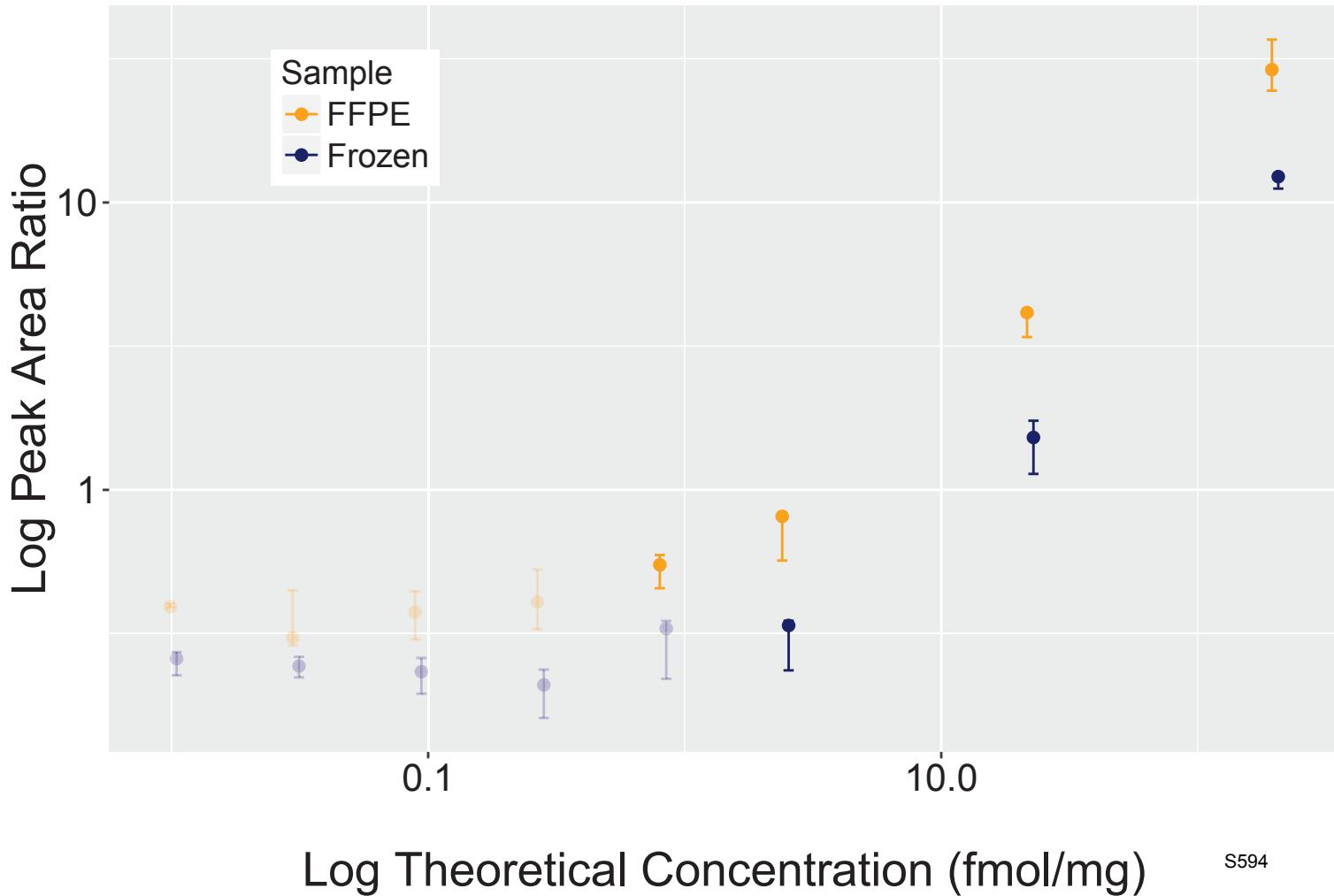


Analyte: ICAM1.VELAPLPSWQPVGK



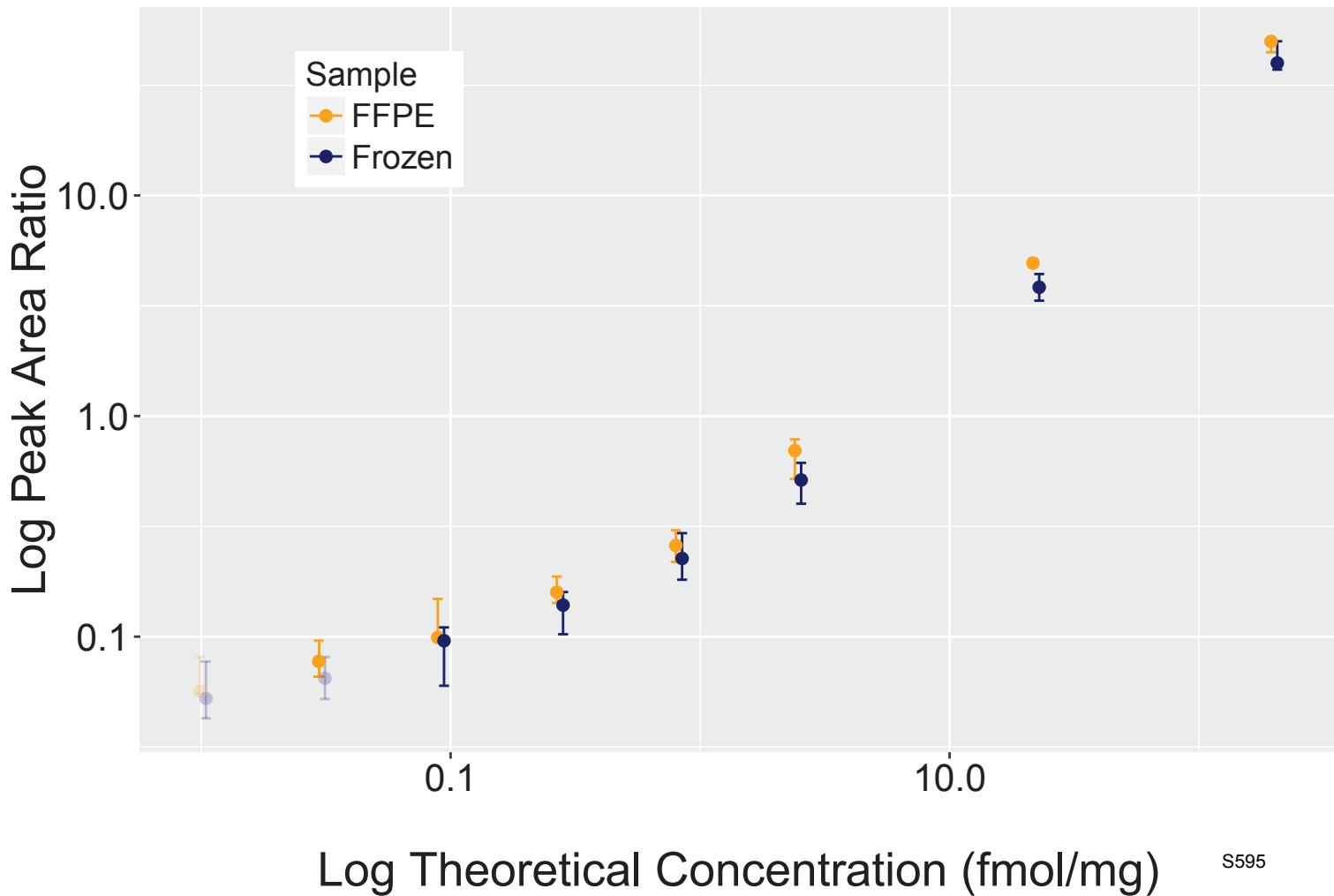
S593

Analyte: CAP1.VENQENVSNLVIEDTELK



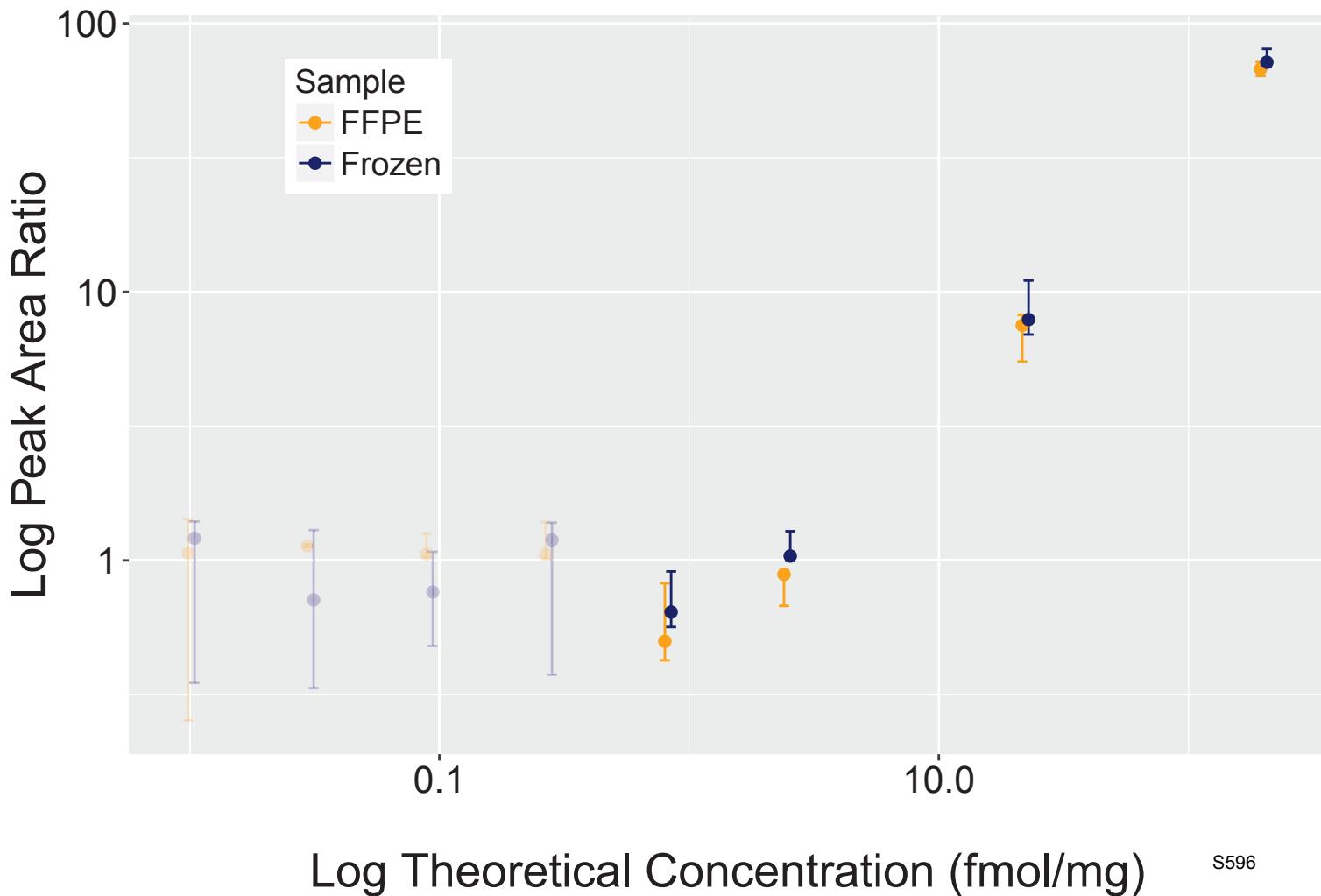
S594

Analyte: PNP.VFGFSLITNK

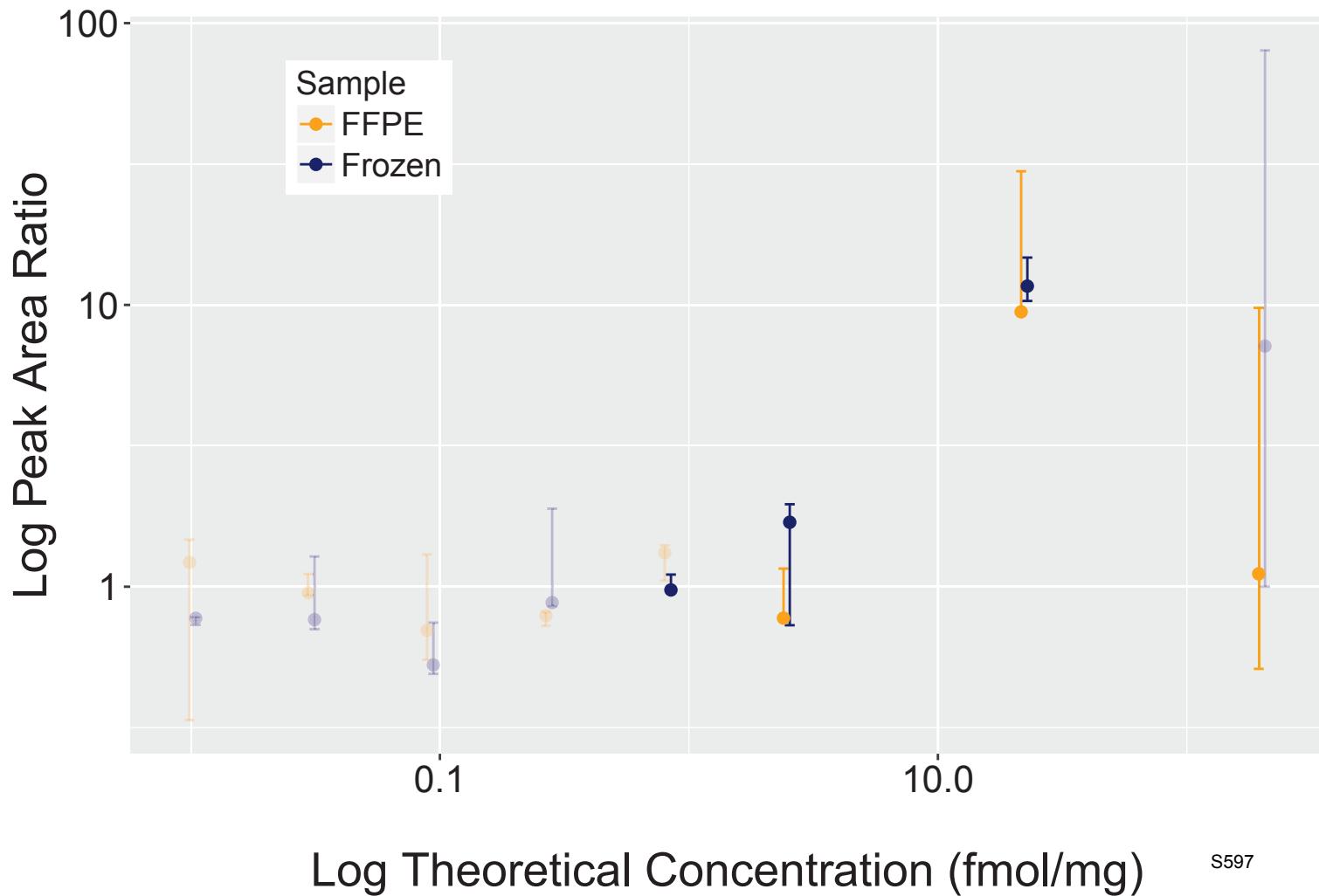


S595

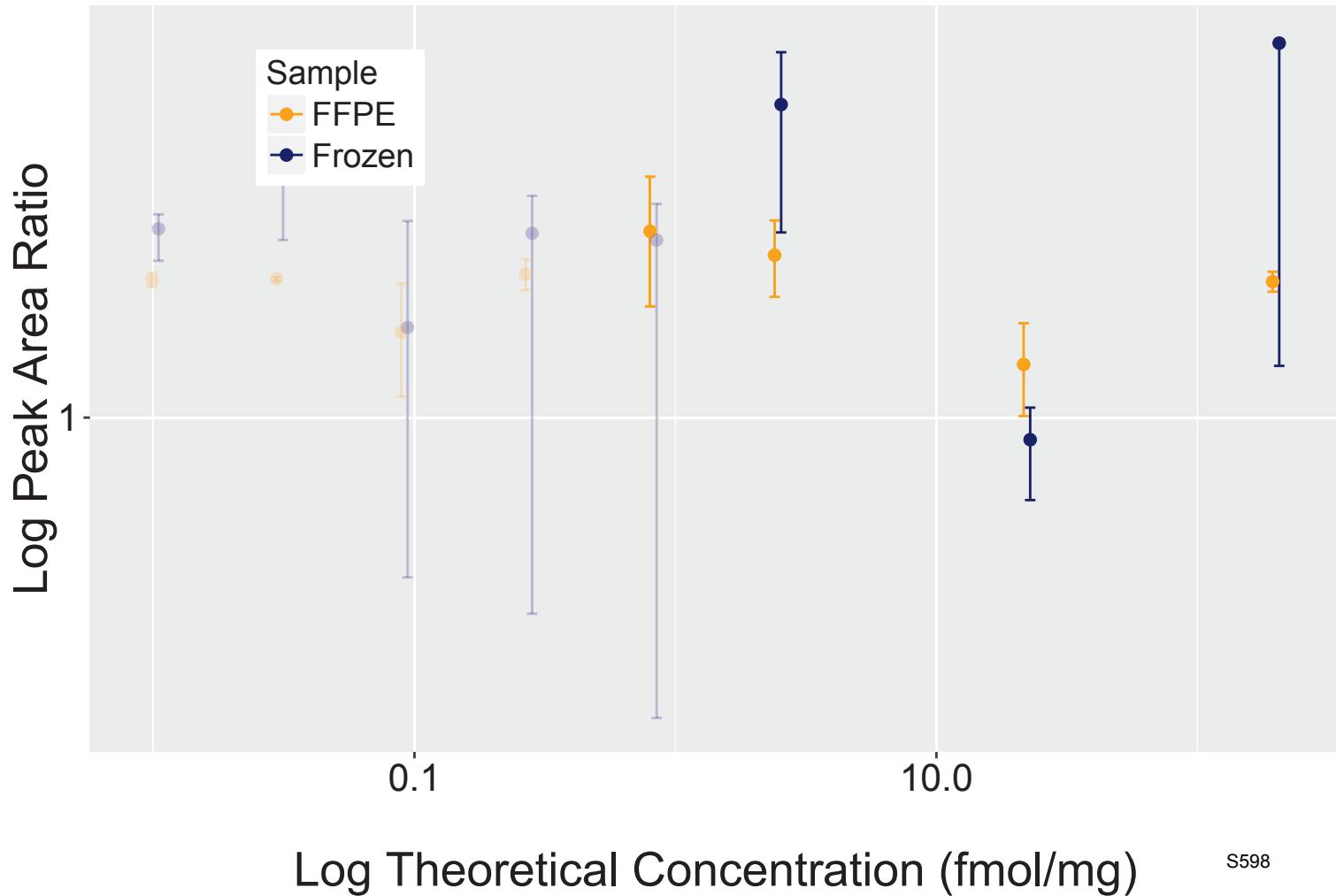
Analyte: OGDH.VFHLPTTFIGGQESALPLR



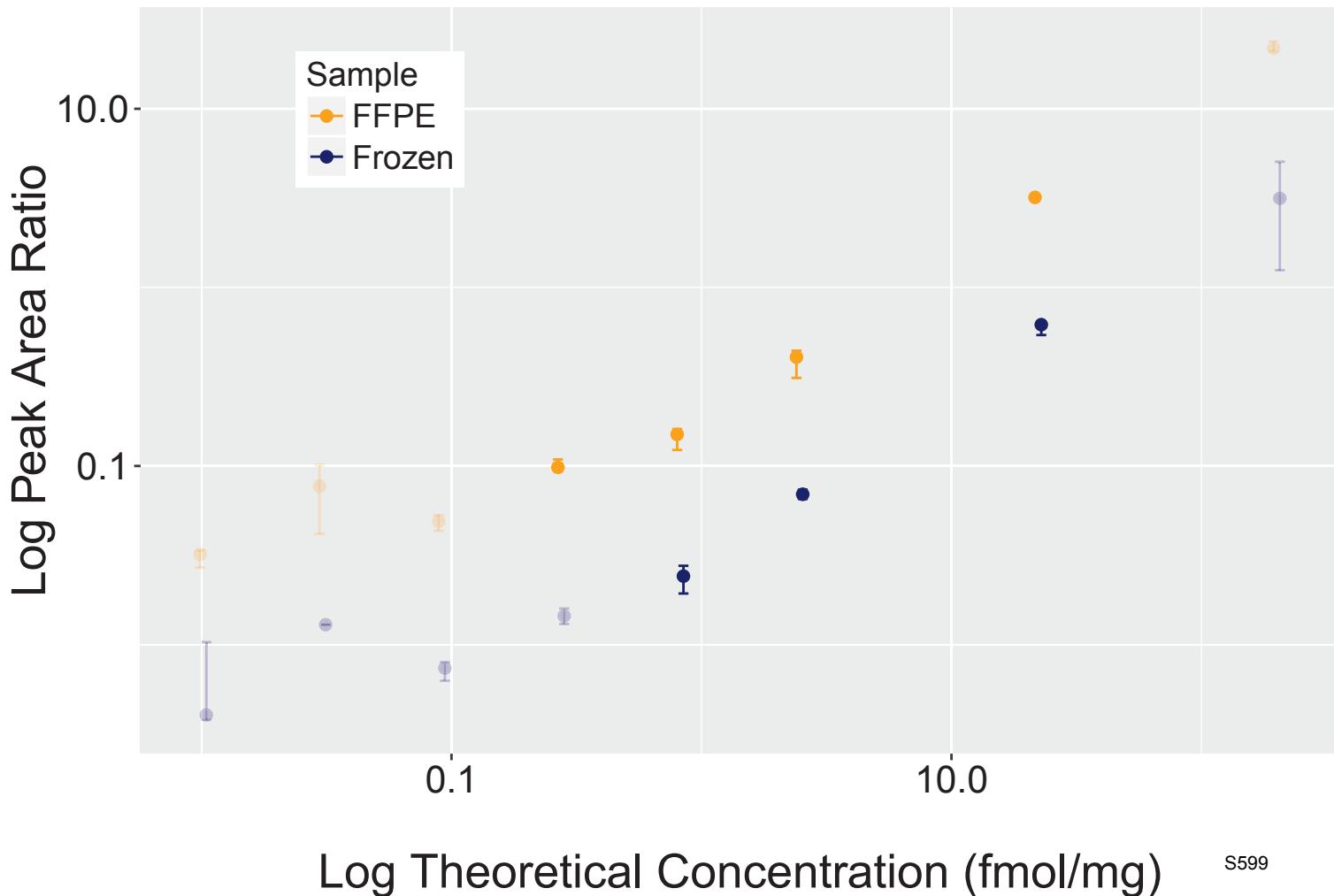
Analyte: PSMD5.VFTAIANQPWAQK



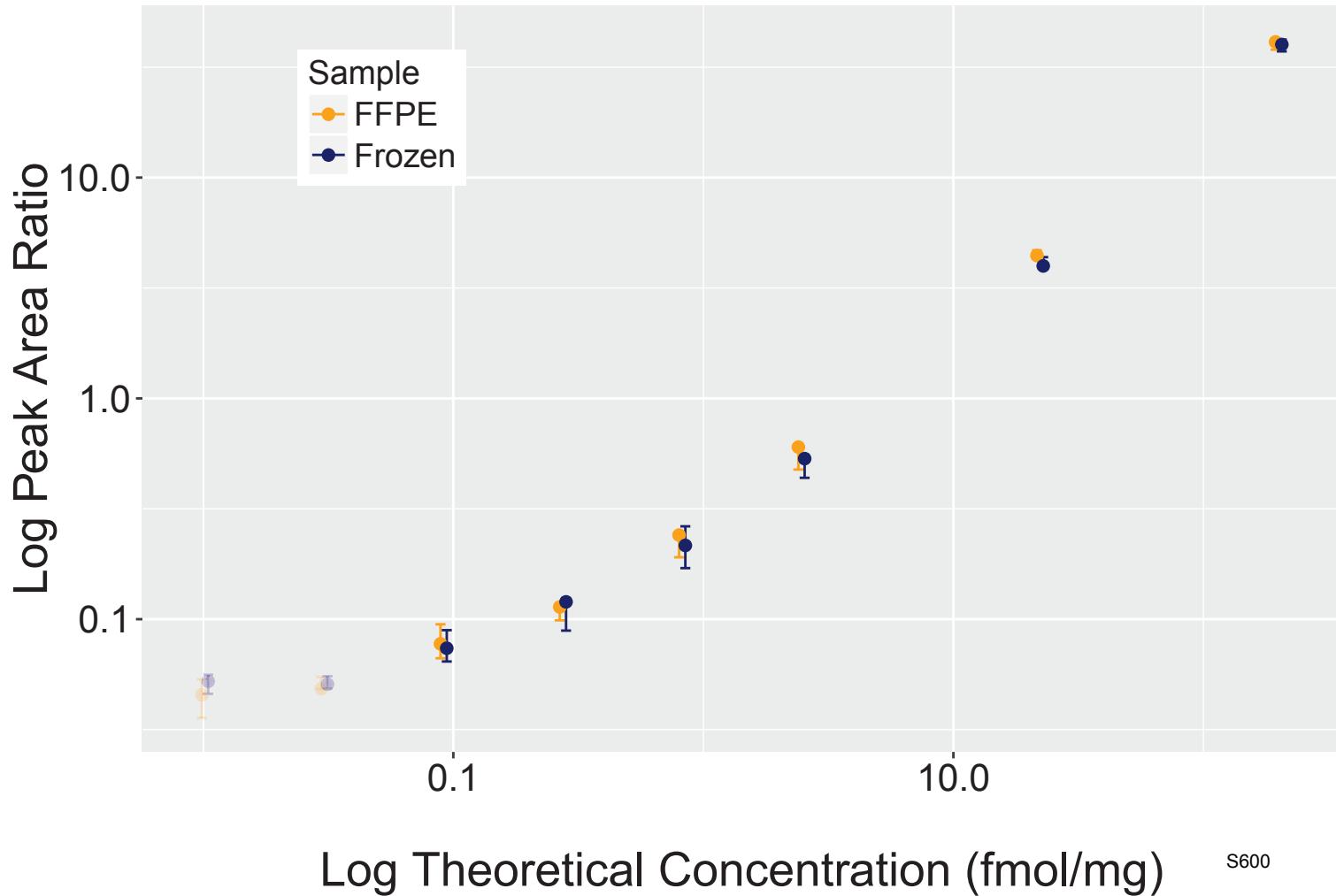
Analyte: FKBP4.VFVHYTGWLLDGK



Analyte: CRABP2.VGEEFEEQTVDGRPC[+57]K

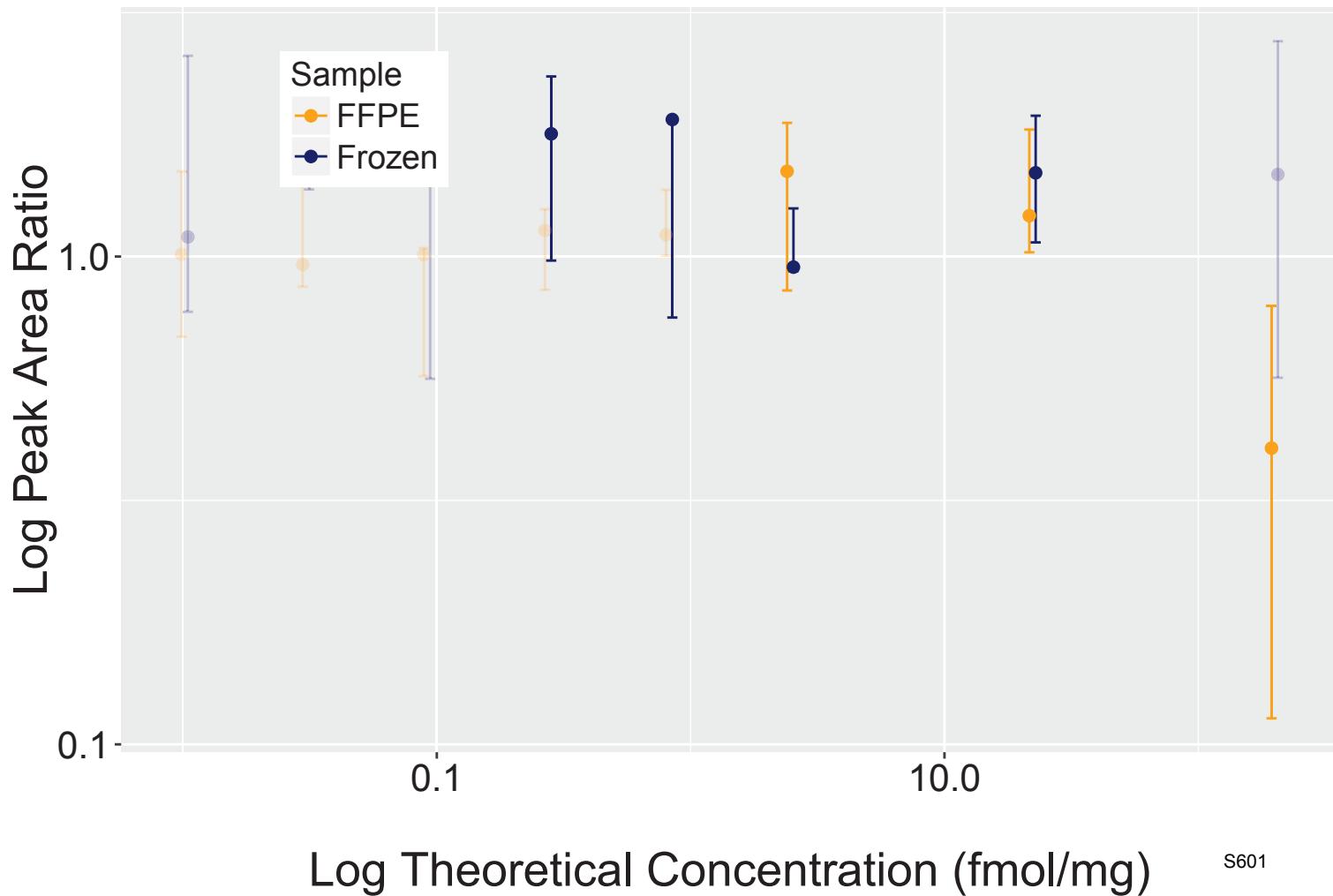


Analyte: MYOF.VGETIIDLENR



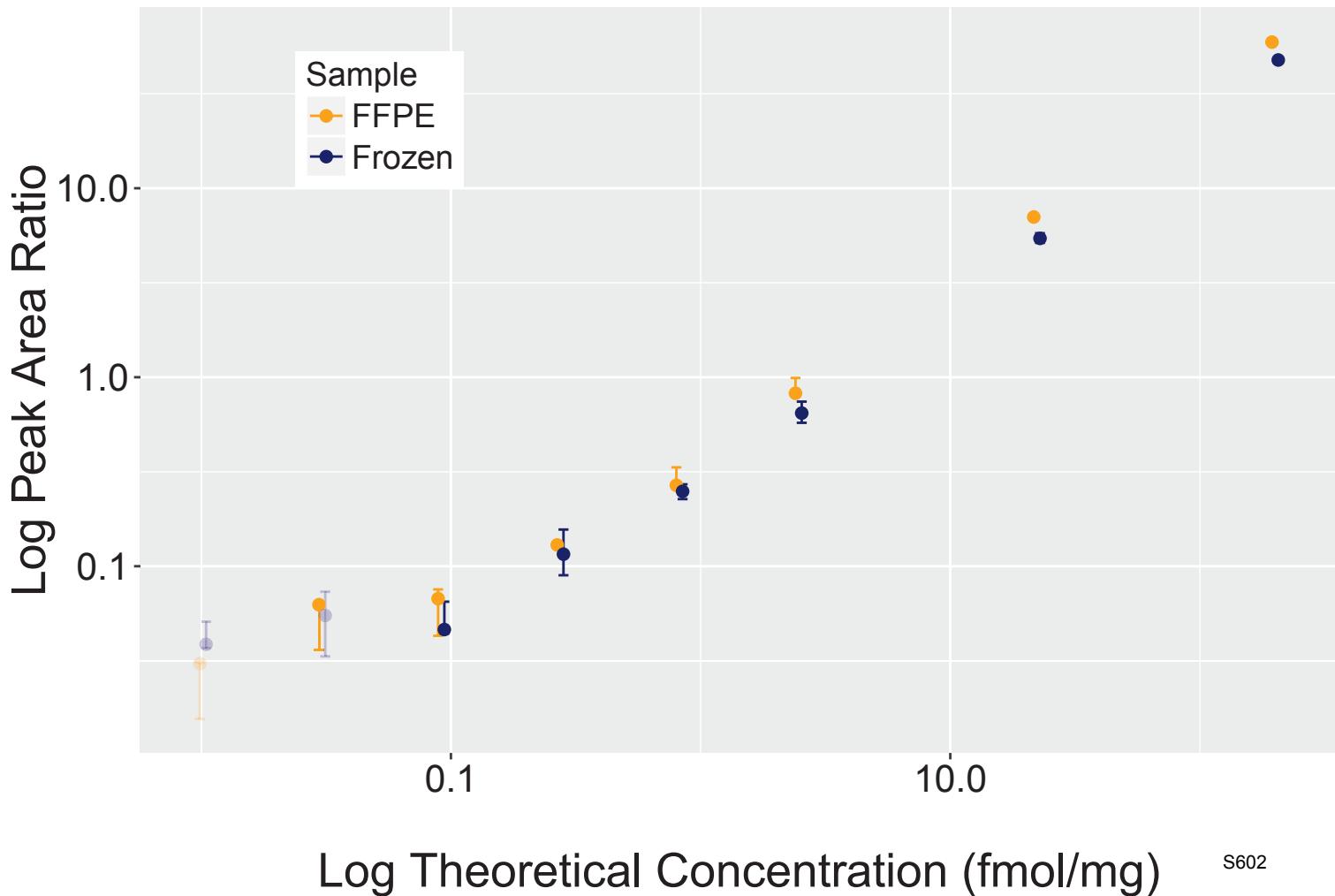
S600

Analyte: FKBP4.VGEVC[+57]HITC[+57]KPEYAYGSAGSP



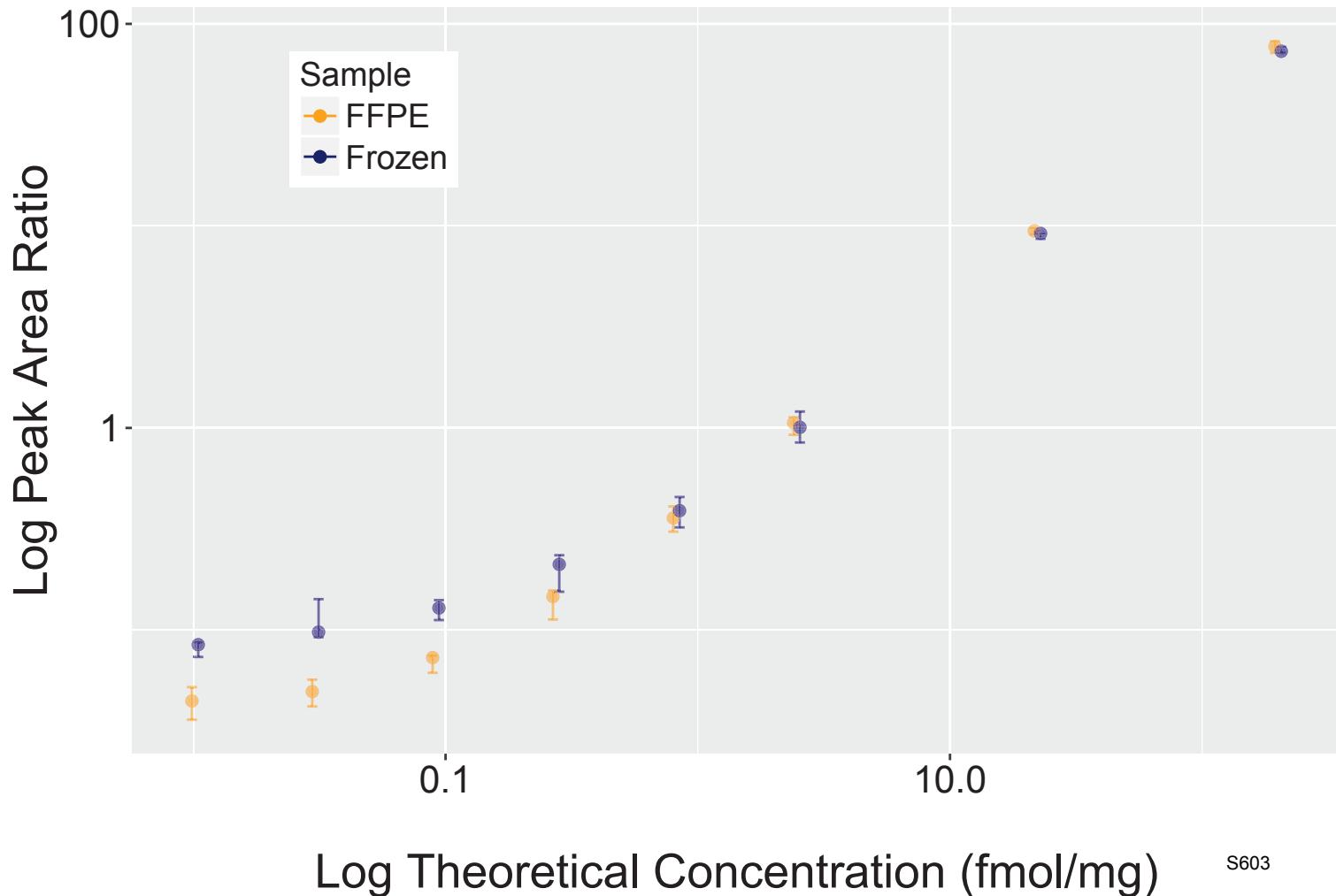
S601

Analyte: APEH.VGFLPSAGK



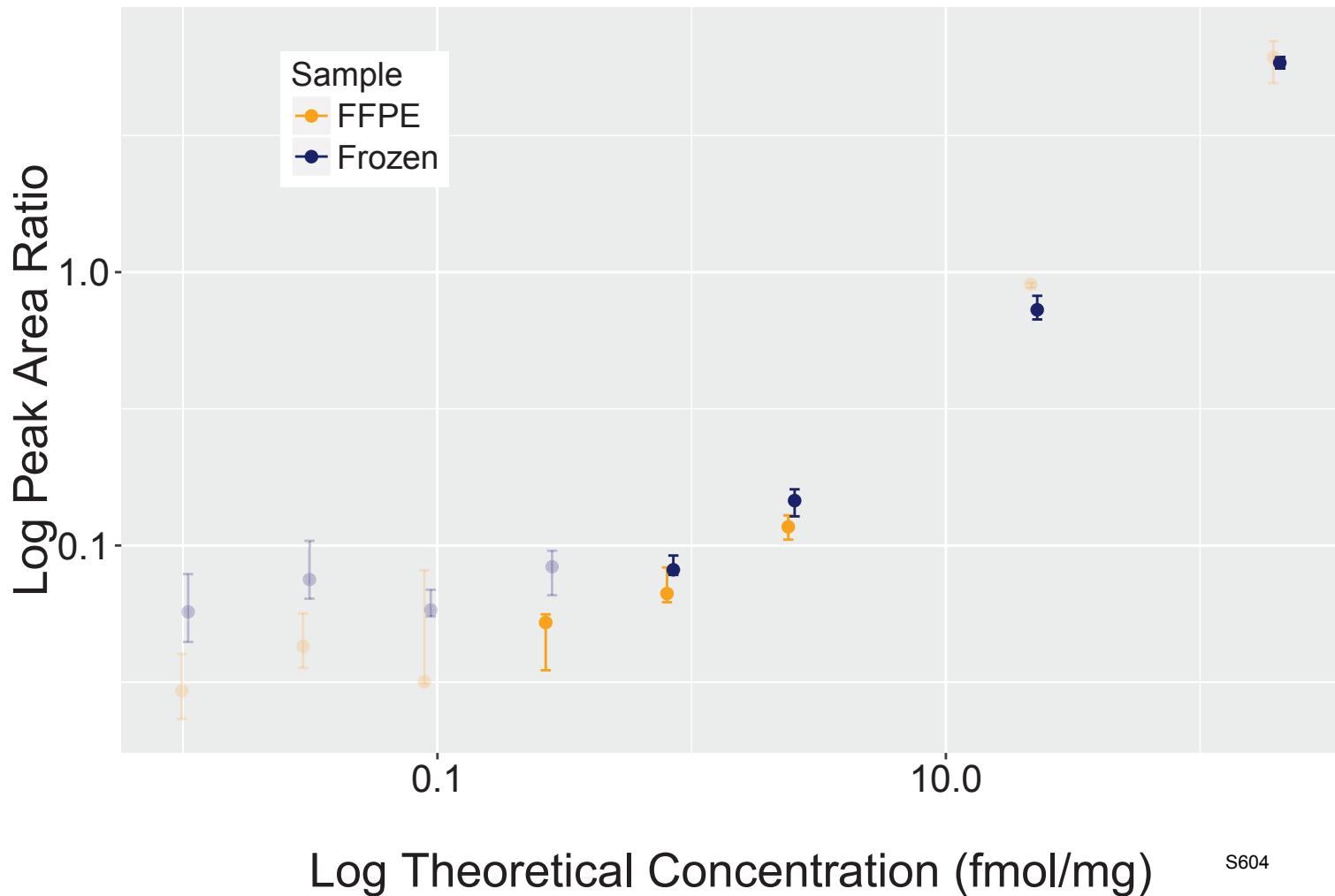
S602

Analyte: GNL3.VGVIGFPNVGK



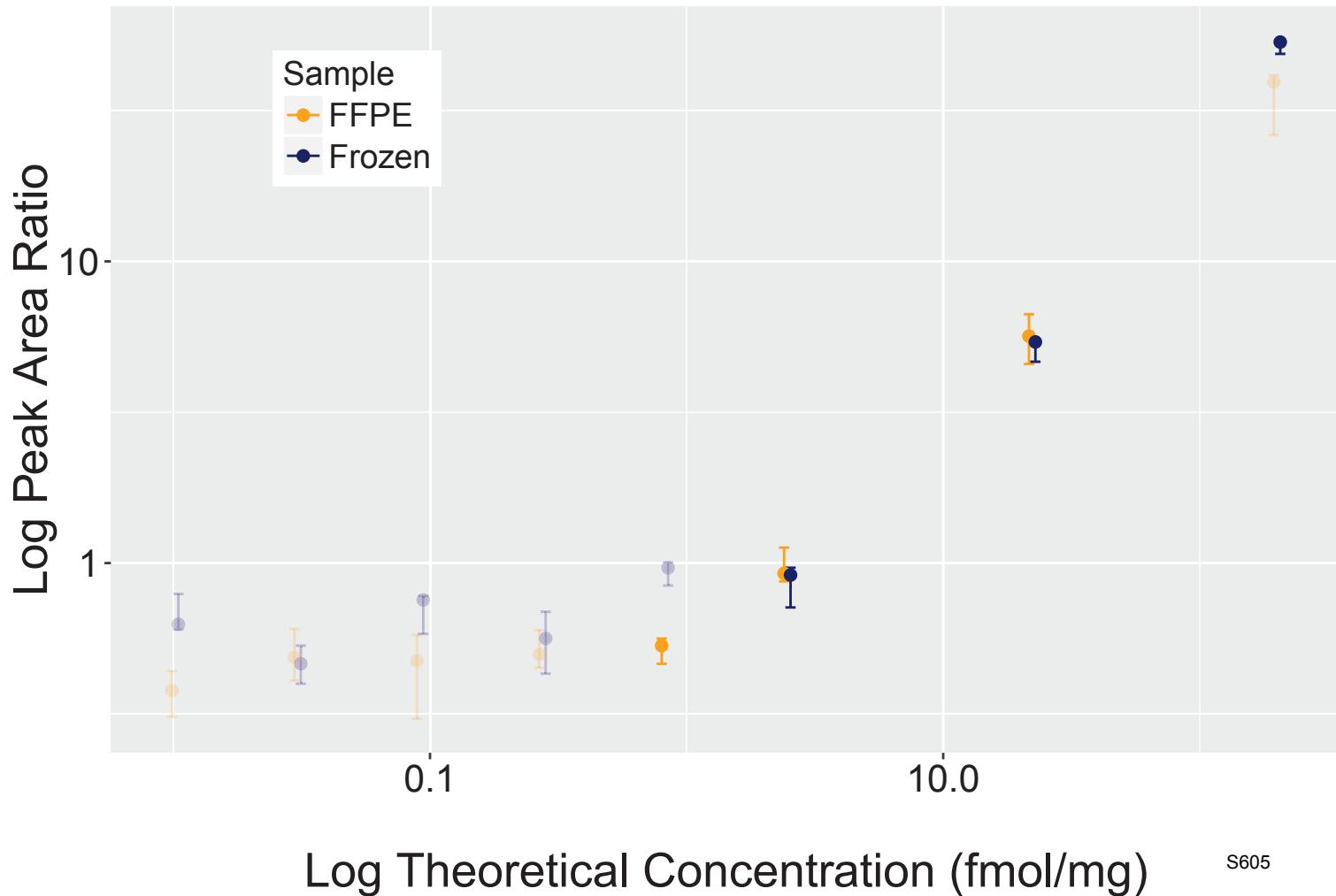
S603

Analyte: CSTB.VHVGDEDVFHLR



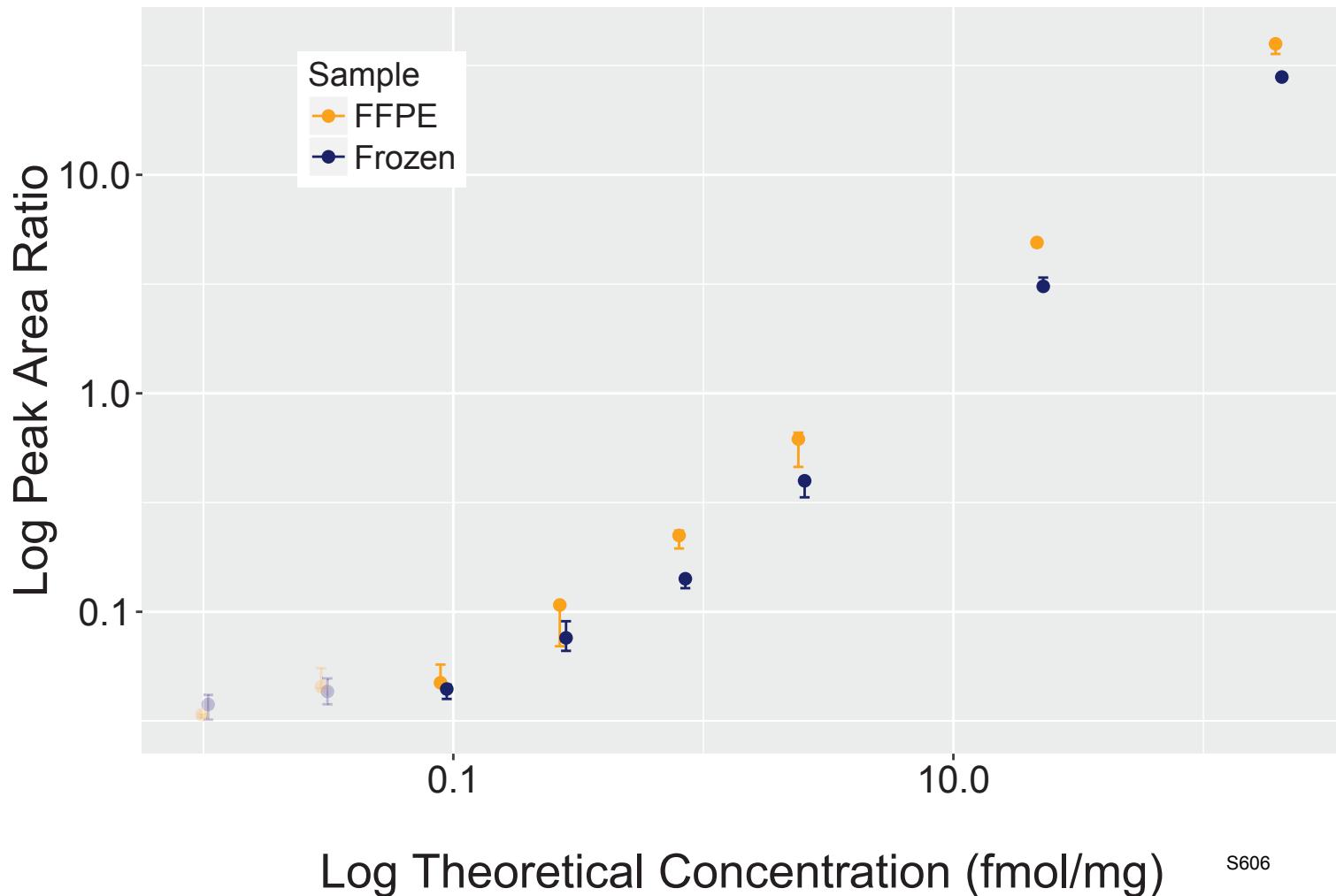
S604

Analyte: DSG3.VIC[+57]PISSVPGNLAGPTQLR

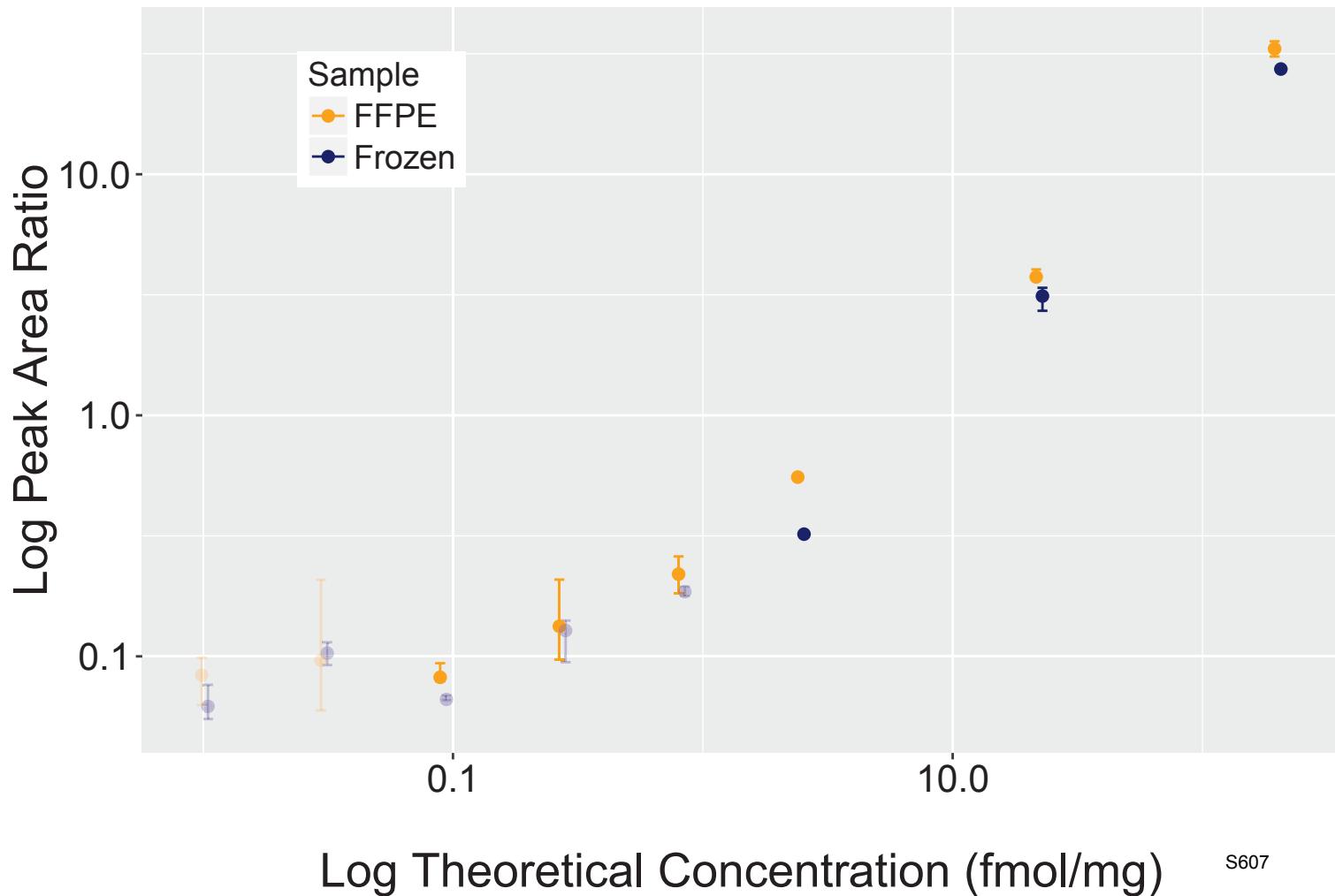


S605

Analyte: HPRT1.VIGGDDLSTLTGK

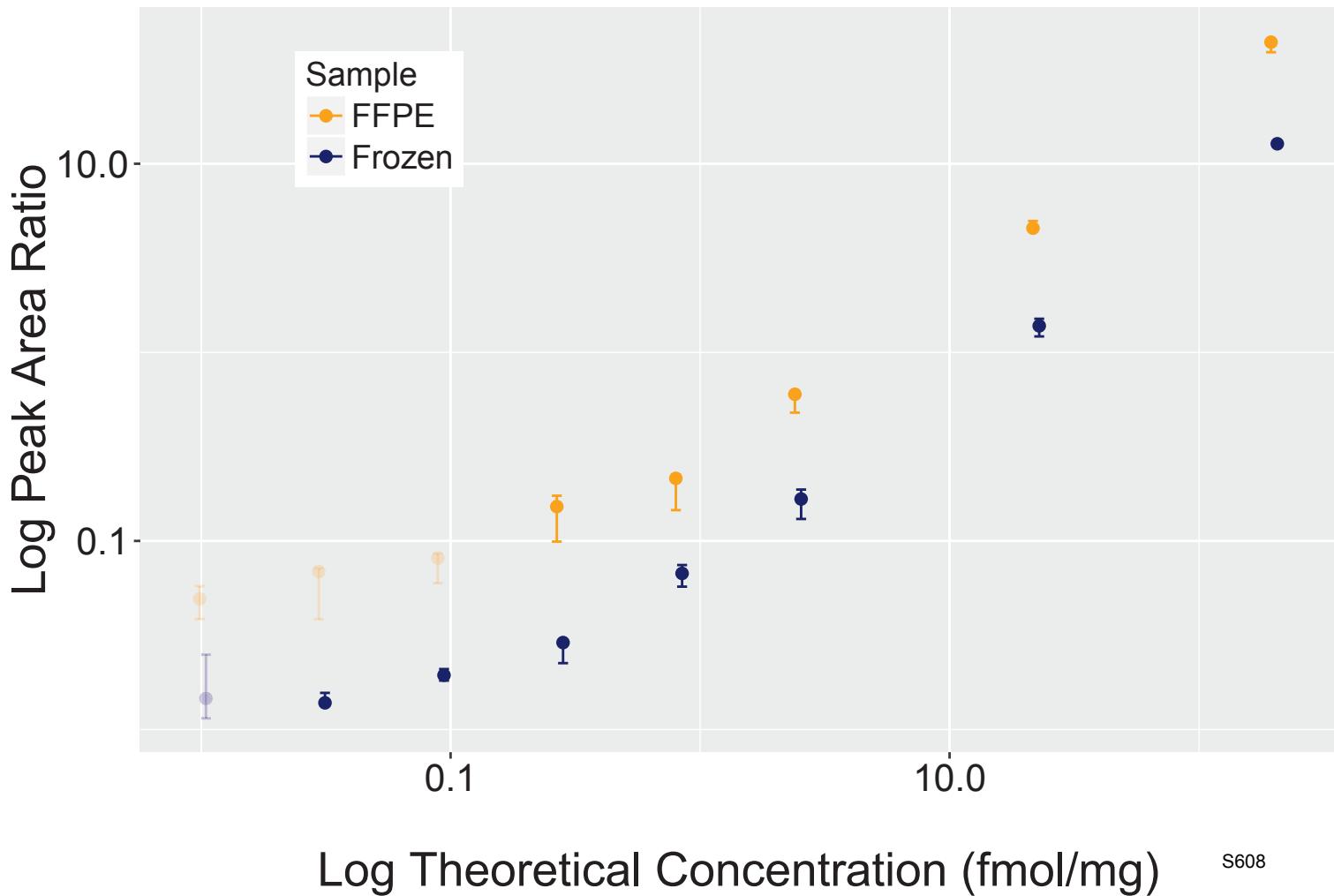


Analyte: ISYNA1.VIVLWTANTER



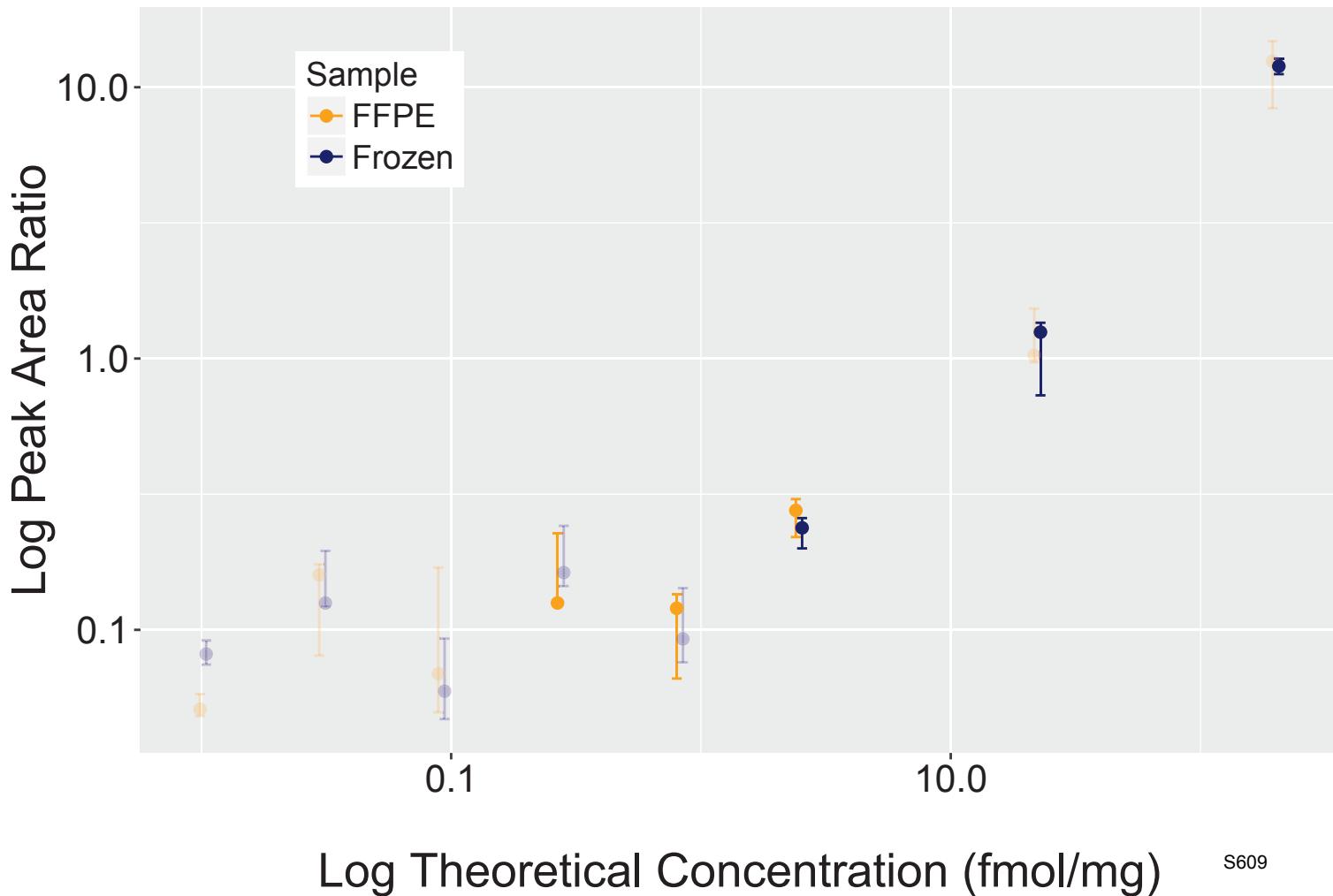
S607

Analyte: MDH1.VIVVGNPANTNC[+57]LTASK

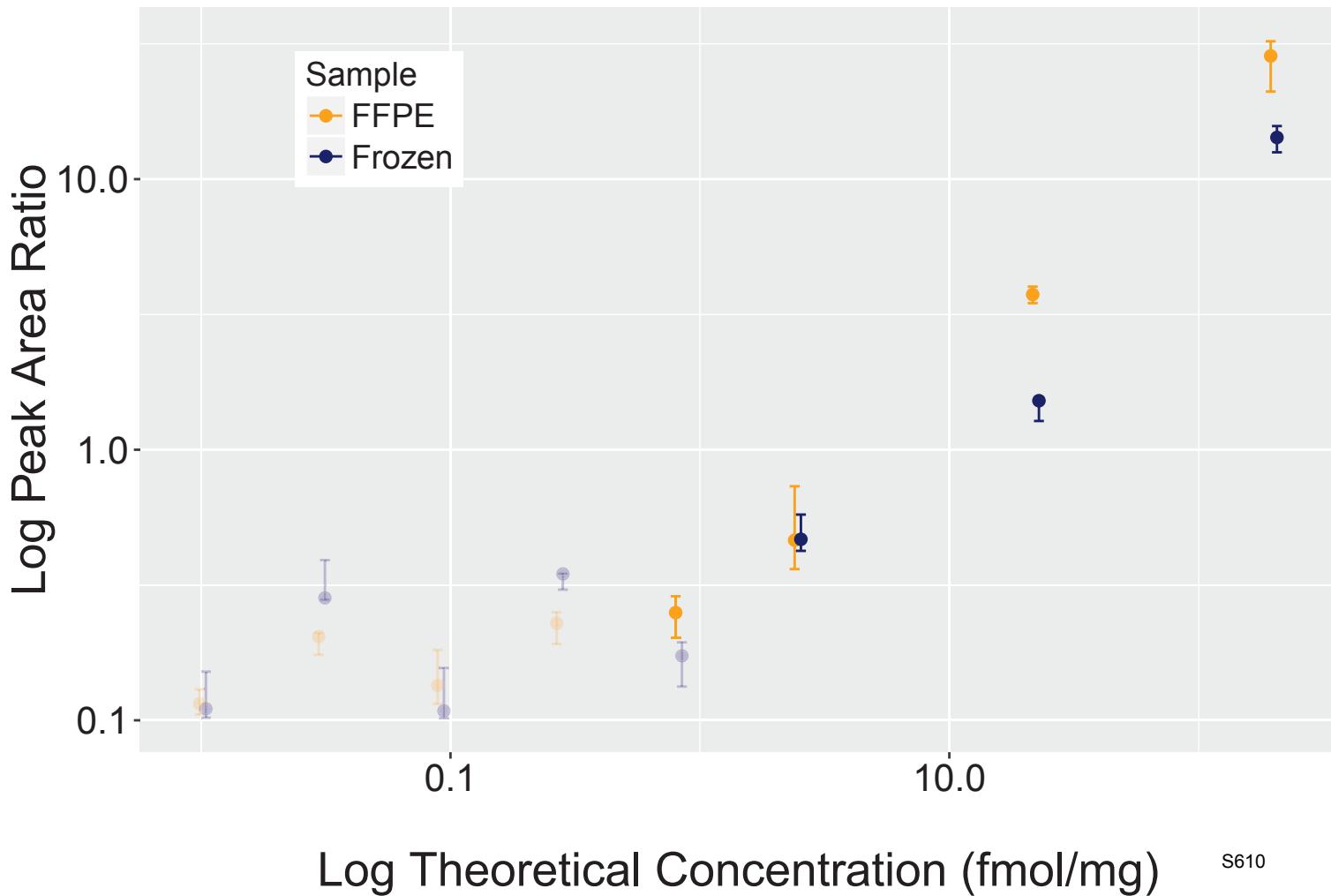


S608

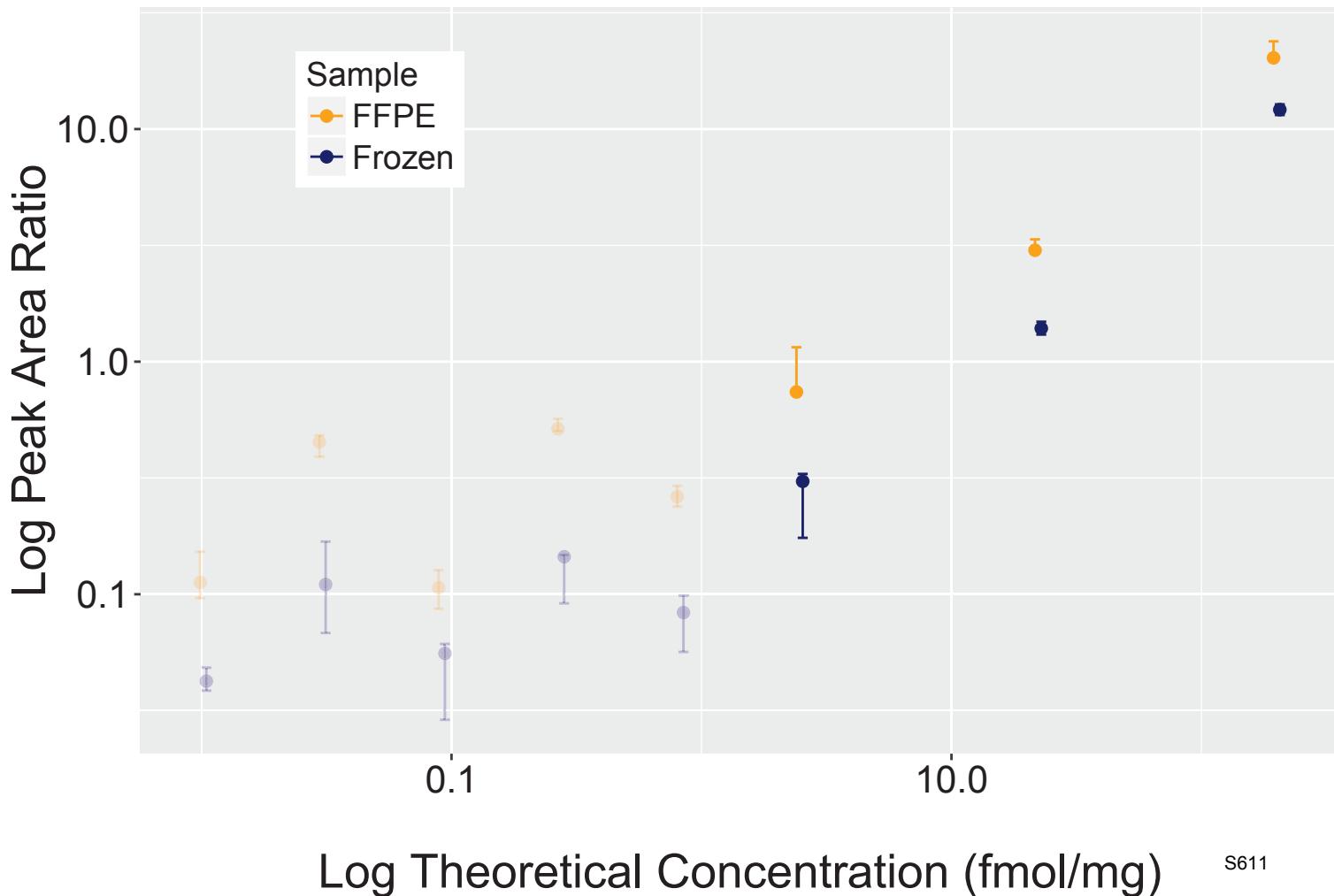
Analyte: ILF3.VLAGETLSVNDPPDVLDR



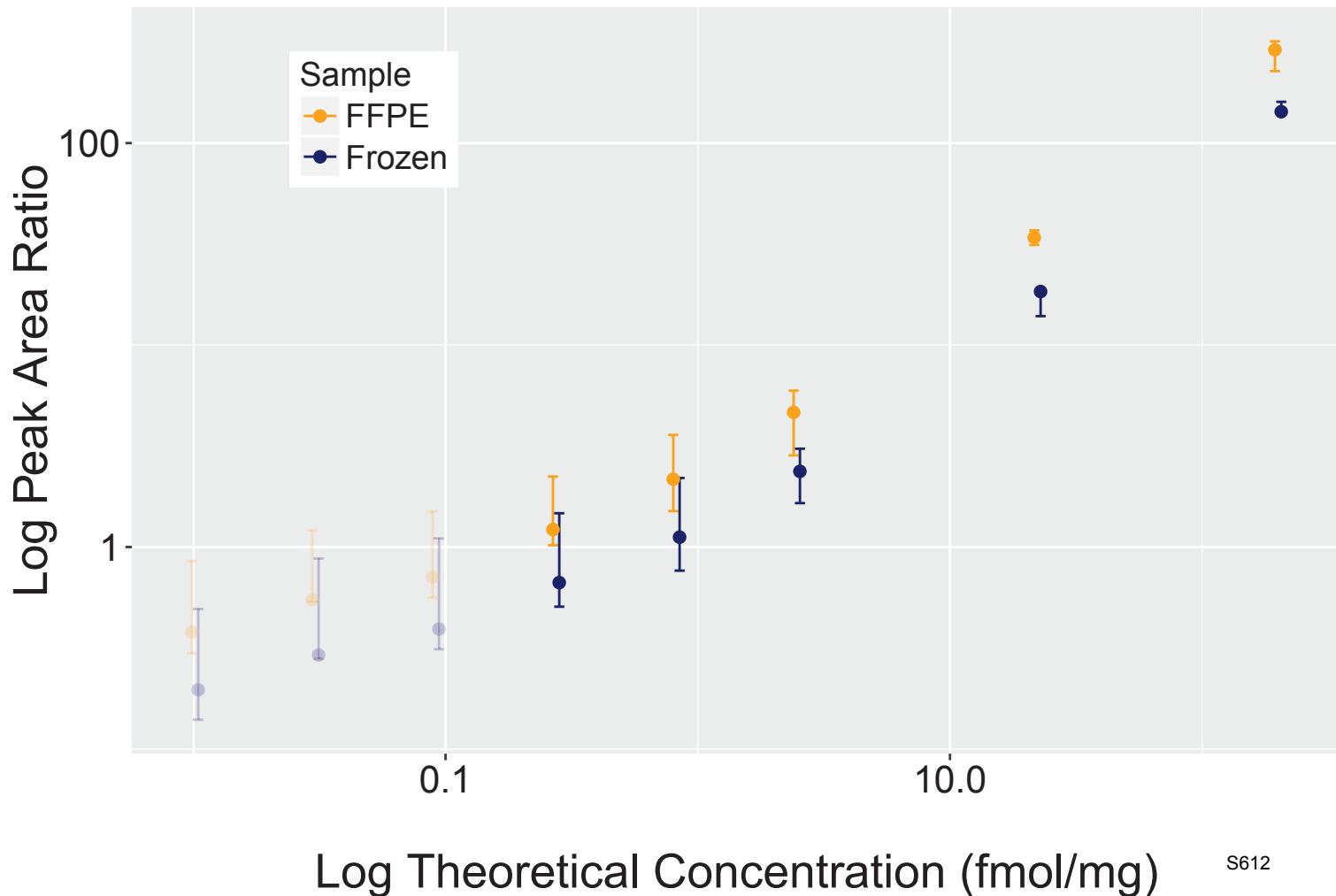
Analyte: CCT6A.VLAQNSGFDLQETLVK



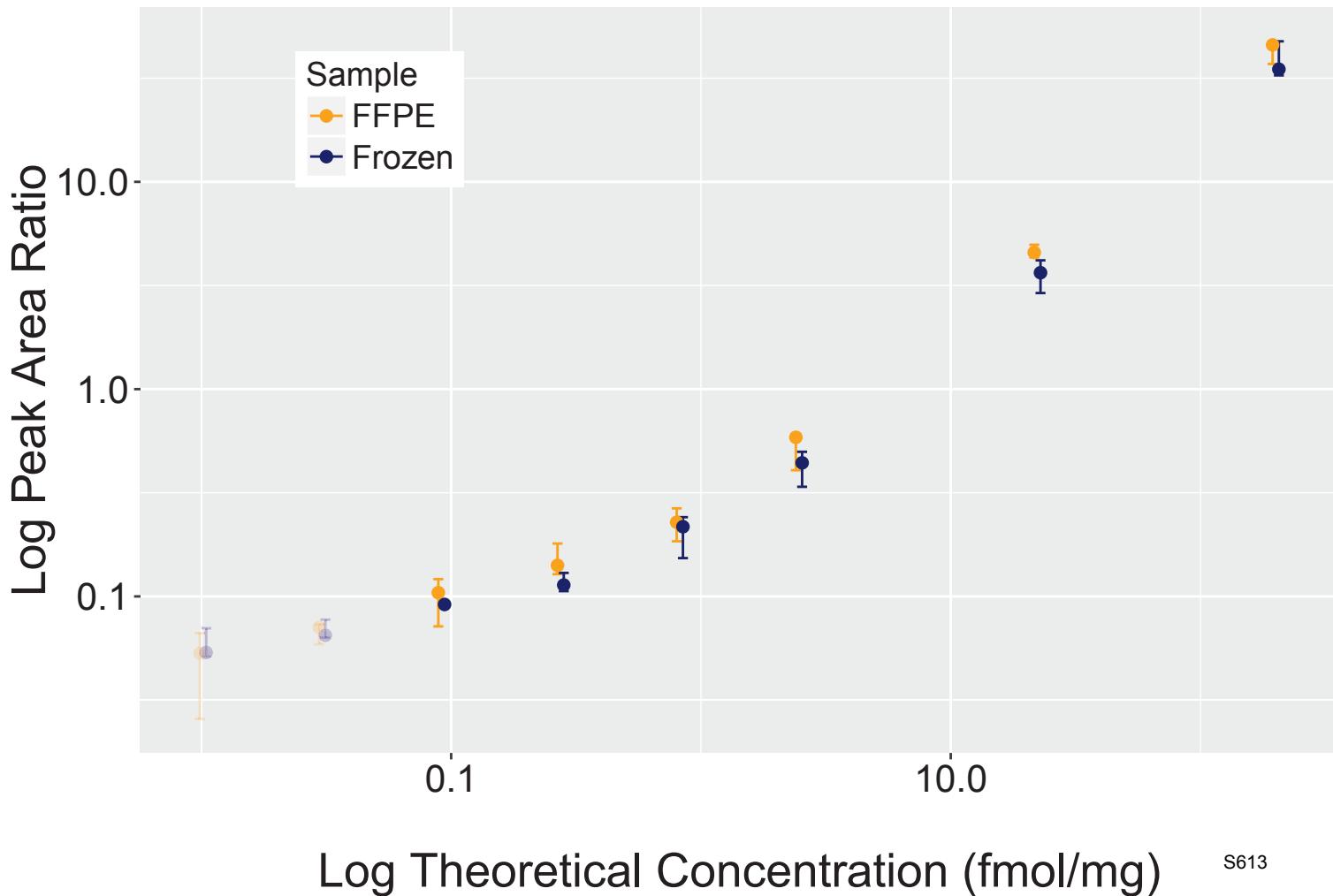
Analyte: ALDH9A1.VLC[+57]GGDIYVPEDPK



Analyte: HEXB.VLDIATINK

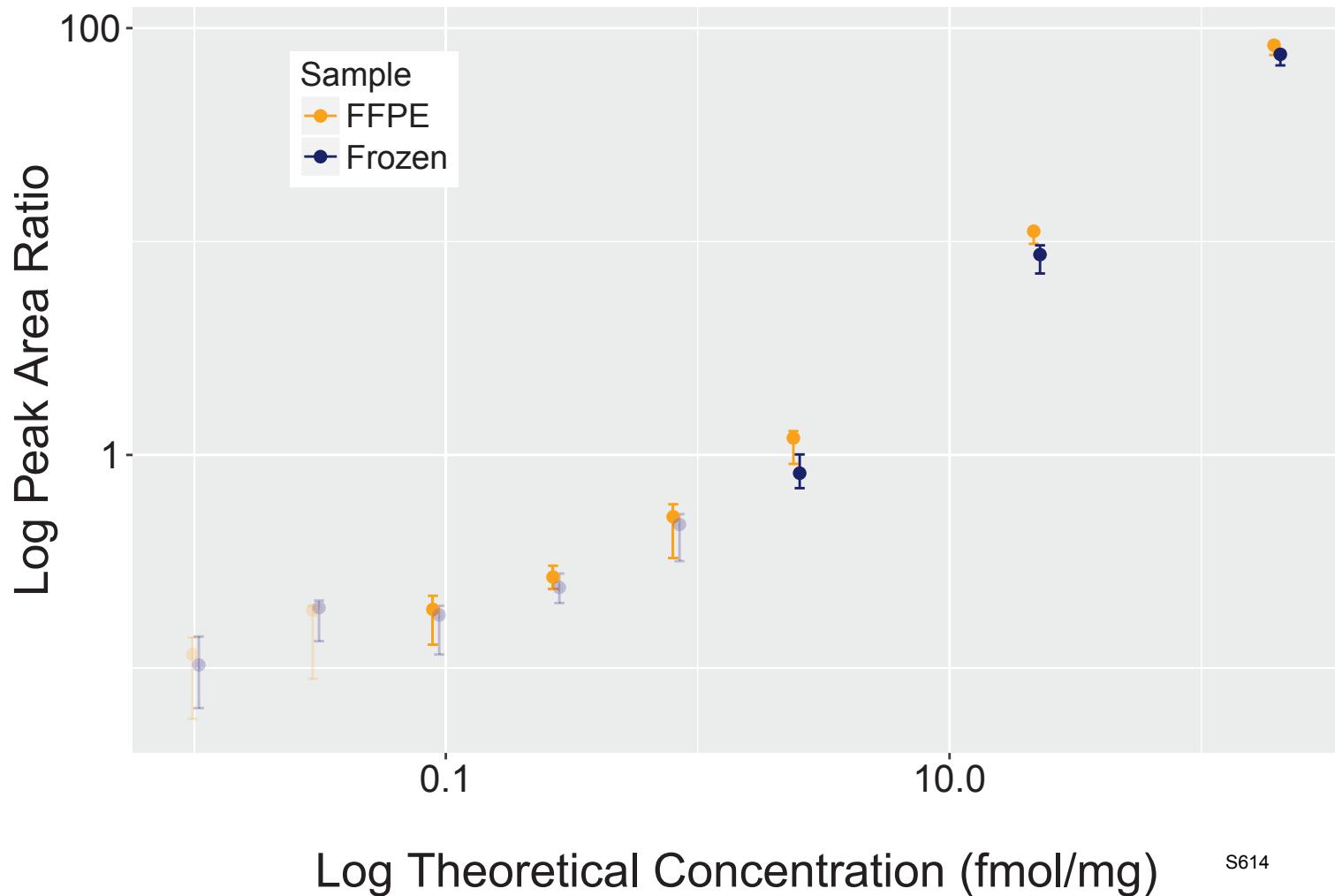


Analyte: SSH3.VLDVSDLESVTSK



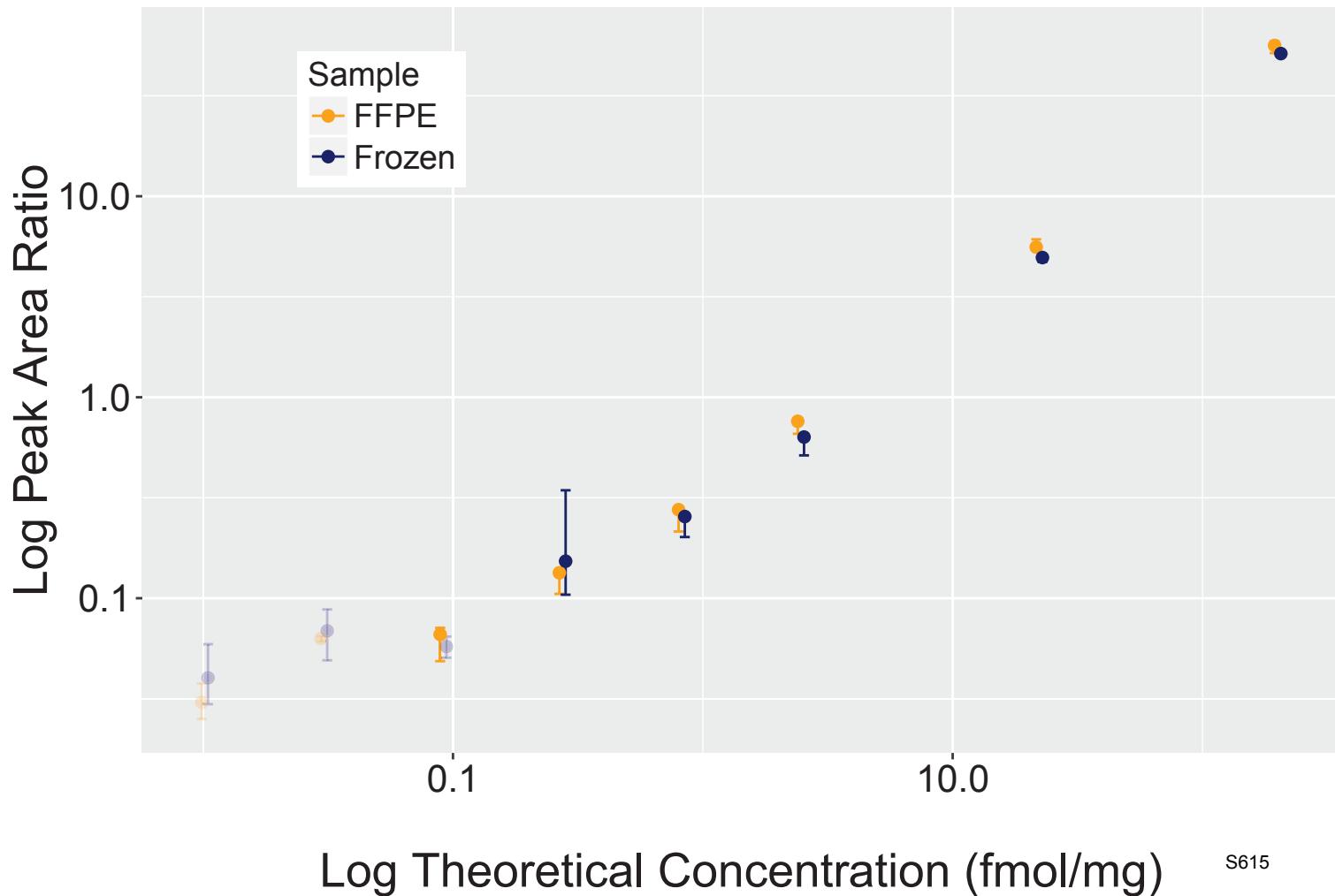
S613

Analyte: AIP.VLELDPALAPVVS R



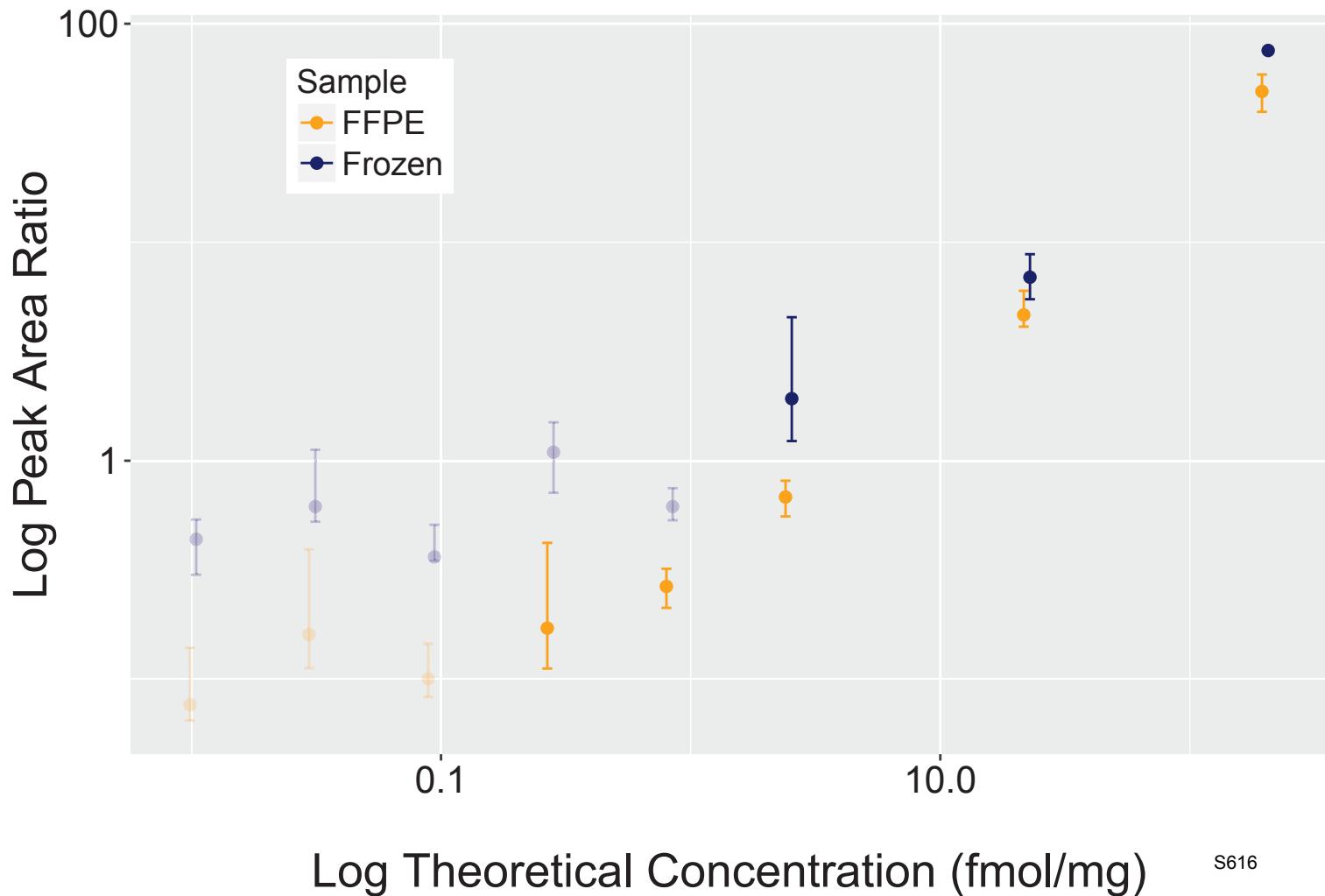
S614

Analyte: ACOT7.VLEVPPVVYSR



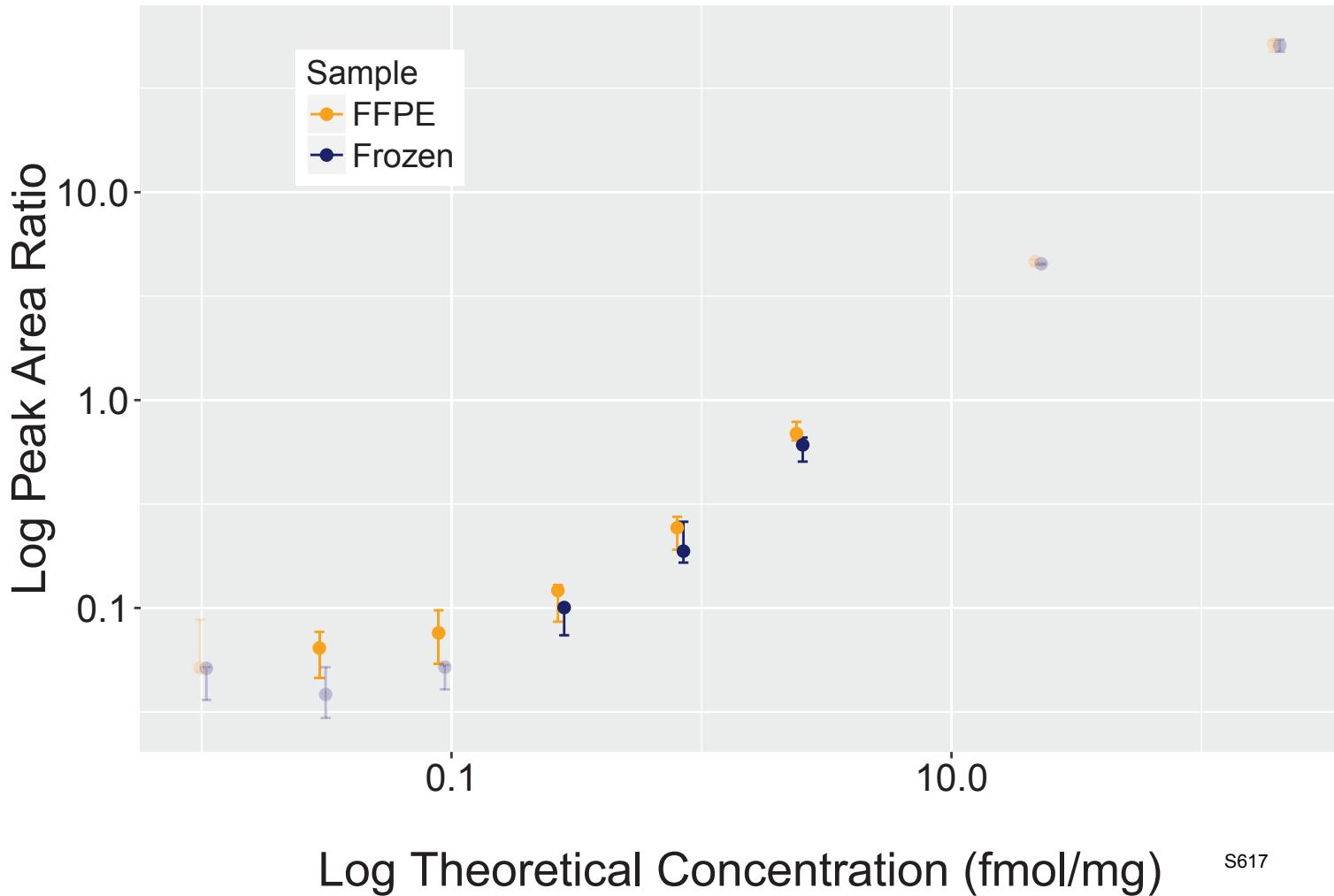
S615

Analyte: ABCD3.VLGELWPLFGGR



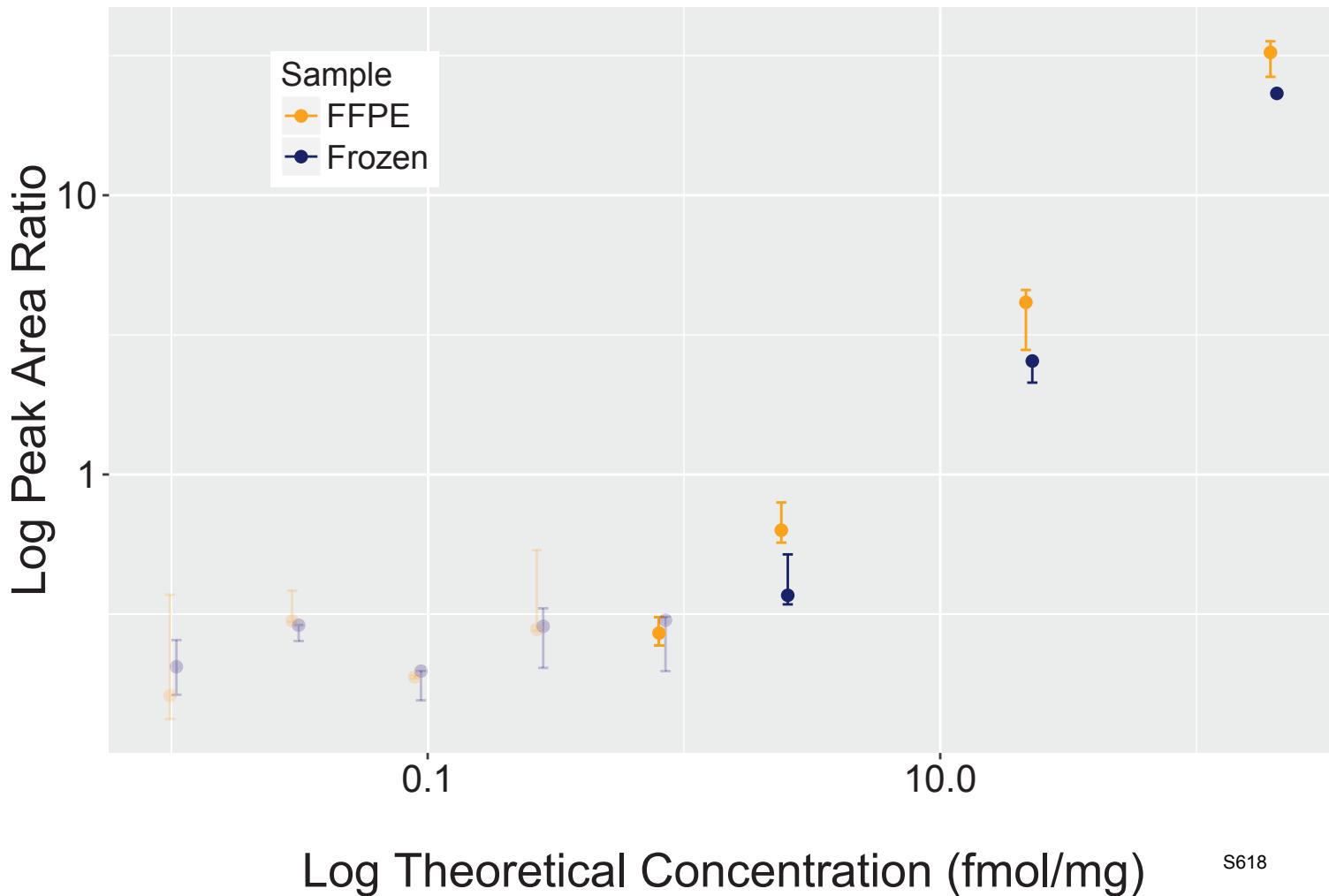
S616

Analyte: CAD.VLGTTSPEAIDSAENR



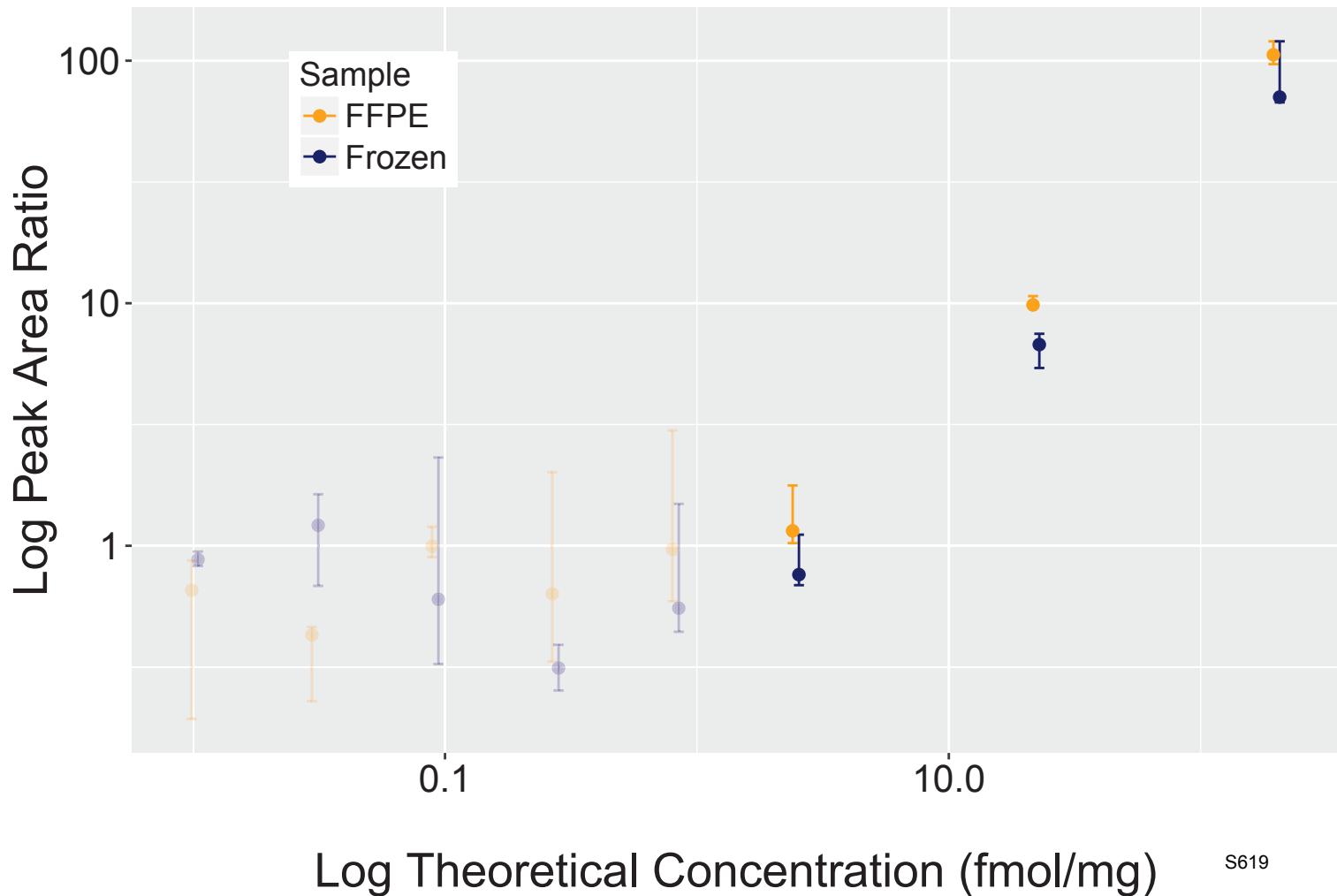
S617

Analyte: DPP3.VLLEAGEGLVTITPTTGS D GRPDAR

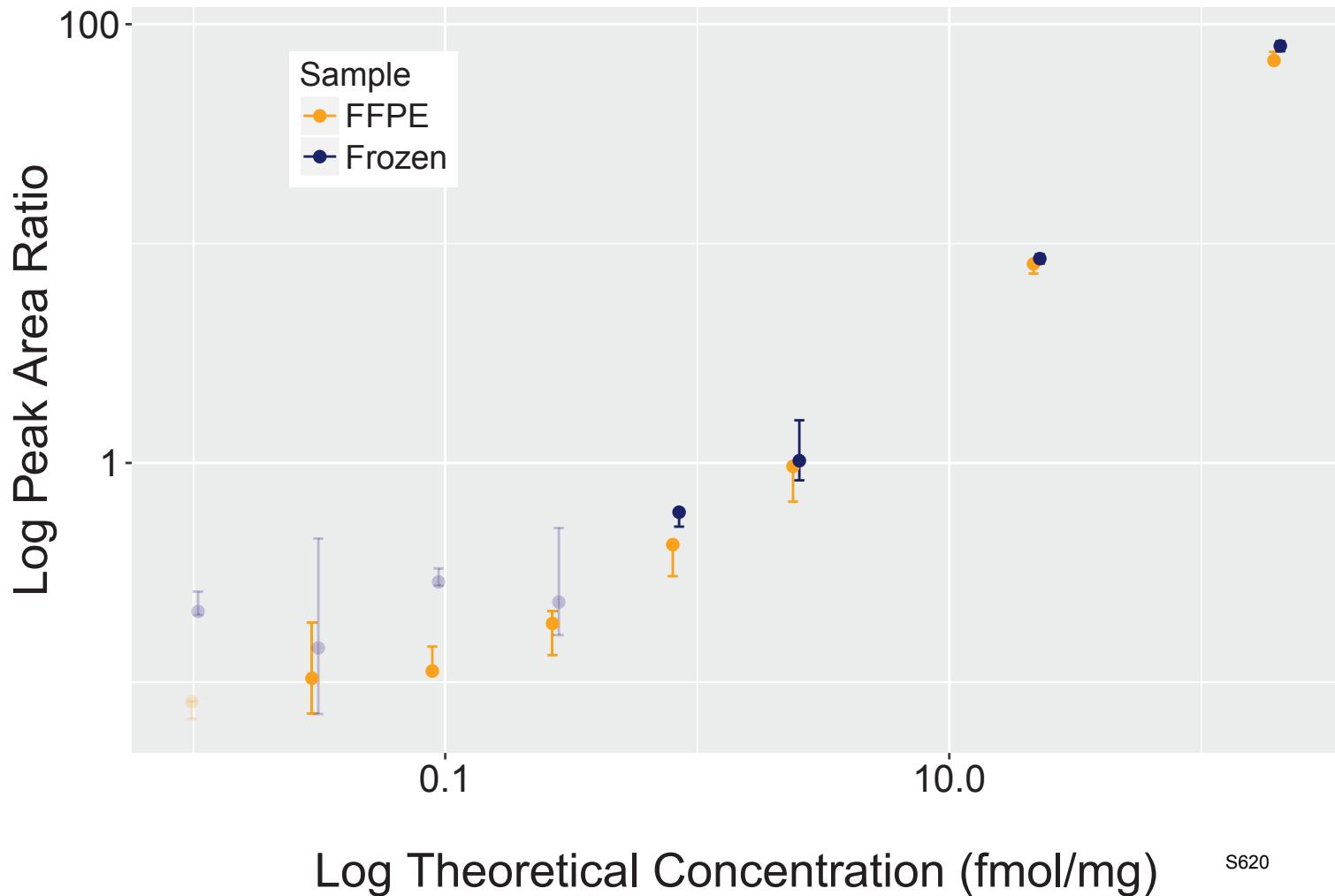


S618

Analyte: NT5E.VLPVGDEVVGVGYTSK

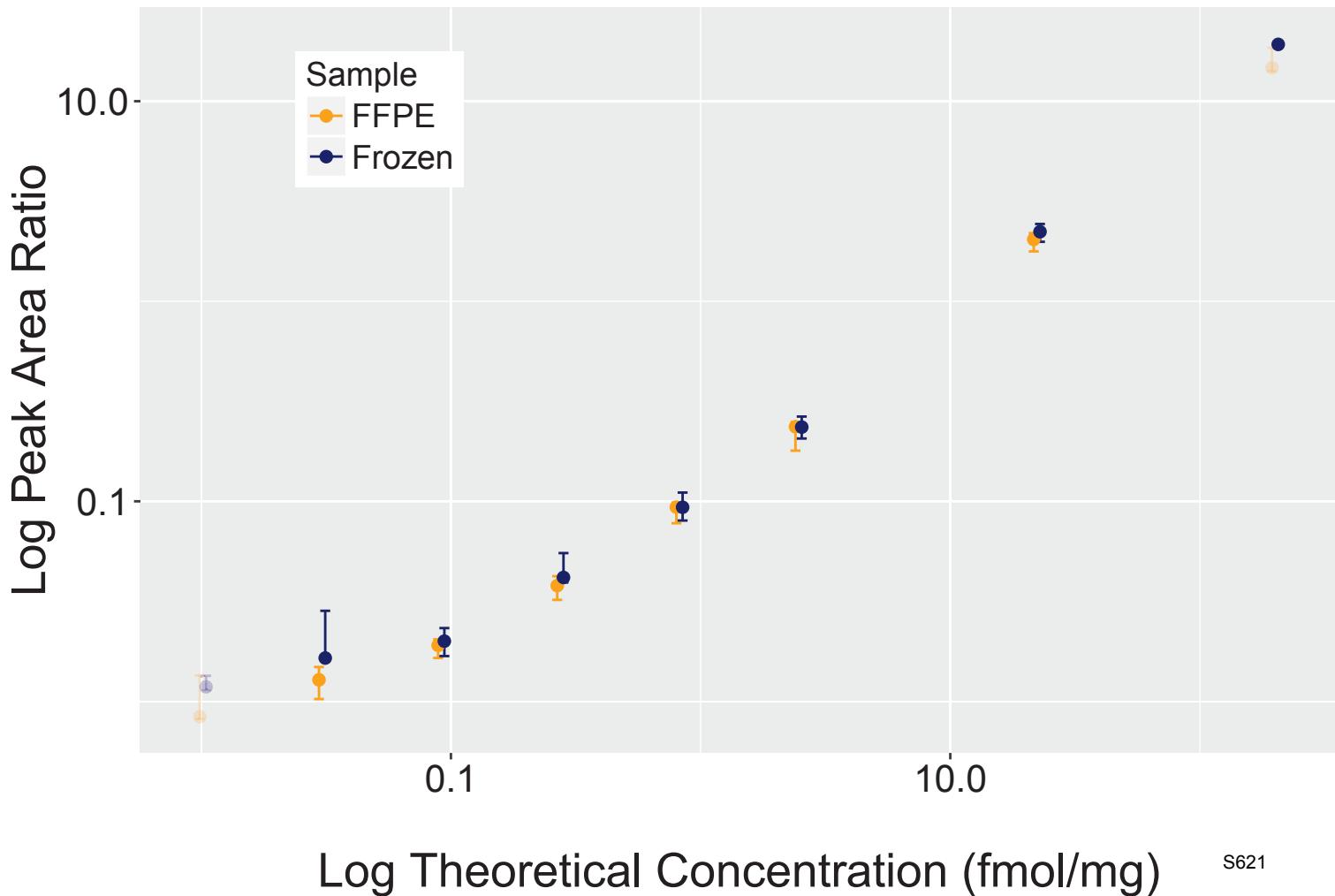


Analyte: ACSL1.VLQPTVFPVVPR

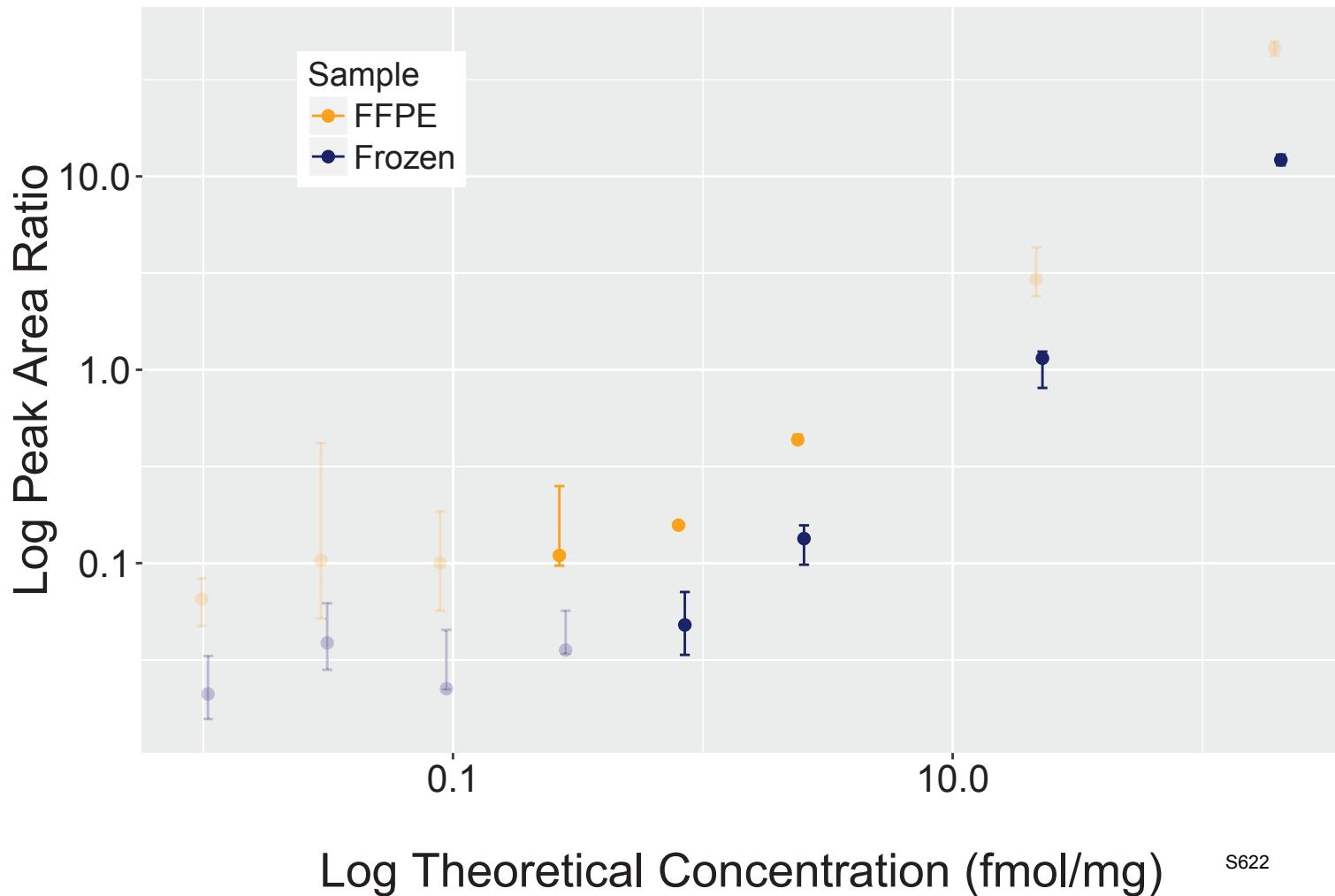


S620

Analyte: ILF2.VLQSALAAIR

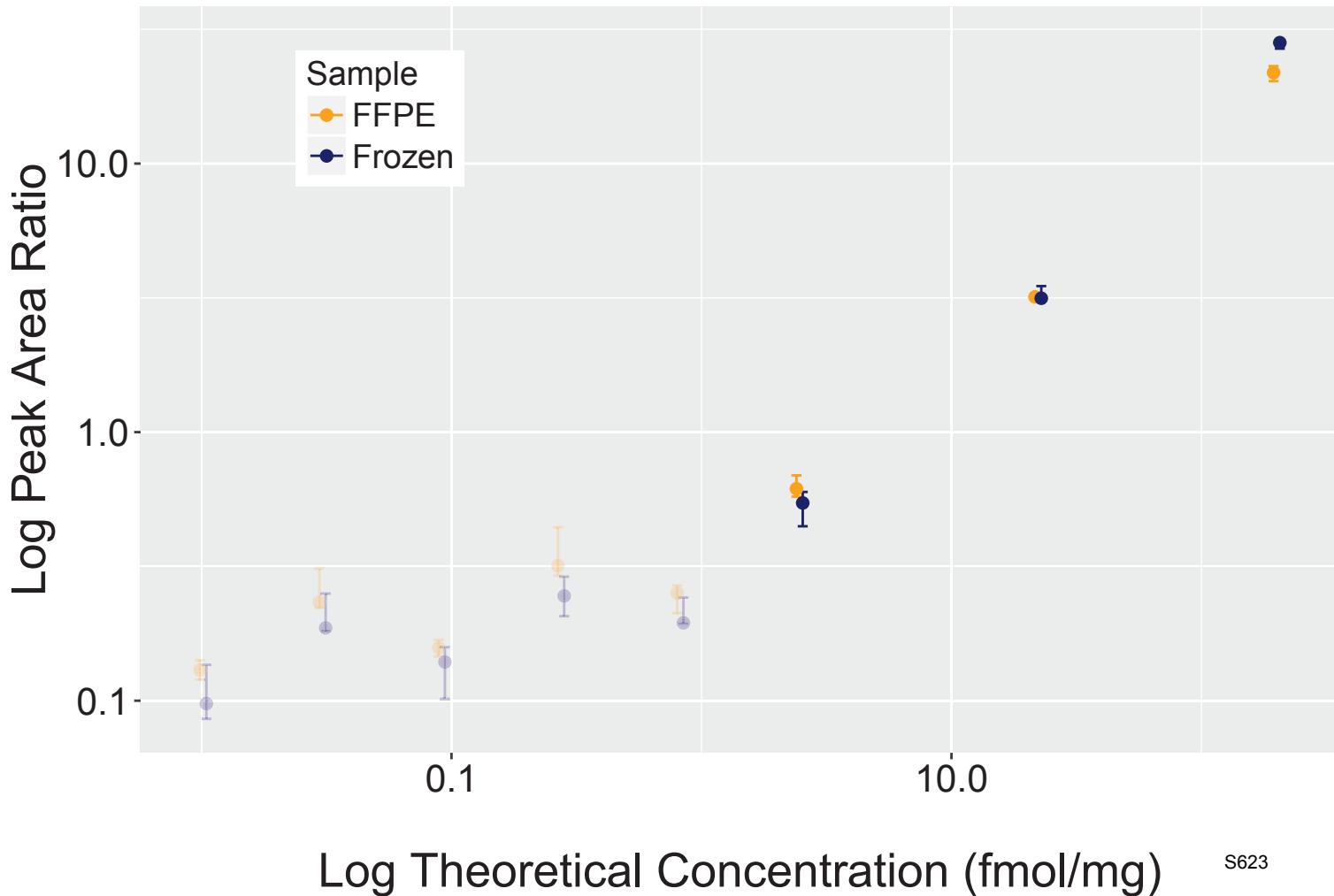


Analyte: PSME2.VLSLLALVKPEVWTLK



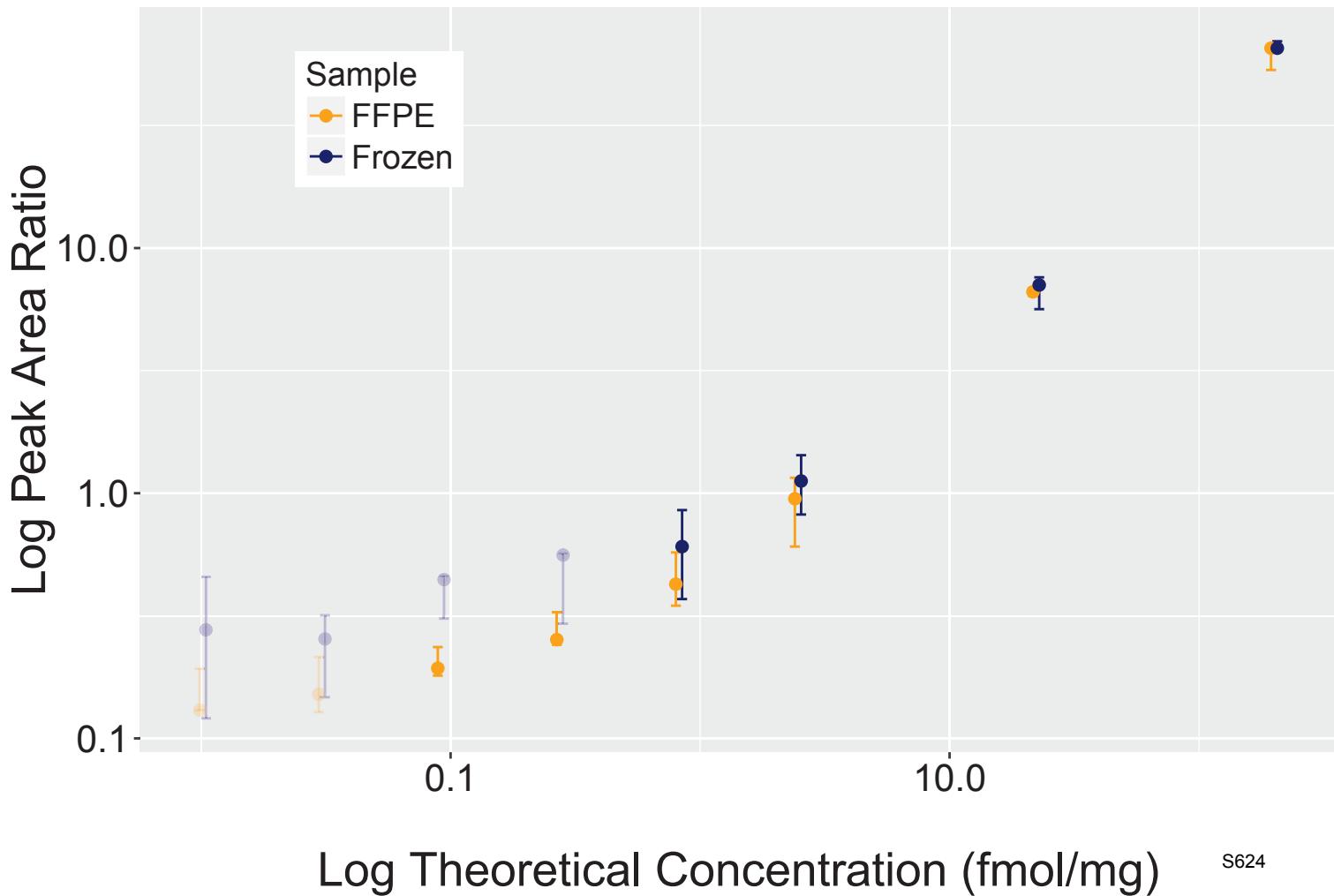
S622

Analyte: EIF5.VLTLSSDDLER

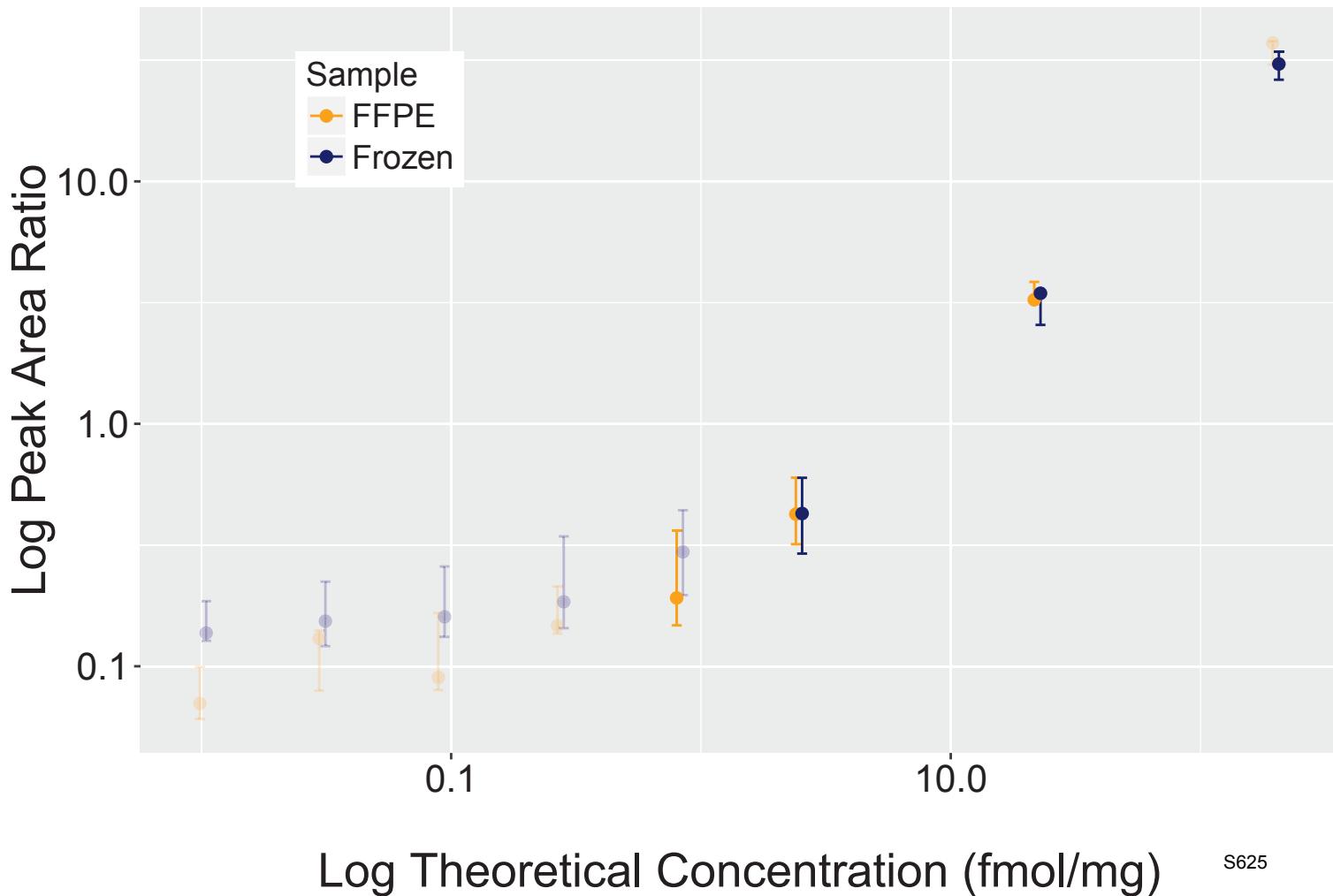


S623

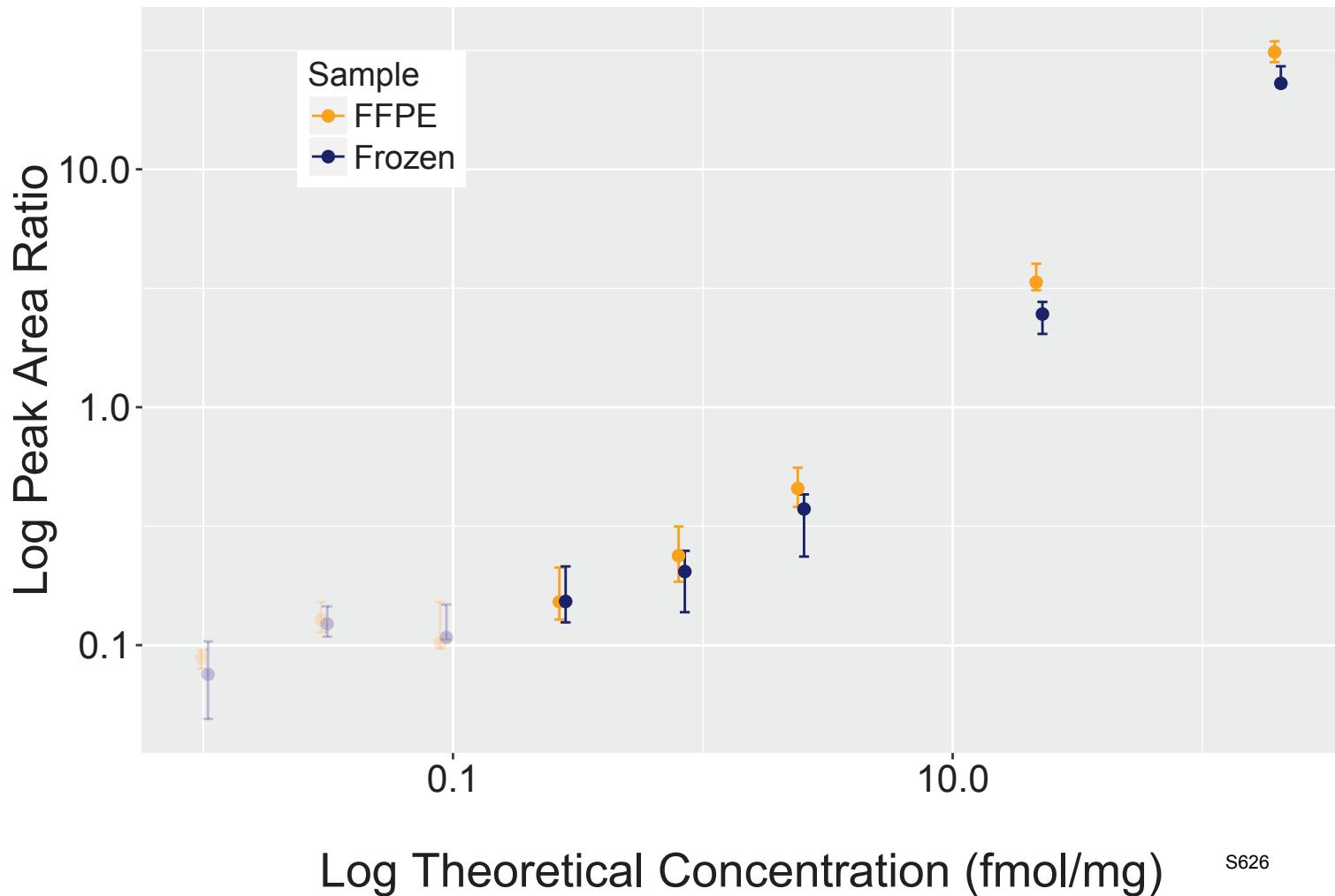
Analyte: CKB.VLTPELYAELR



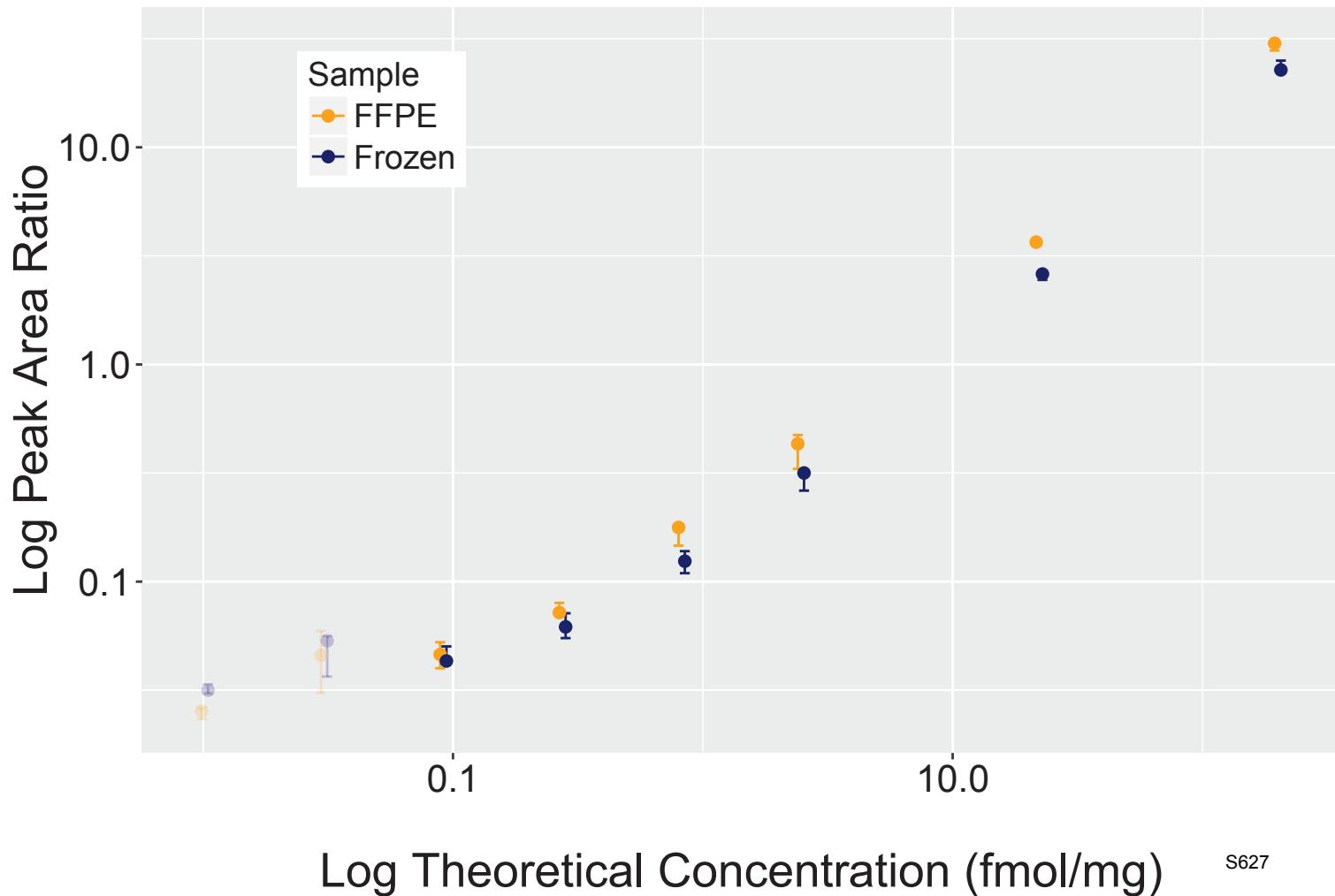
Analyte: EIF5.VNILFDFVK



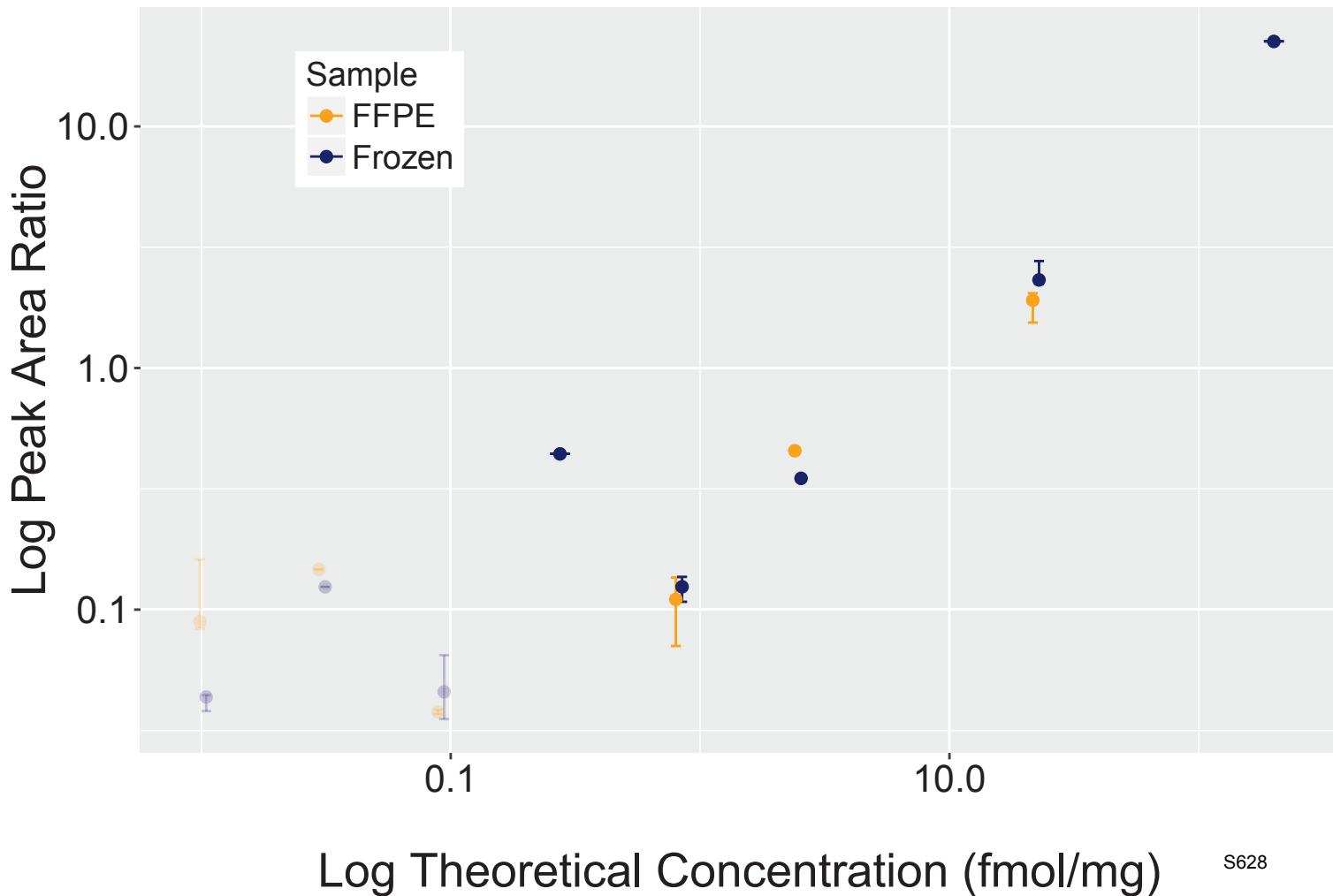
Analyte: ALDH7A1.VNLLSFTGSTQVGK



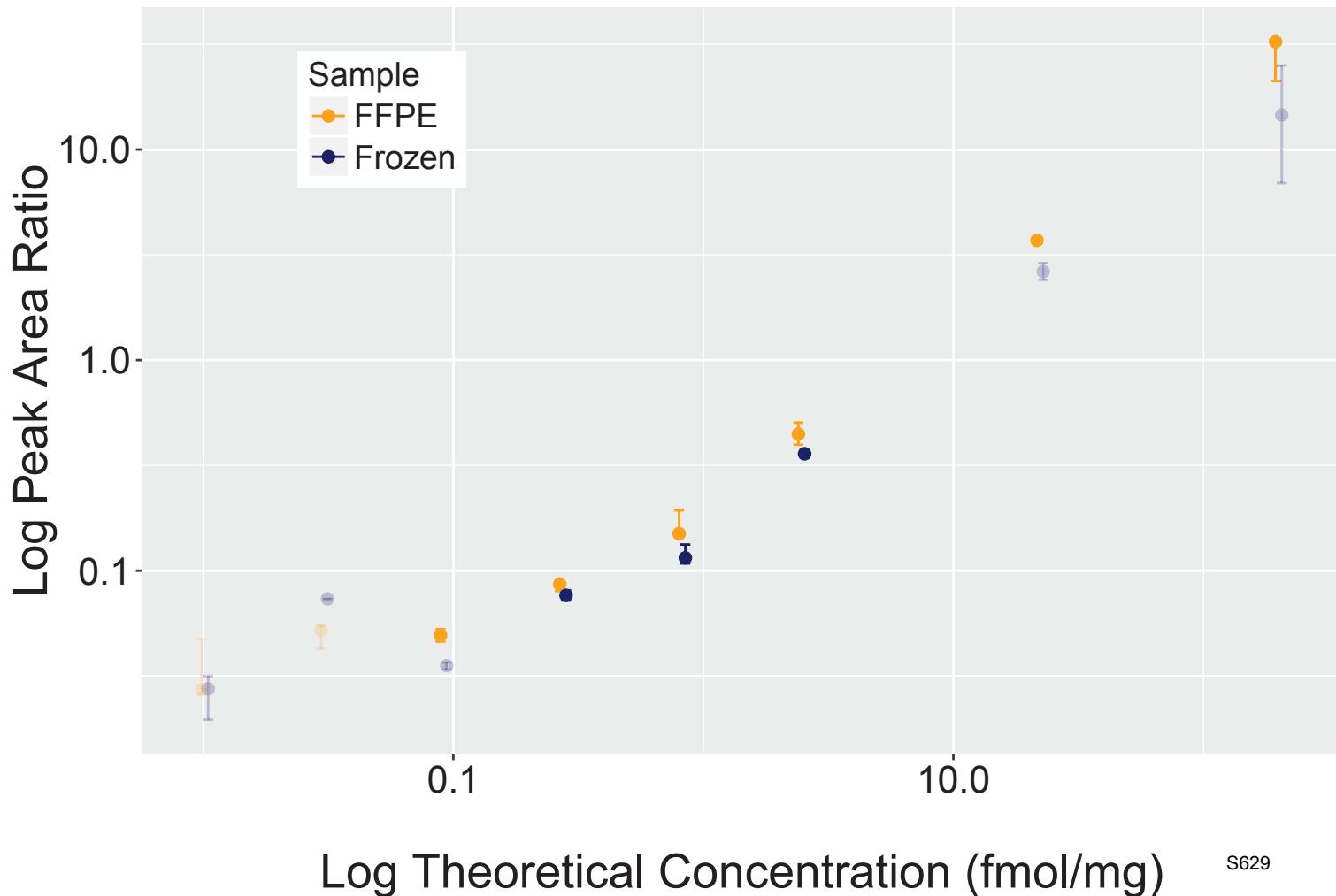
Analyte: ZYX.VNPFRPGDSEPPPAPGAQR



Analyte: RPS19.VPEWVDTVK

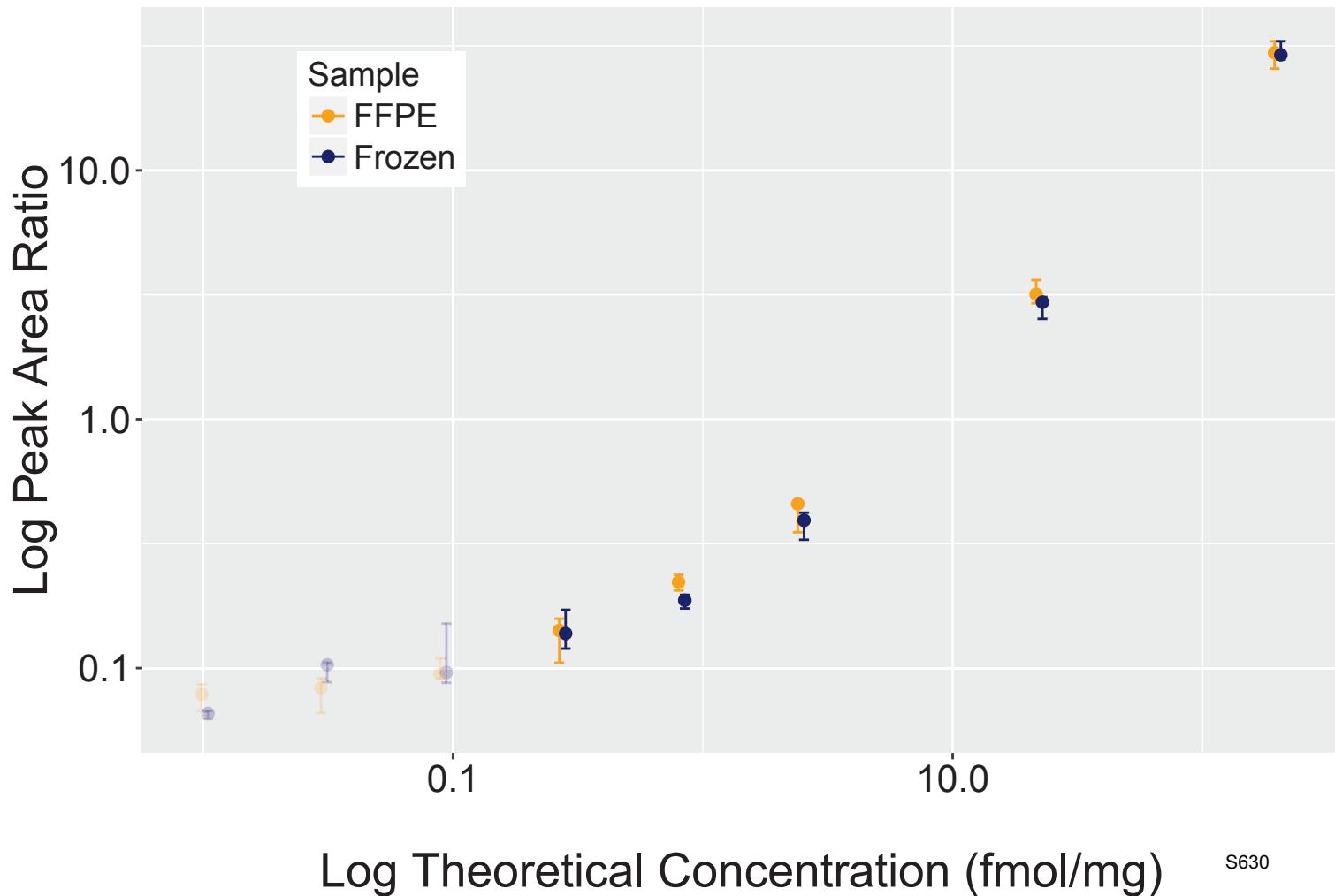


Analyte: MVP.VPHNAAVQVYDYR



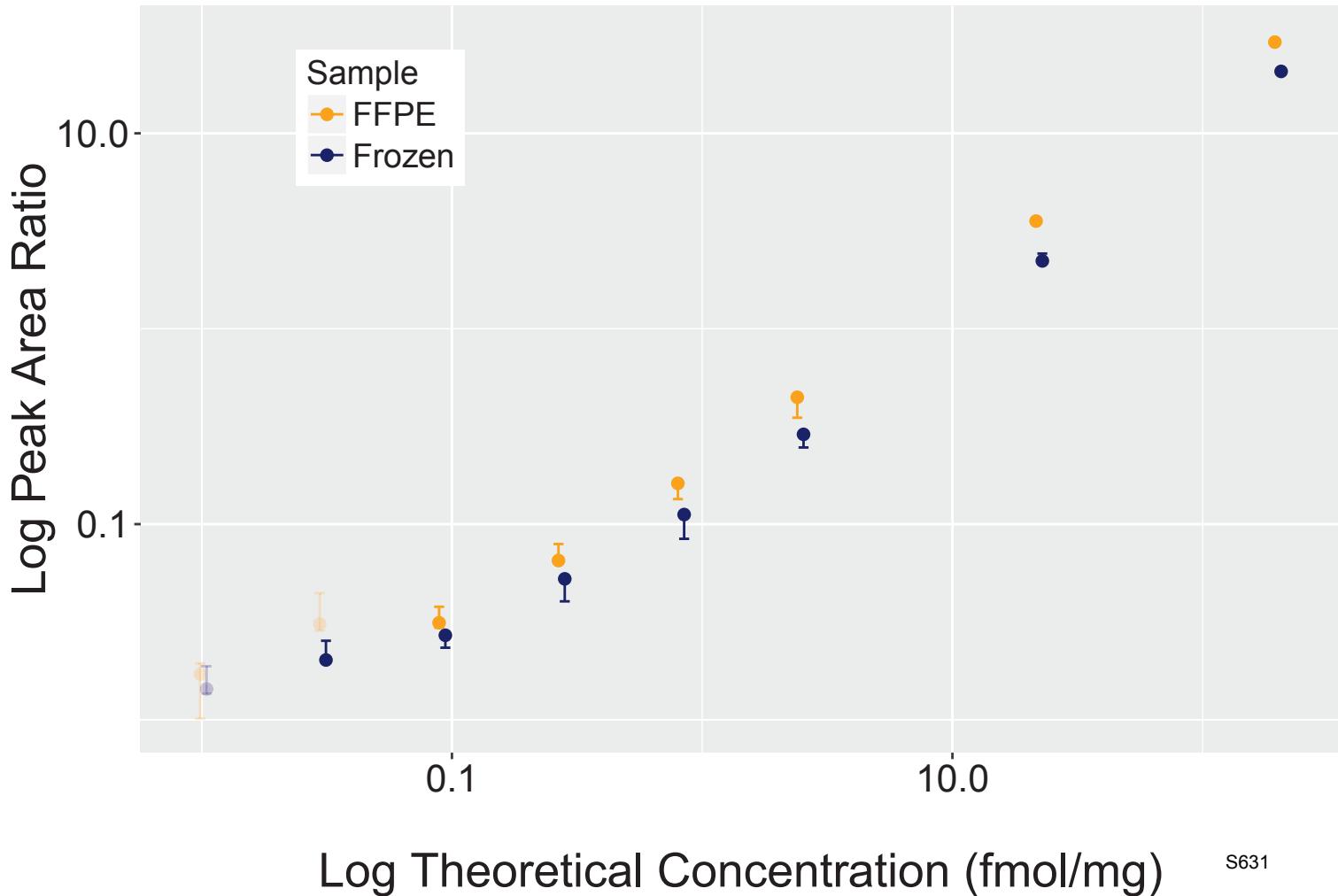
S629

Analyte: ACADVL.VPSENVLGEVGSGFK



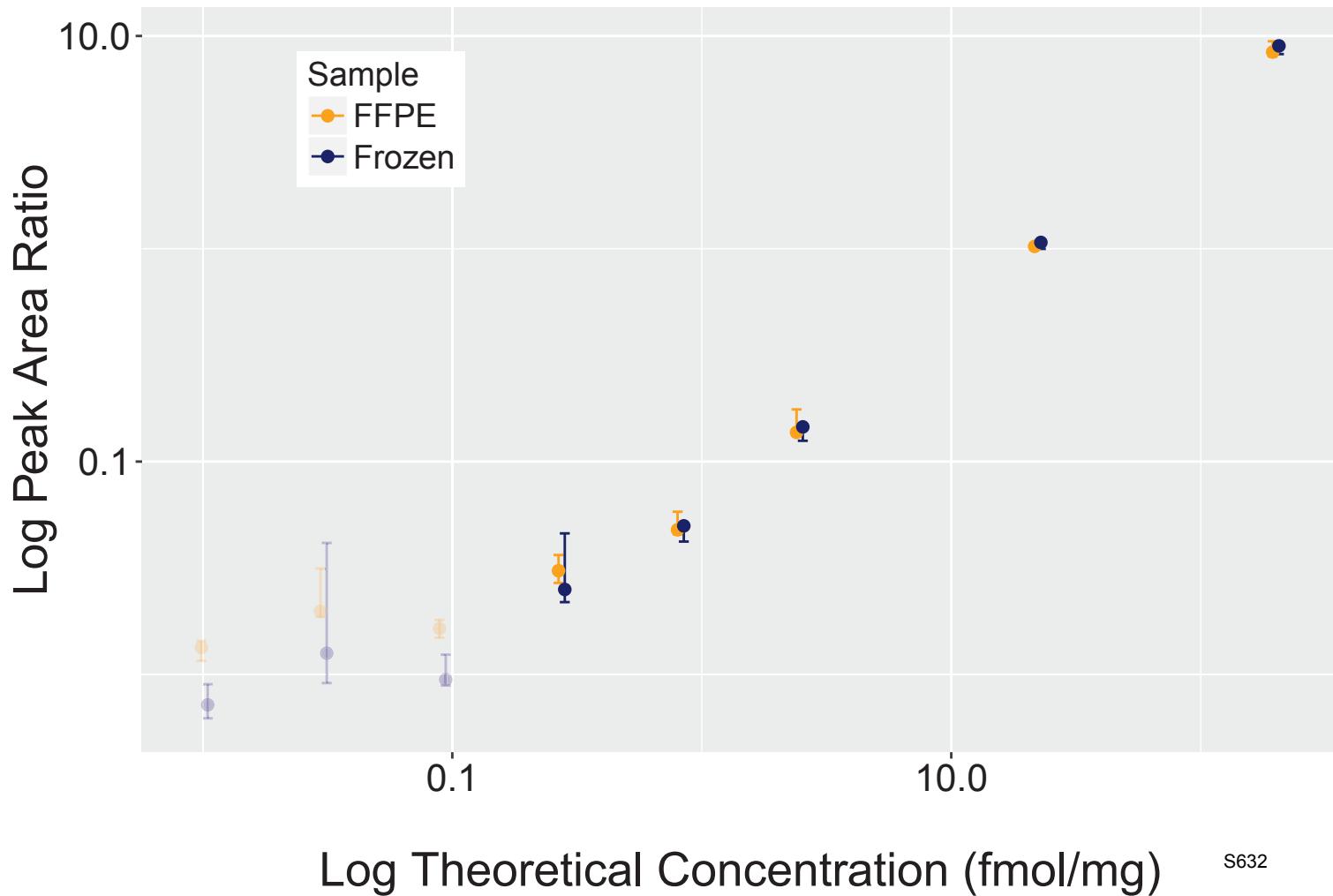
S630

Analyte: GSTO1.VPSLVGSFIR



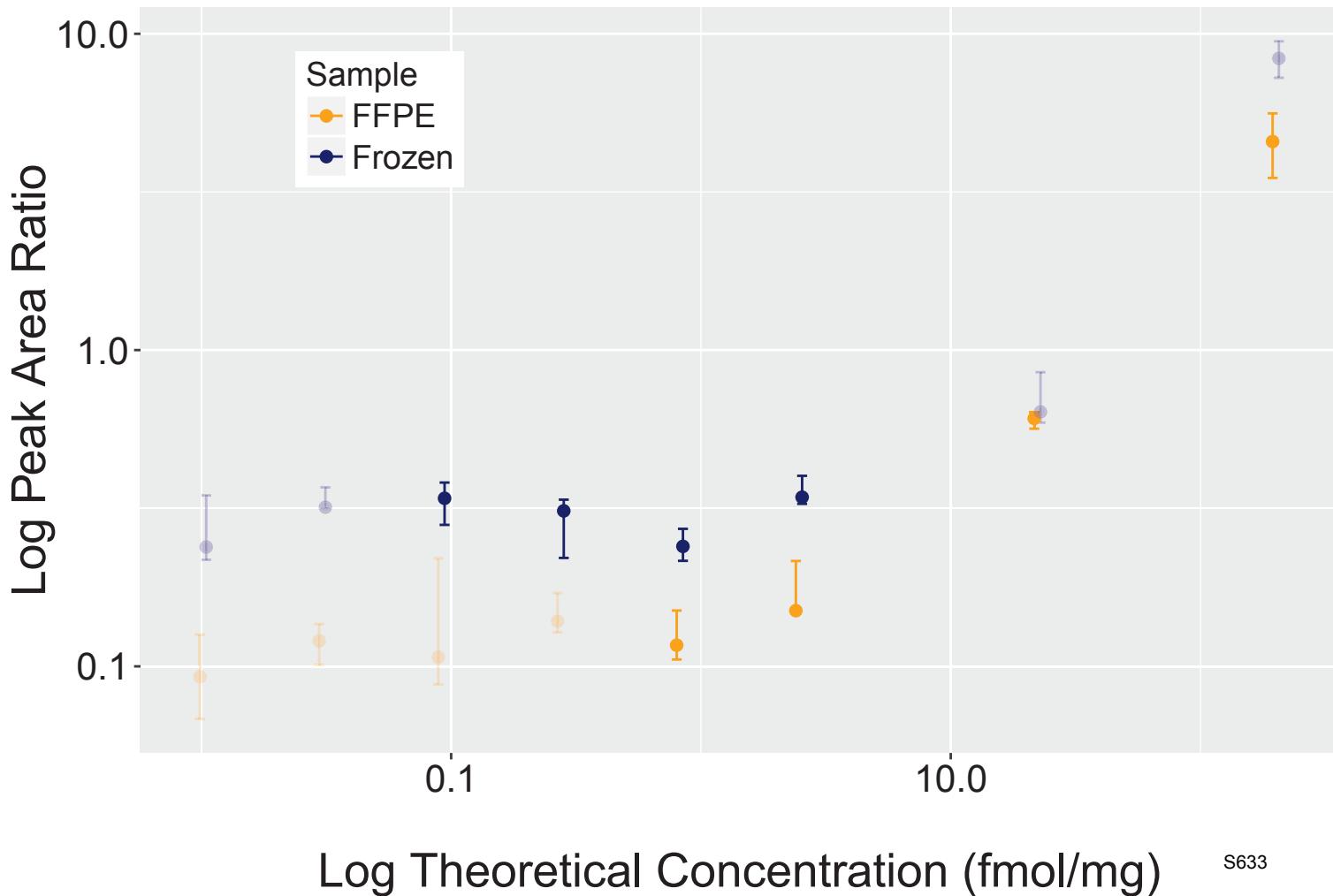
S631

Analyte: NASP.VQIAANEETQER



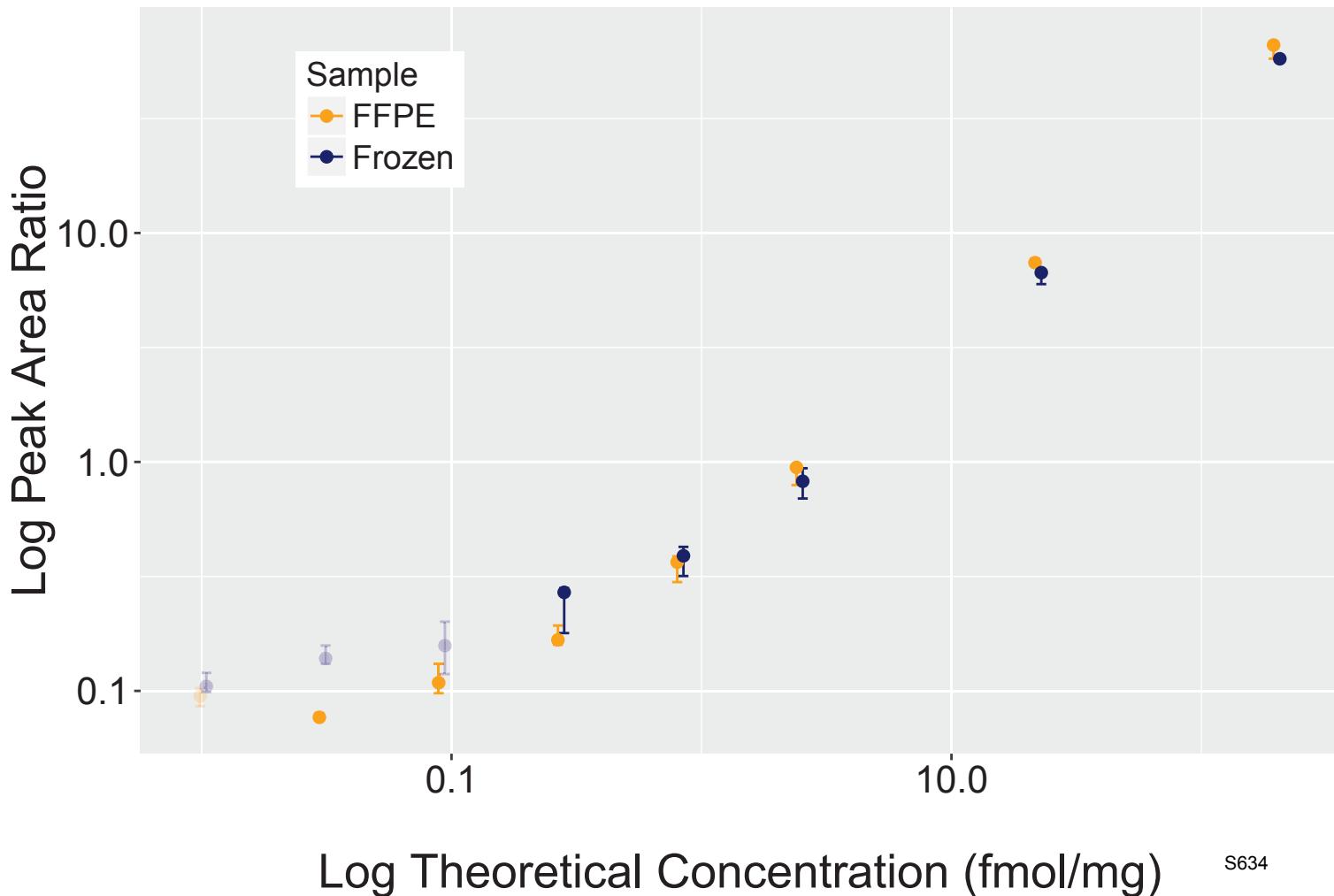
S632

Analyte: STOM.VQNATLAVANITNADSATR



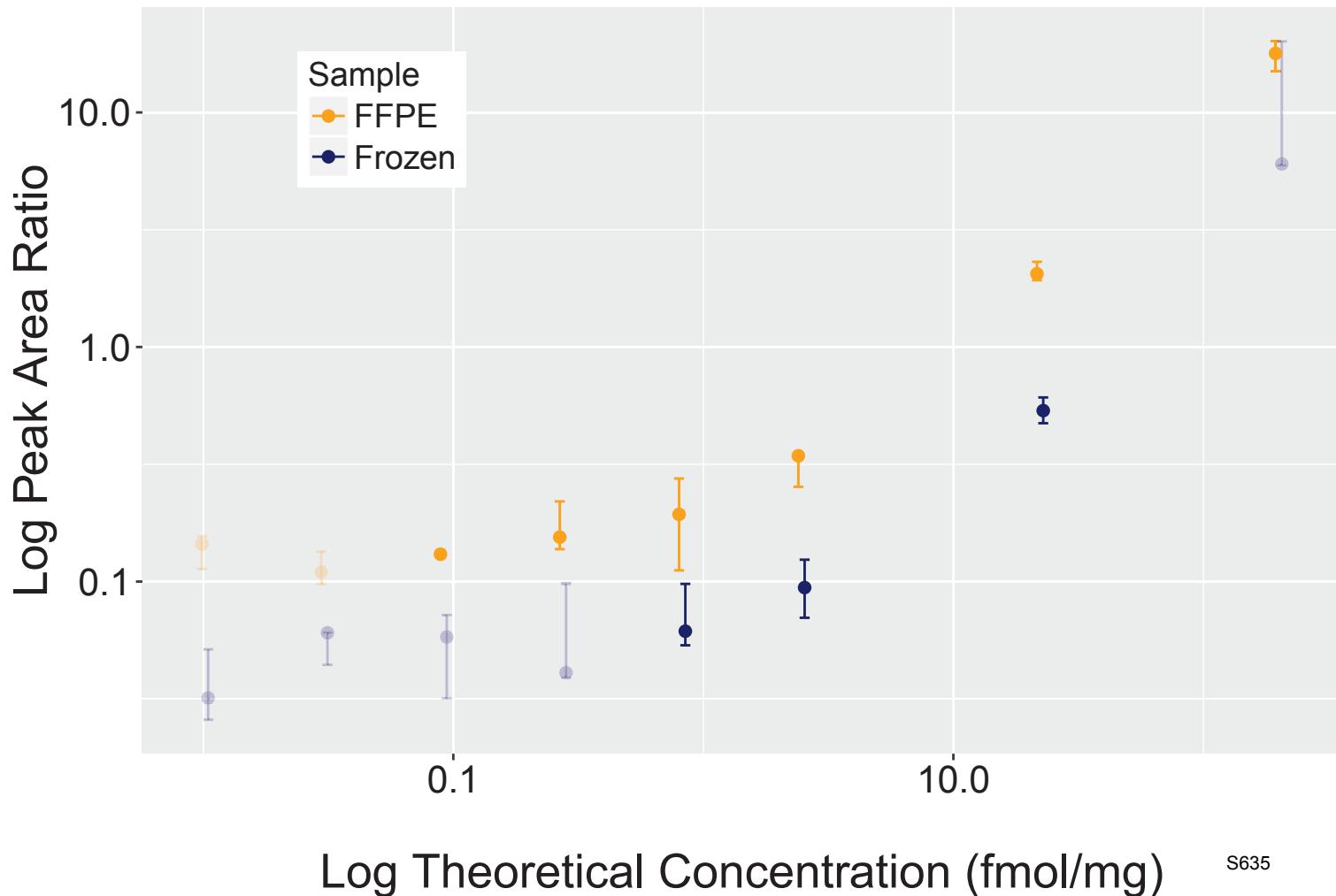
S633

Analyte: DNAJA2.VSLEDLYNGK



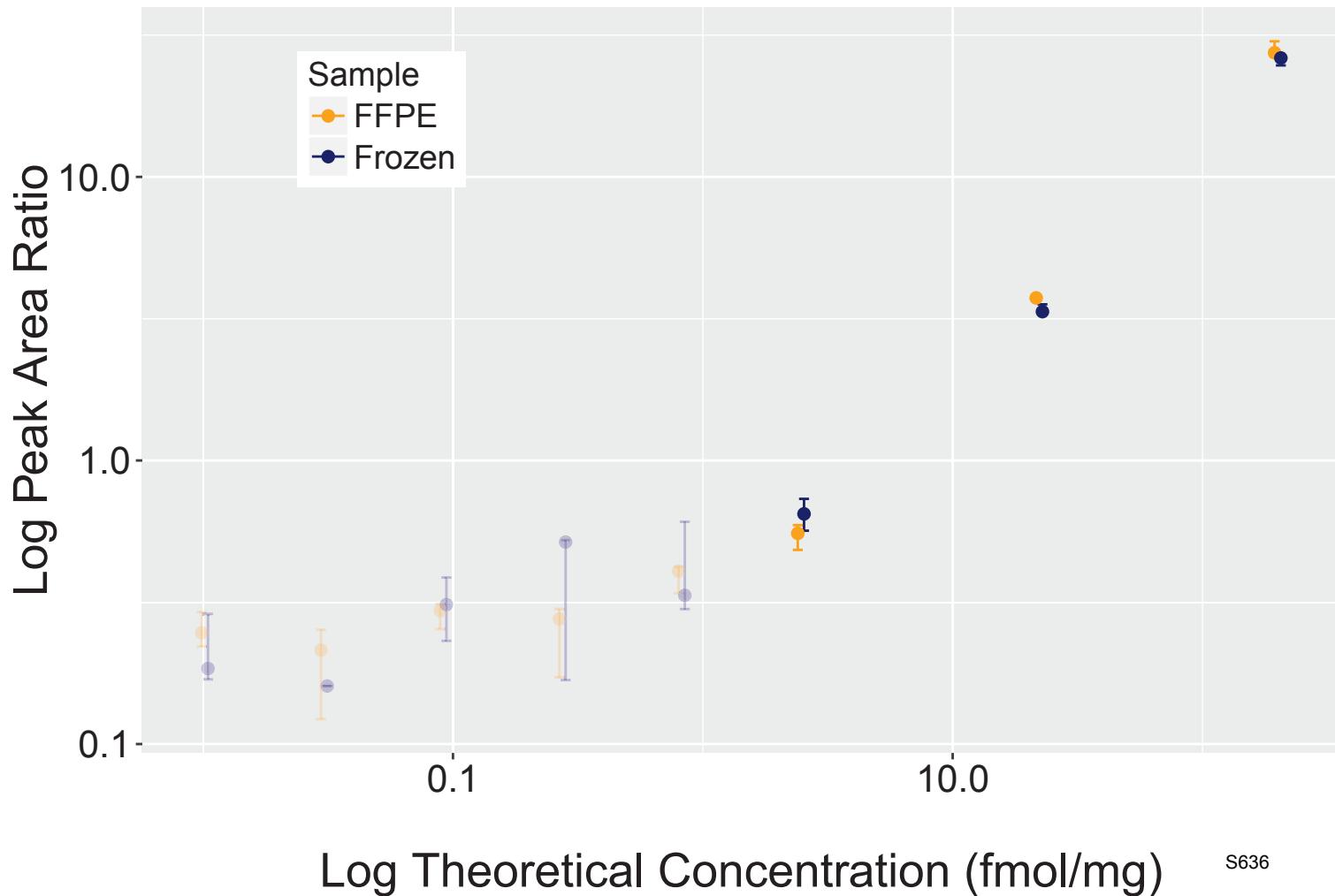
S634

Analyte: FLNB.VSYFPTVPGVYIVSTK



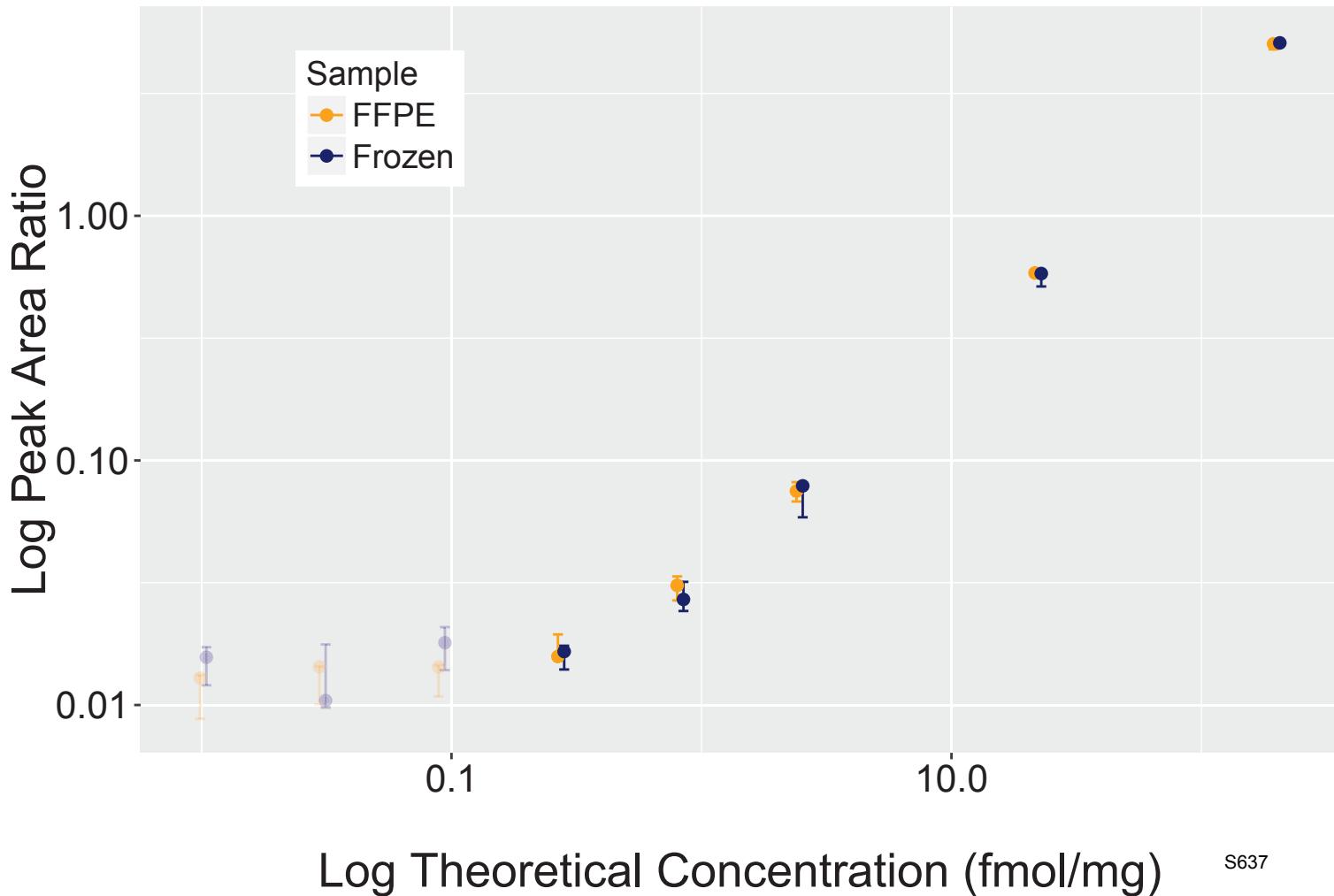
S635

Analyte: APEX1.VSYGIGDEEHQEGR



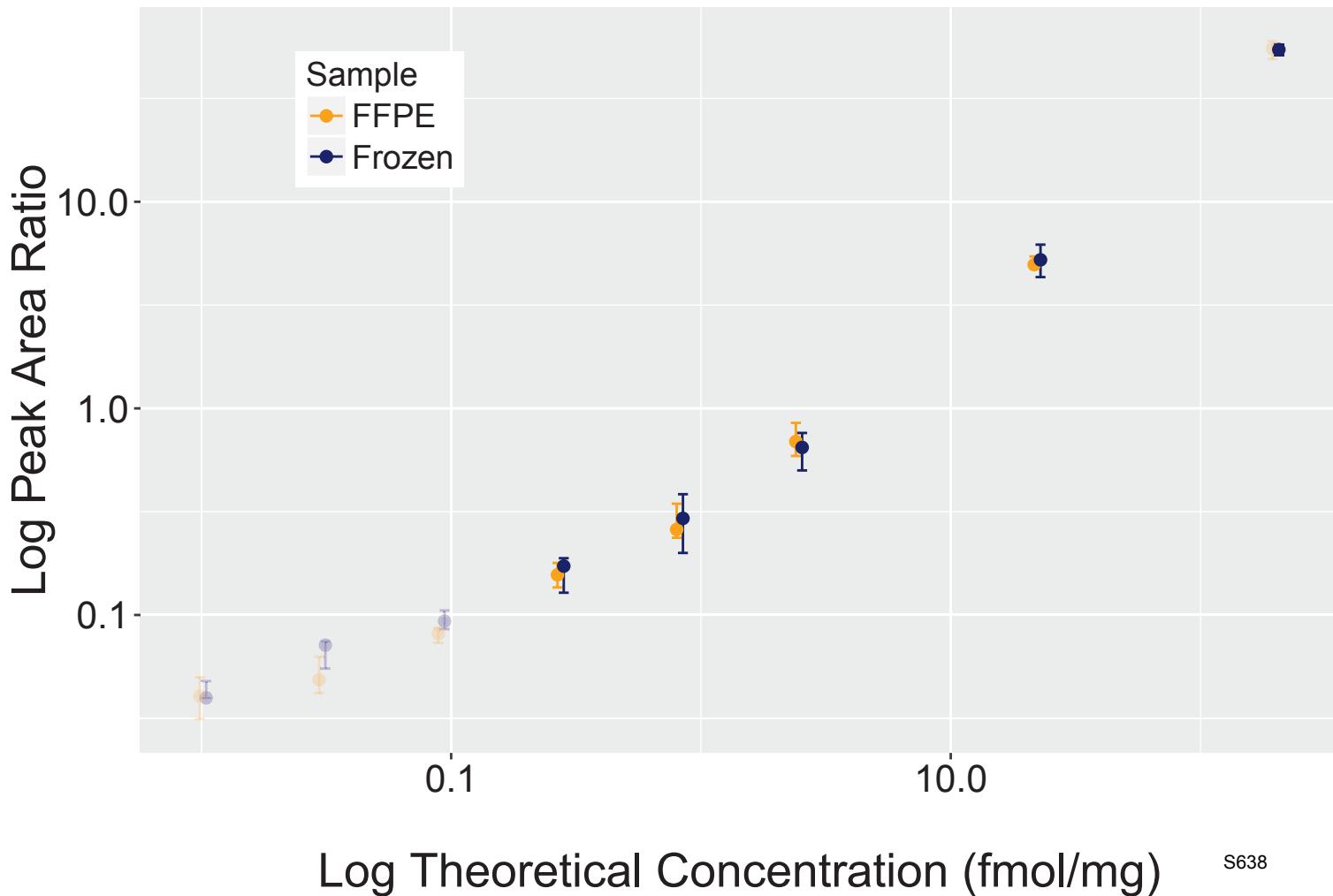
S636

Analyte: METTL7A.VTC[+57]IDPNPNFEK



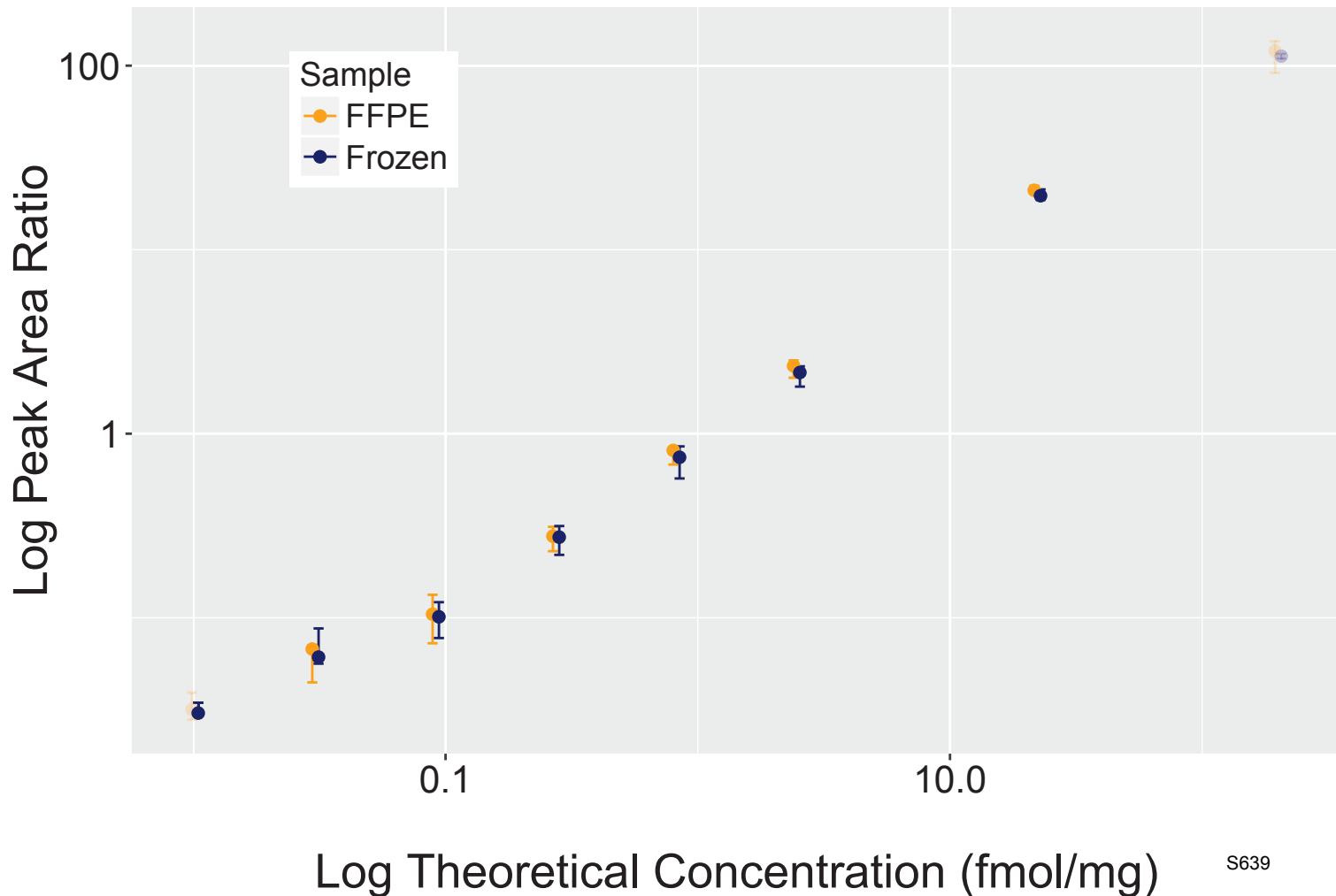
S637

Analyte: SLC2A1.VTILELFR

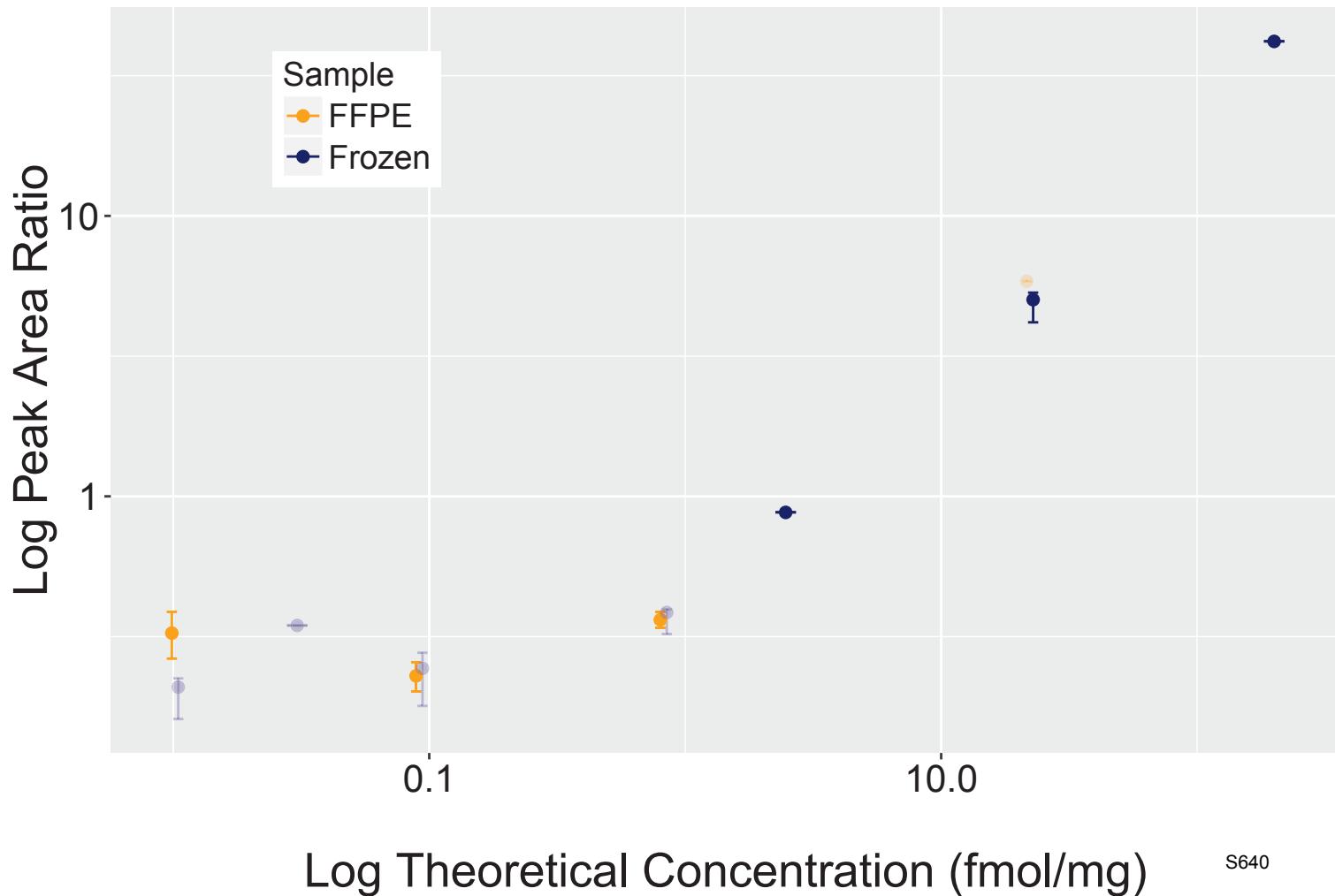


S638

Analyte: ICAM1.VTLNGVPAQPLGPR

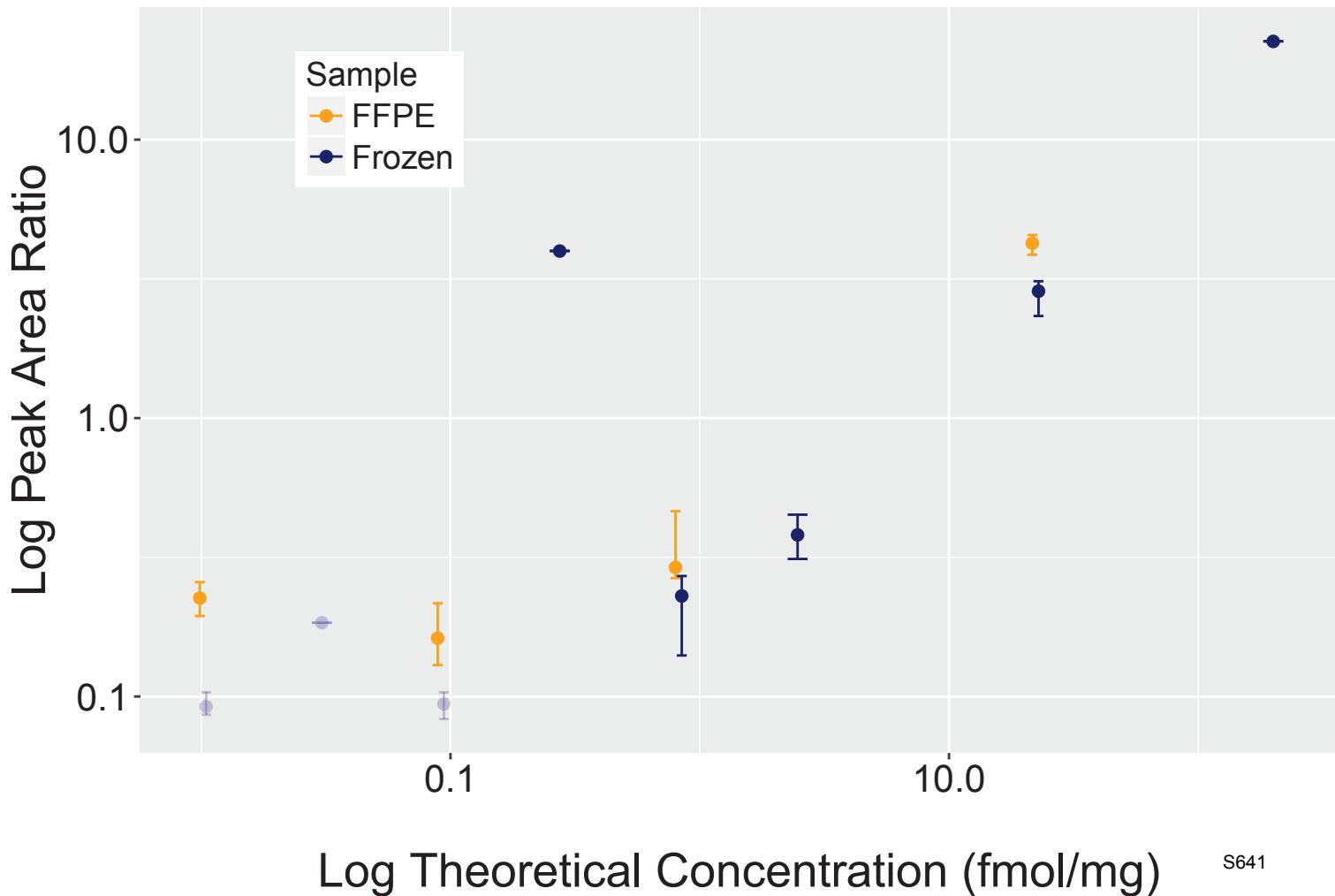


Analyte: CORO1C.VTWDSSFC[+57]AVNPR

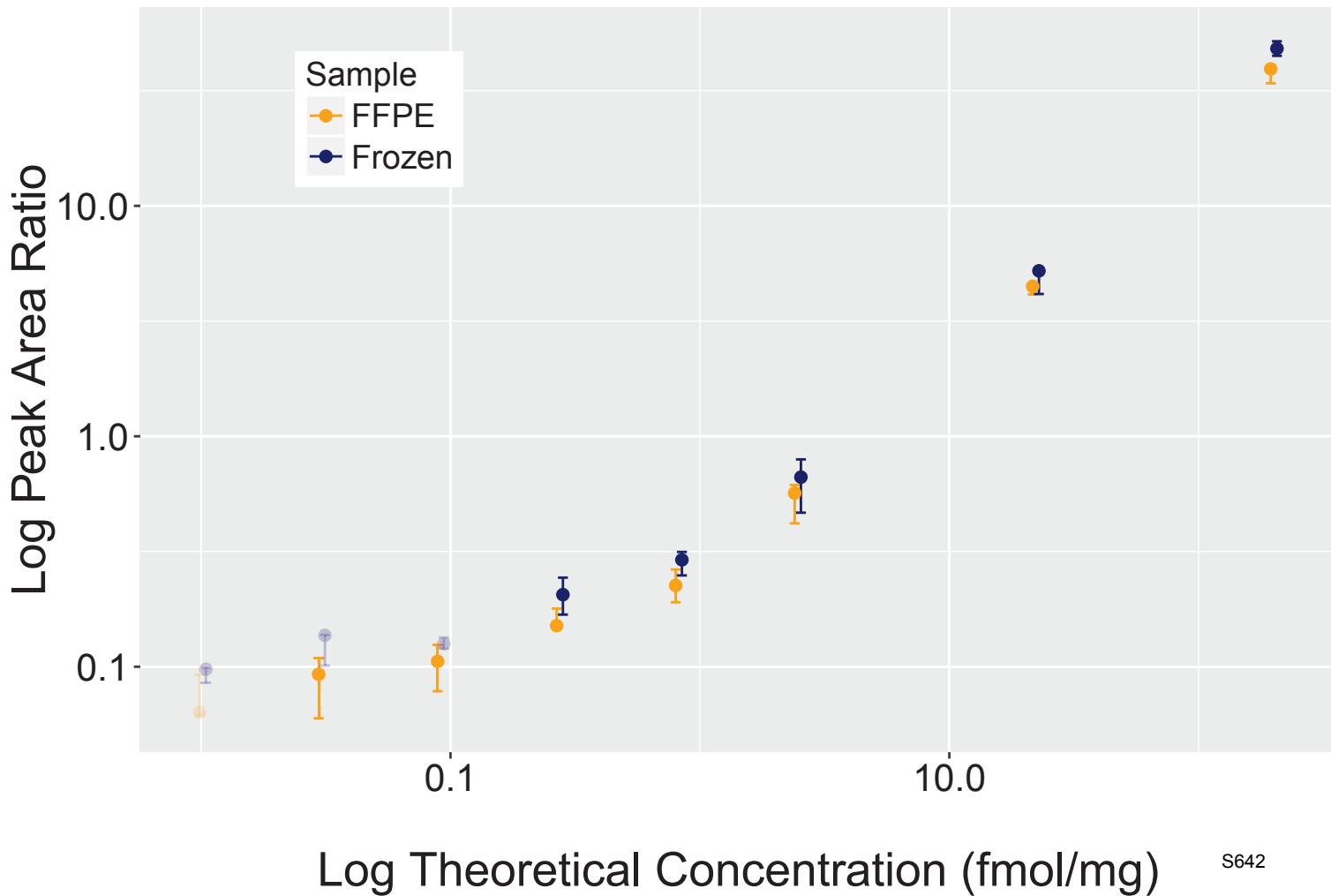


S640

Analyte: CORO1B.VTWDSTFC[+57]AVNPK

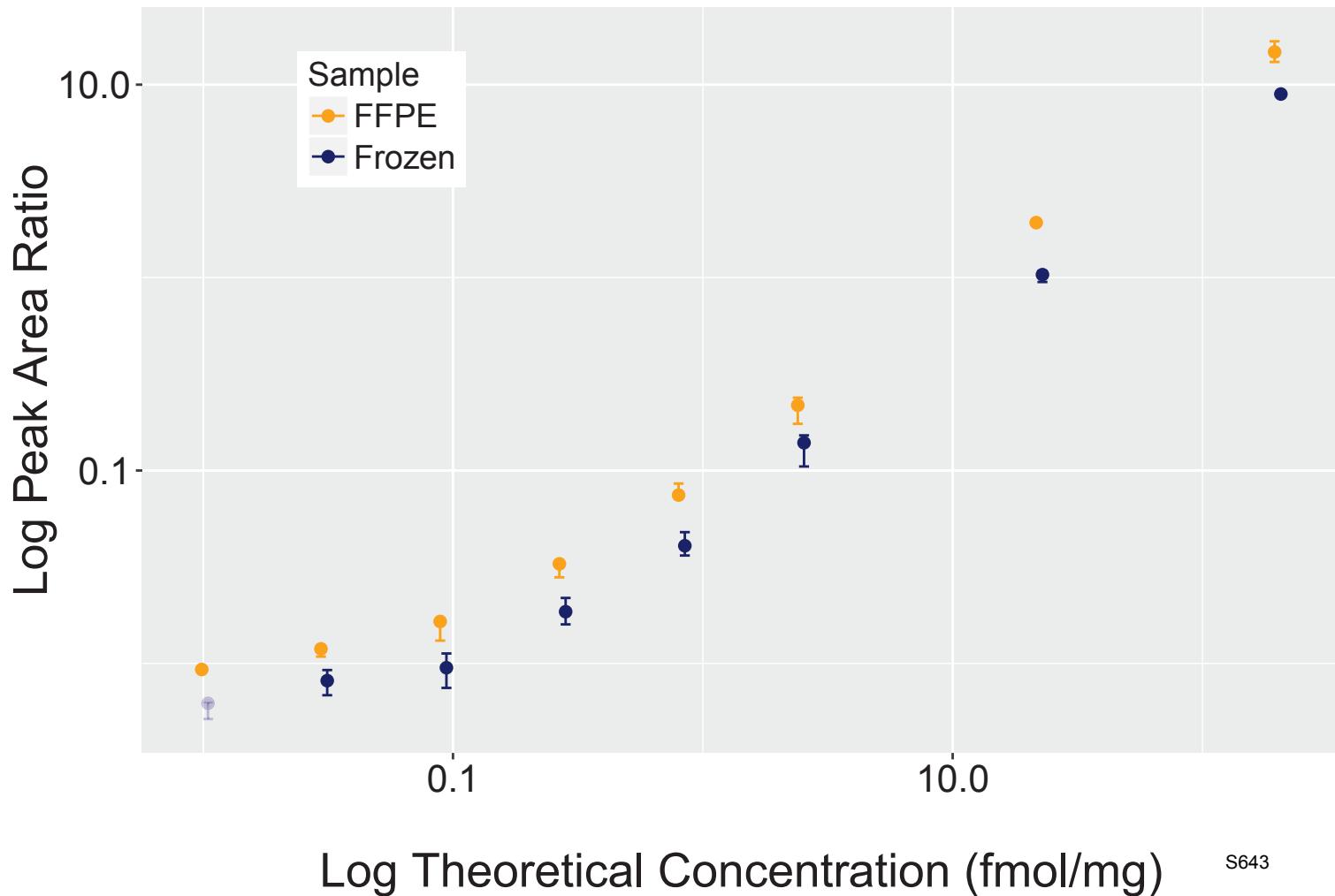


Analyte: NDUFS3.VVAEPVELAQEFR



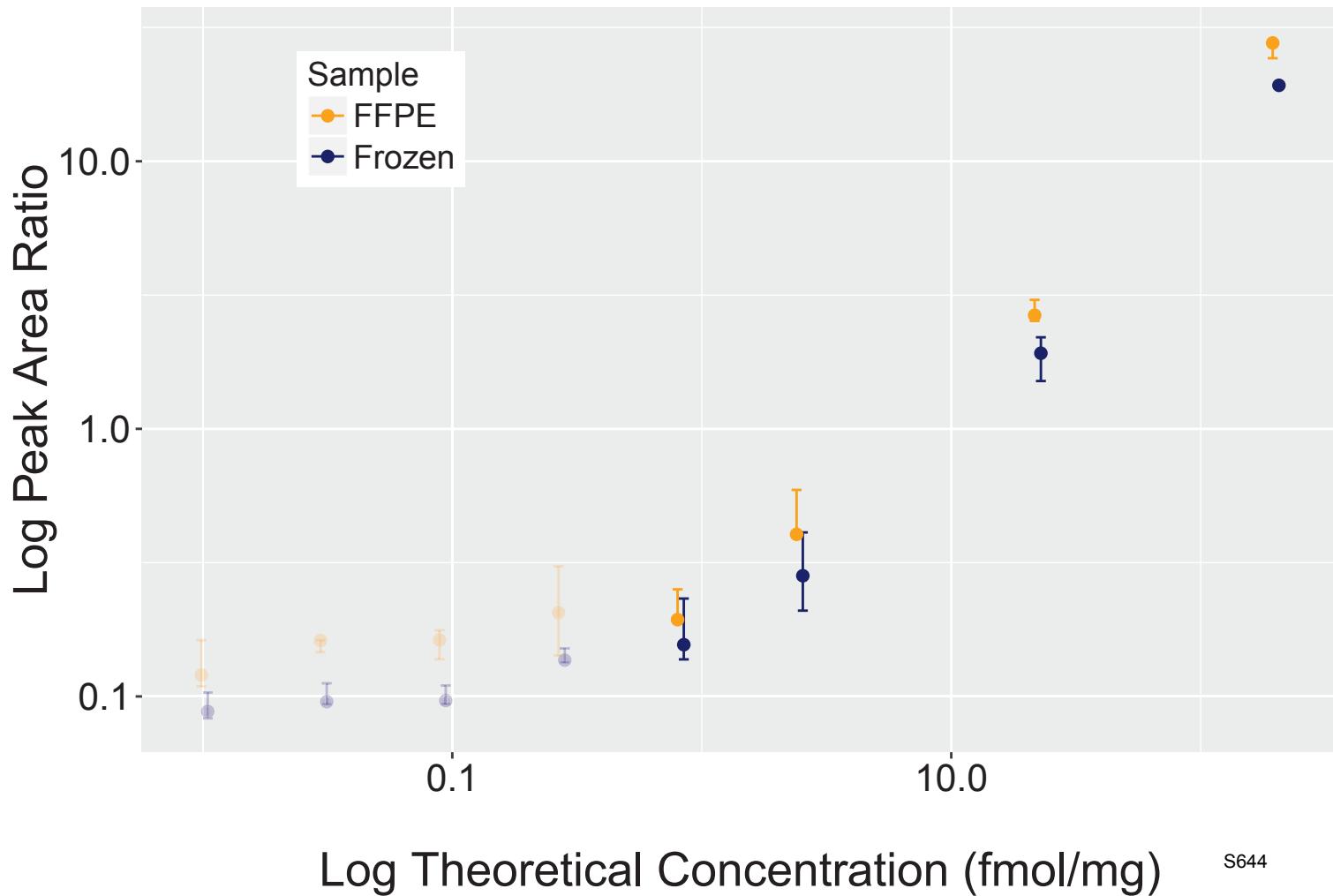
S642

Analyte: ATP5A1.VVDALGNAIDGK



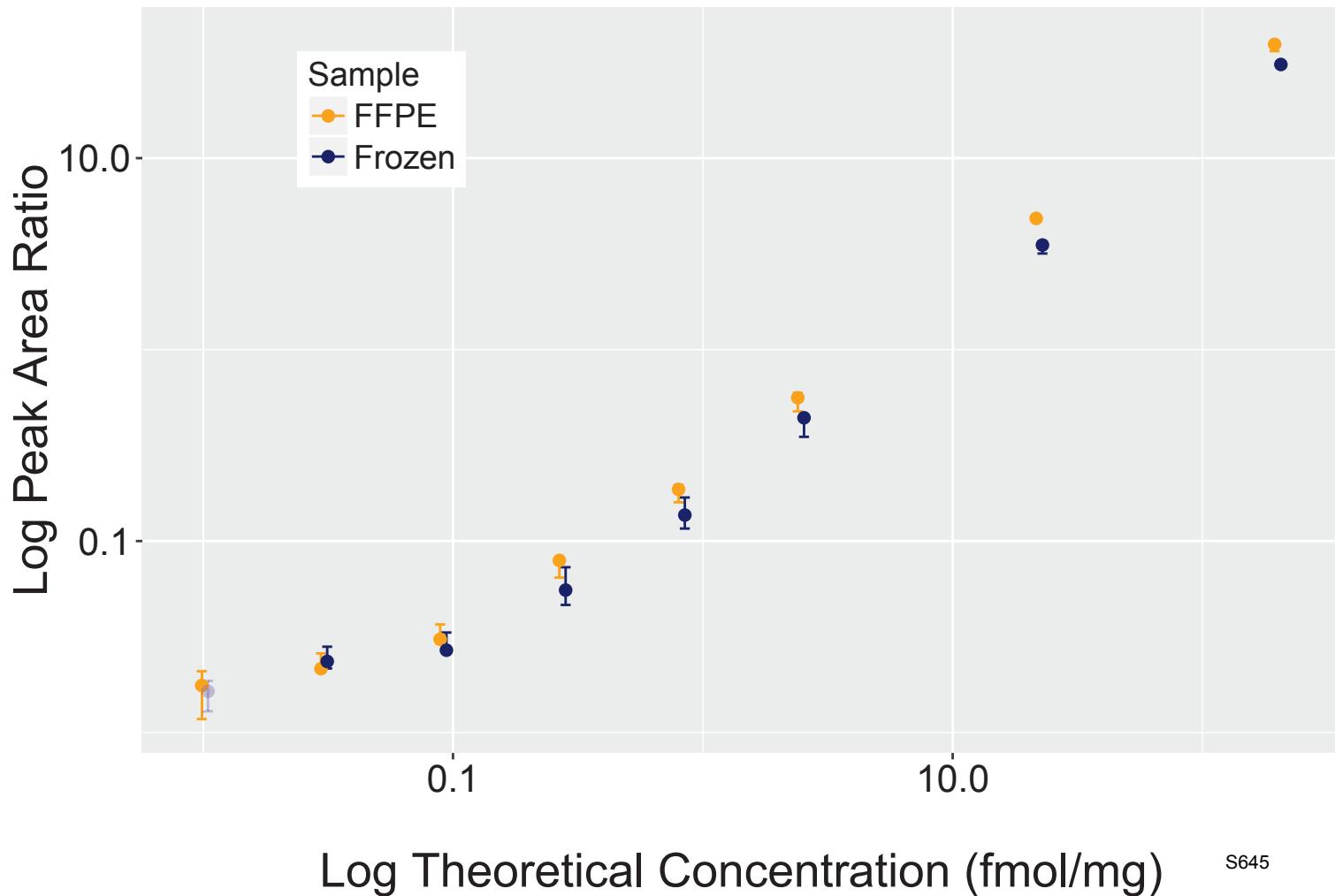
S643

Analyte: ADSS.VVDLLAQDADIVC[+57]R

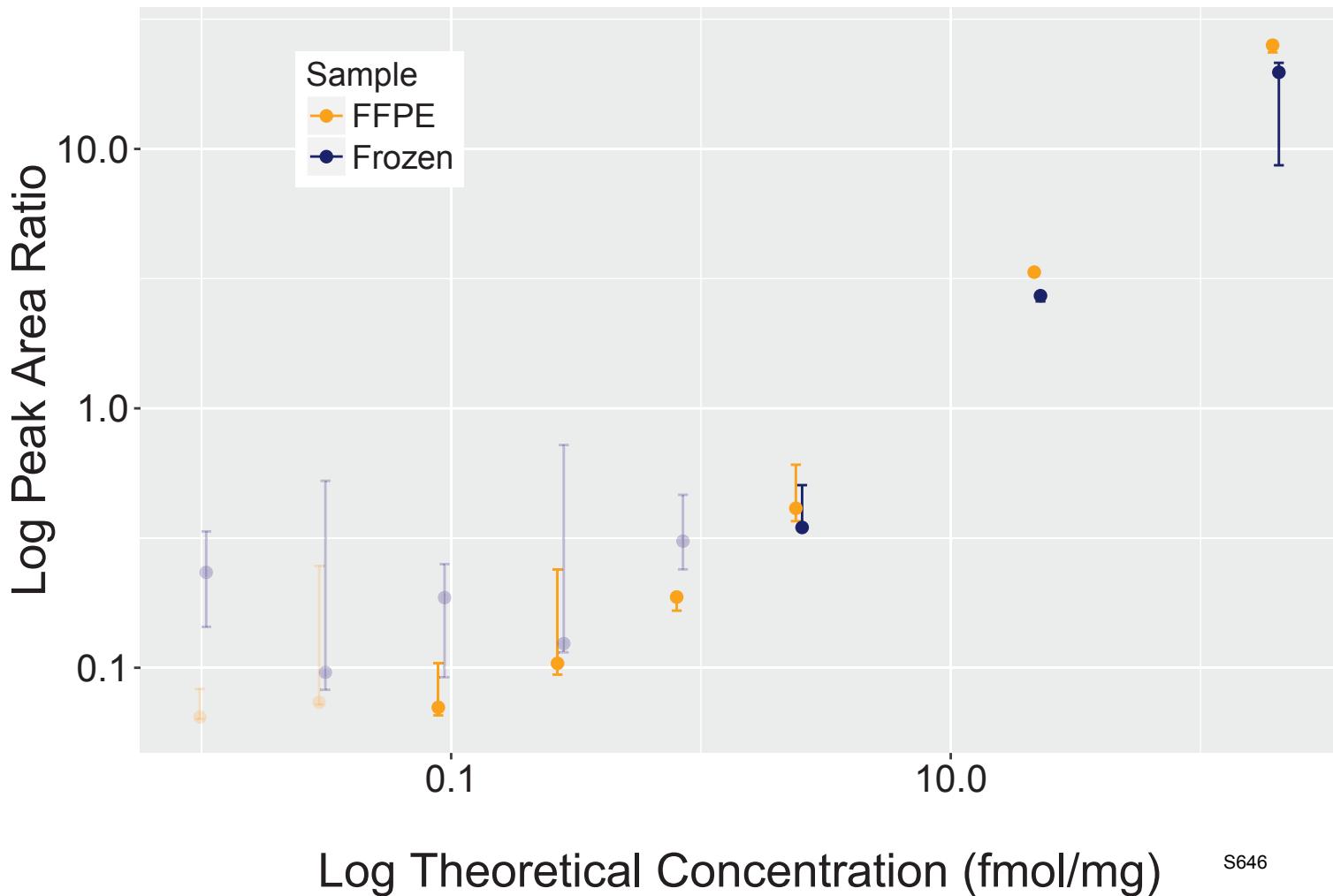


S644

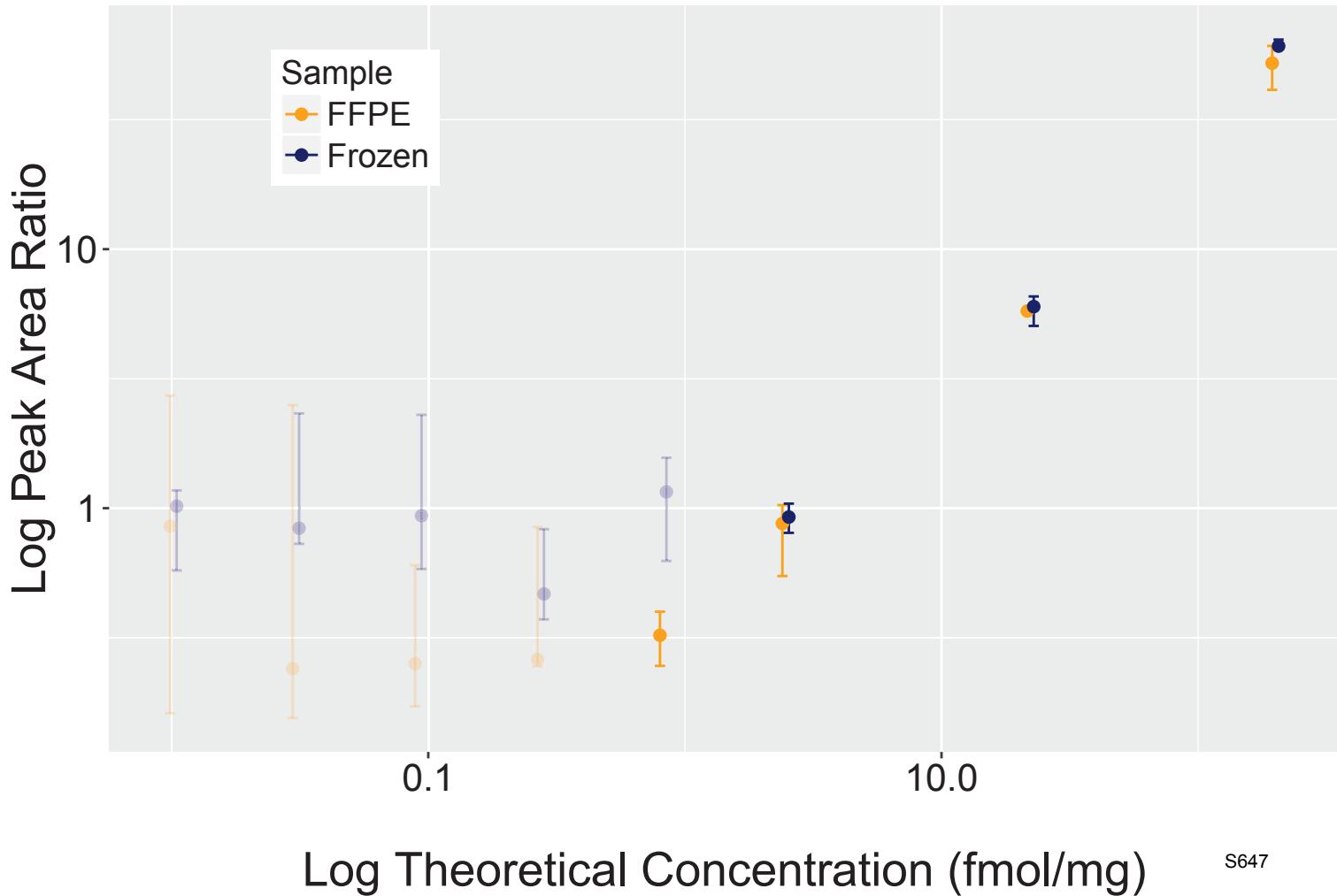
Analyte: CA2.VVDVLDSIK



Analyte: ALDH2.VVGNPFDSK

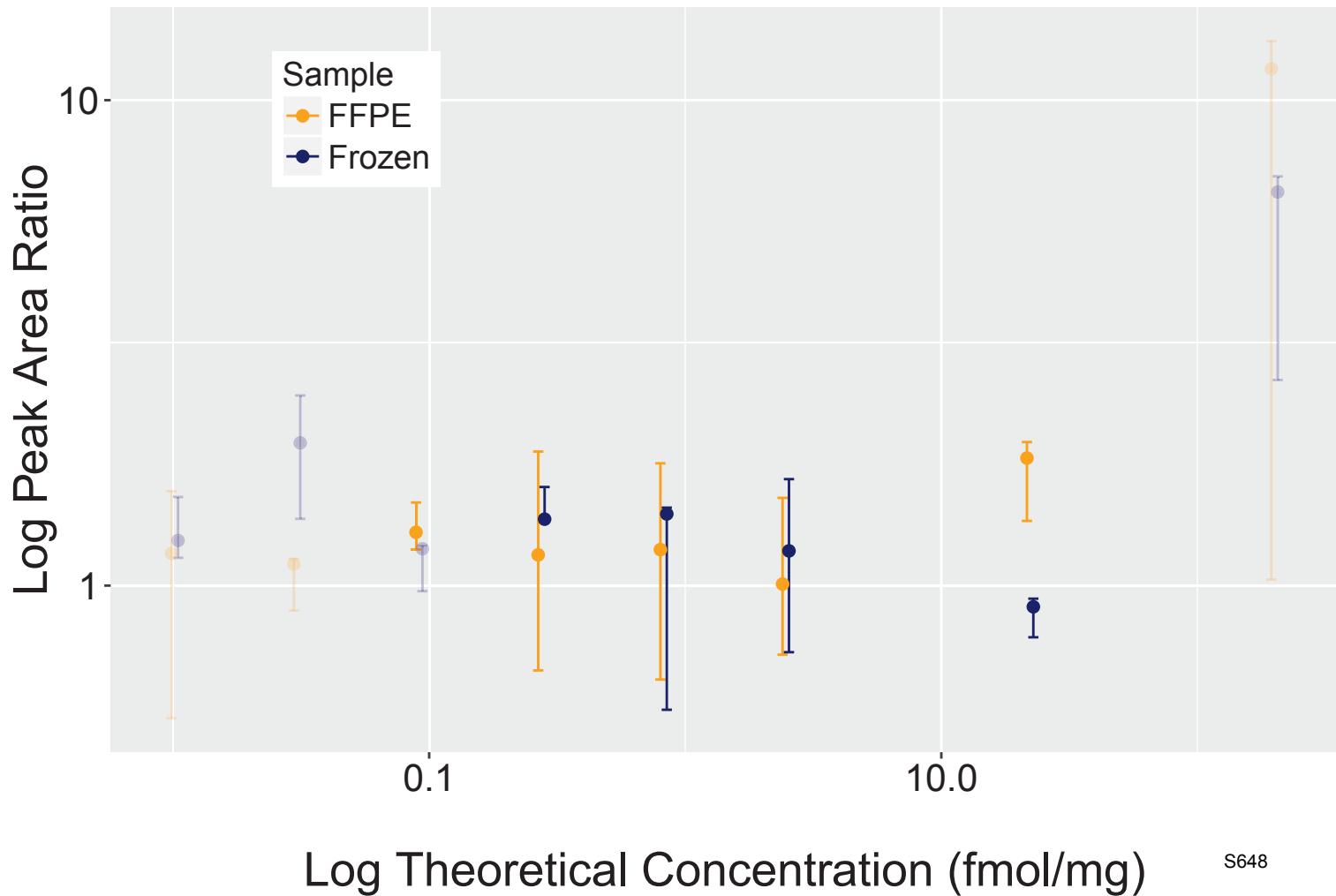


Analyte: PARP1.VVSEDFLQDVSASTK



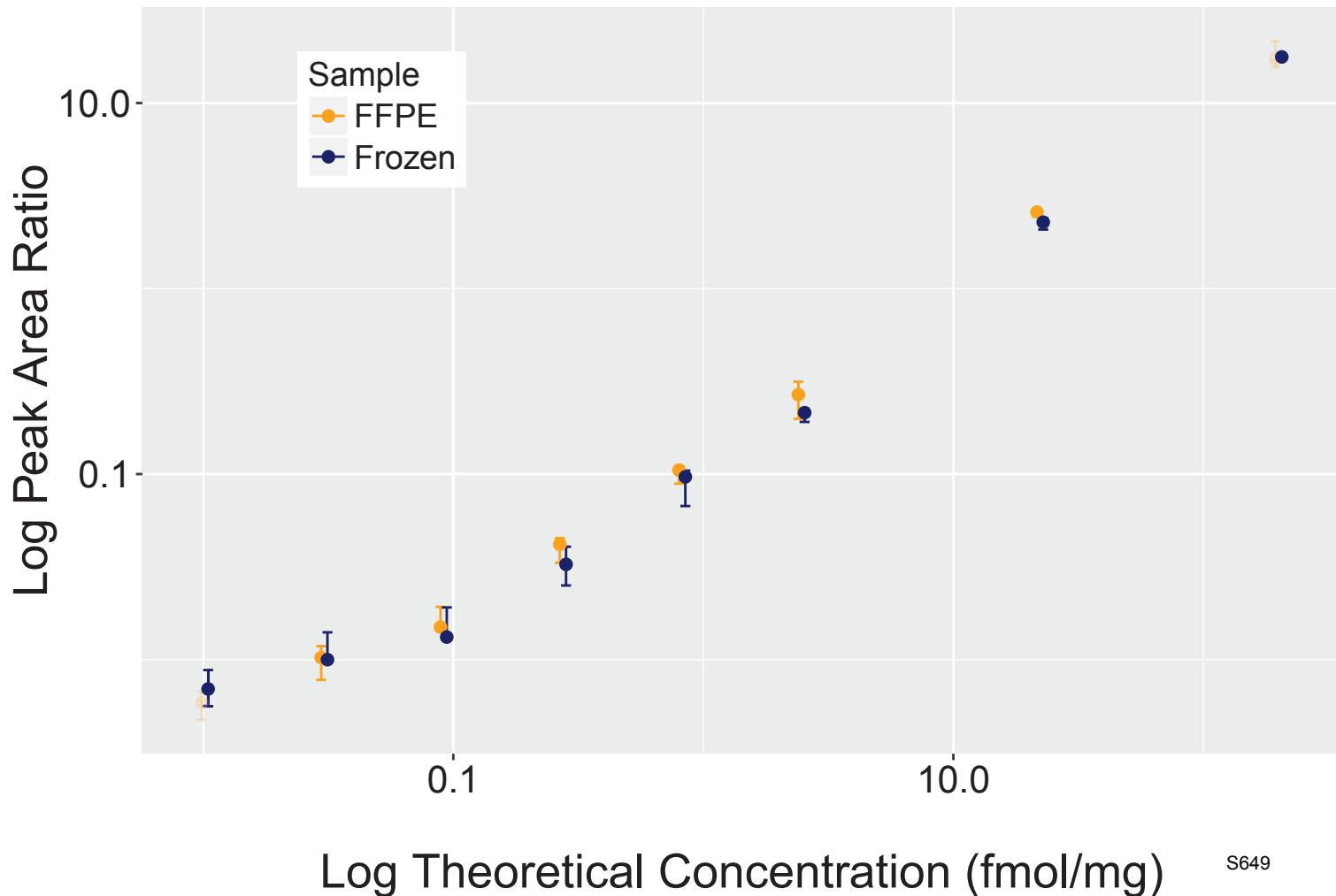
S647

Analyte: TGM2.VVTNYNSAHDQNSNLLIEYFR

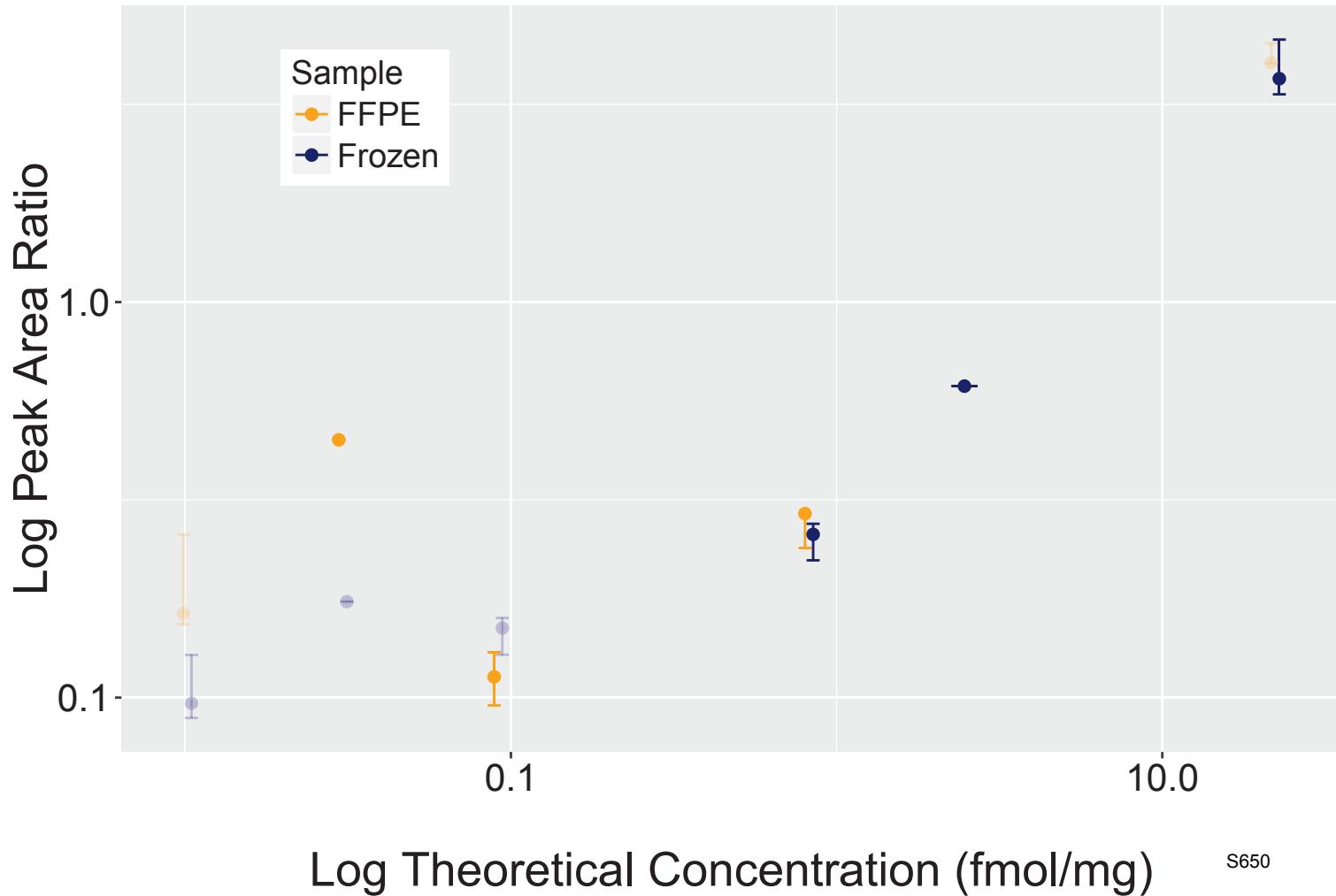


S648

Analyte: PAFAH1B3.VVVLGLLPR

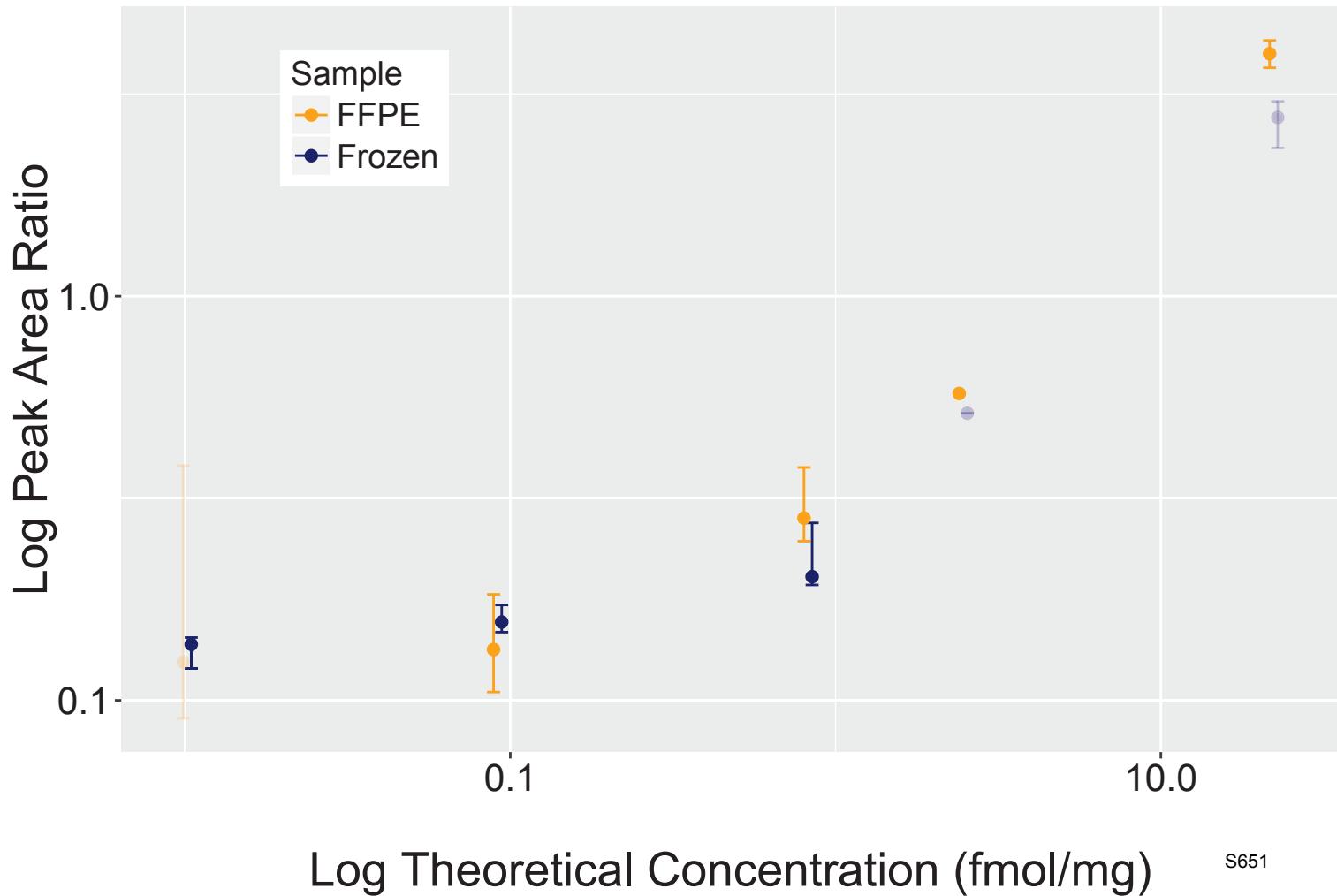


Analyte: MCCC2.VWDDGIIDPADTR



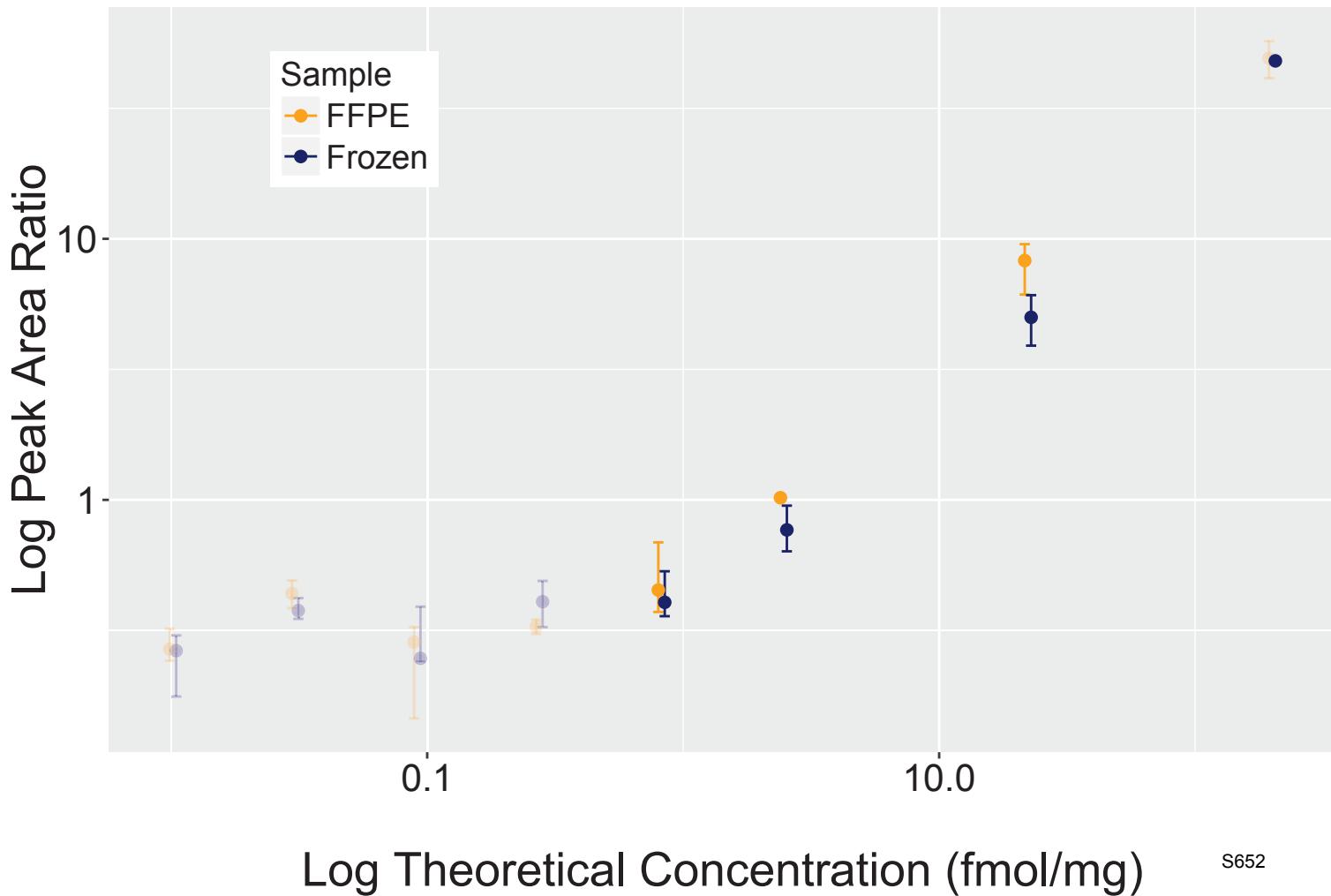
S650

Analyte: PAFAH1B1.VWDYETGDFER

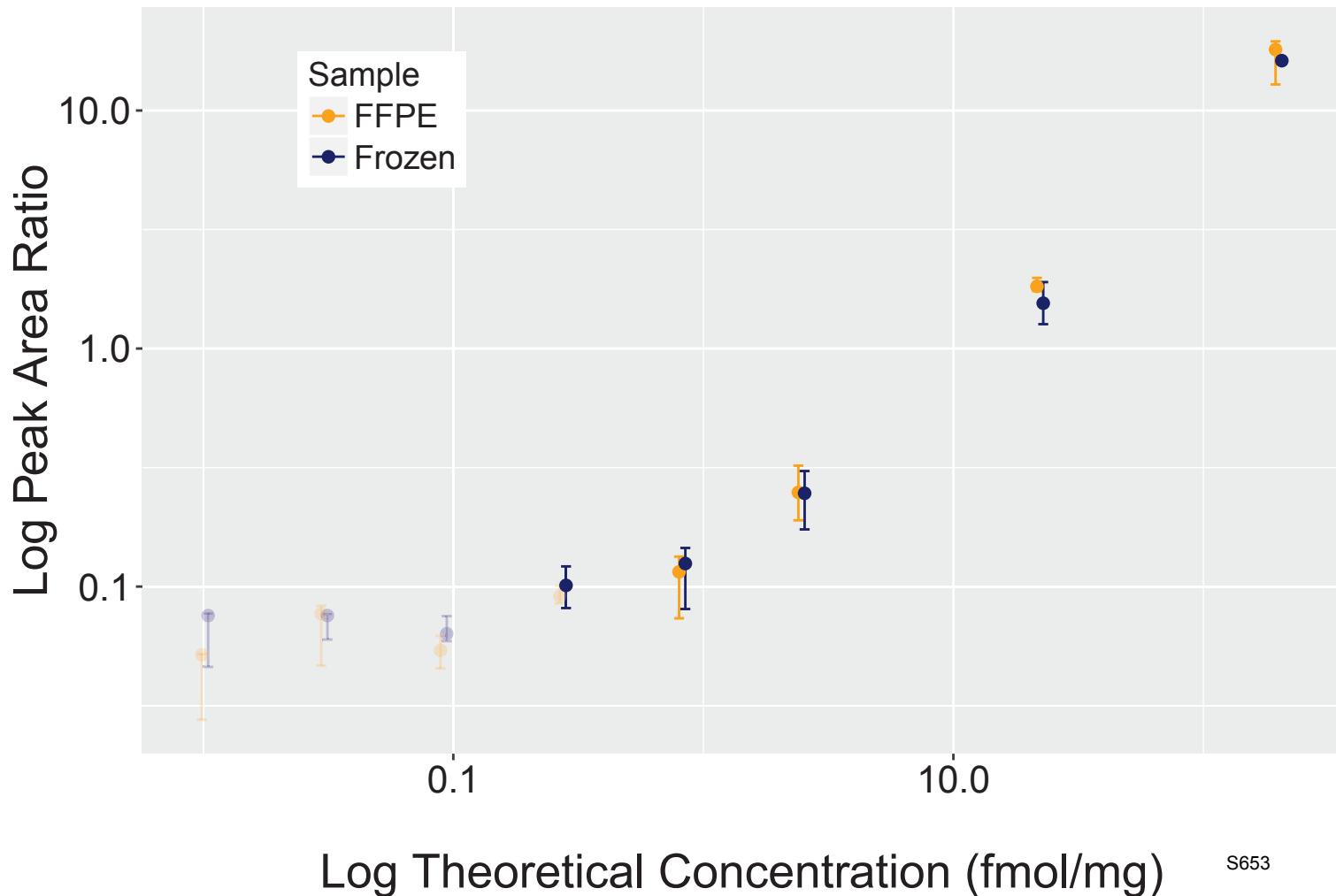


S651

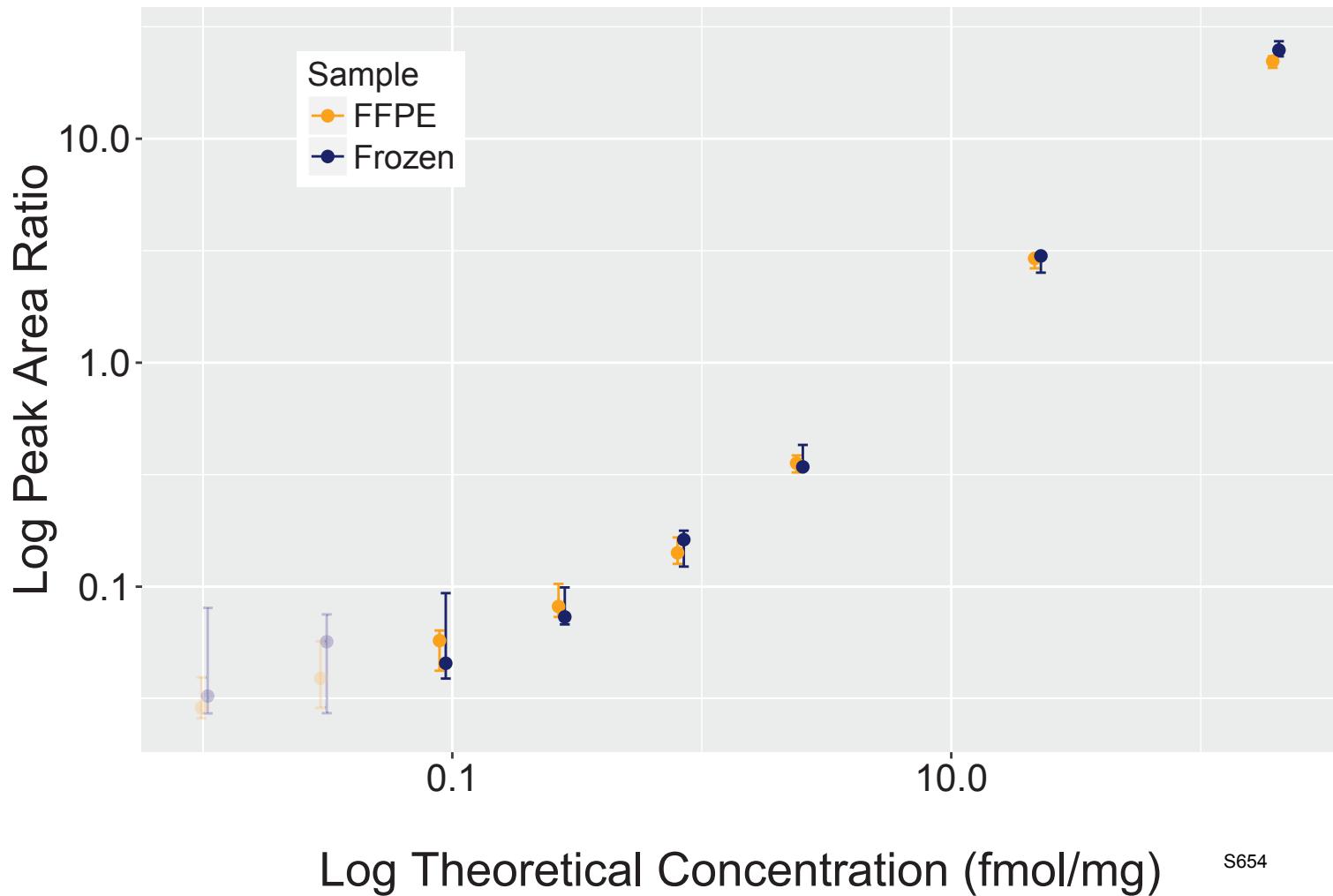
Analyte: UGGT1.VWQLQDLSFQTAAR



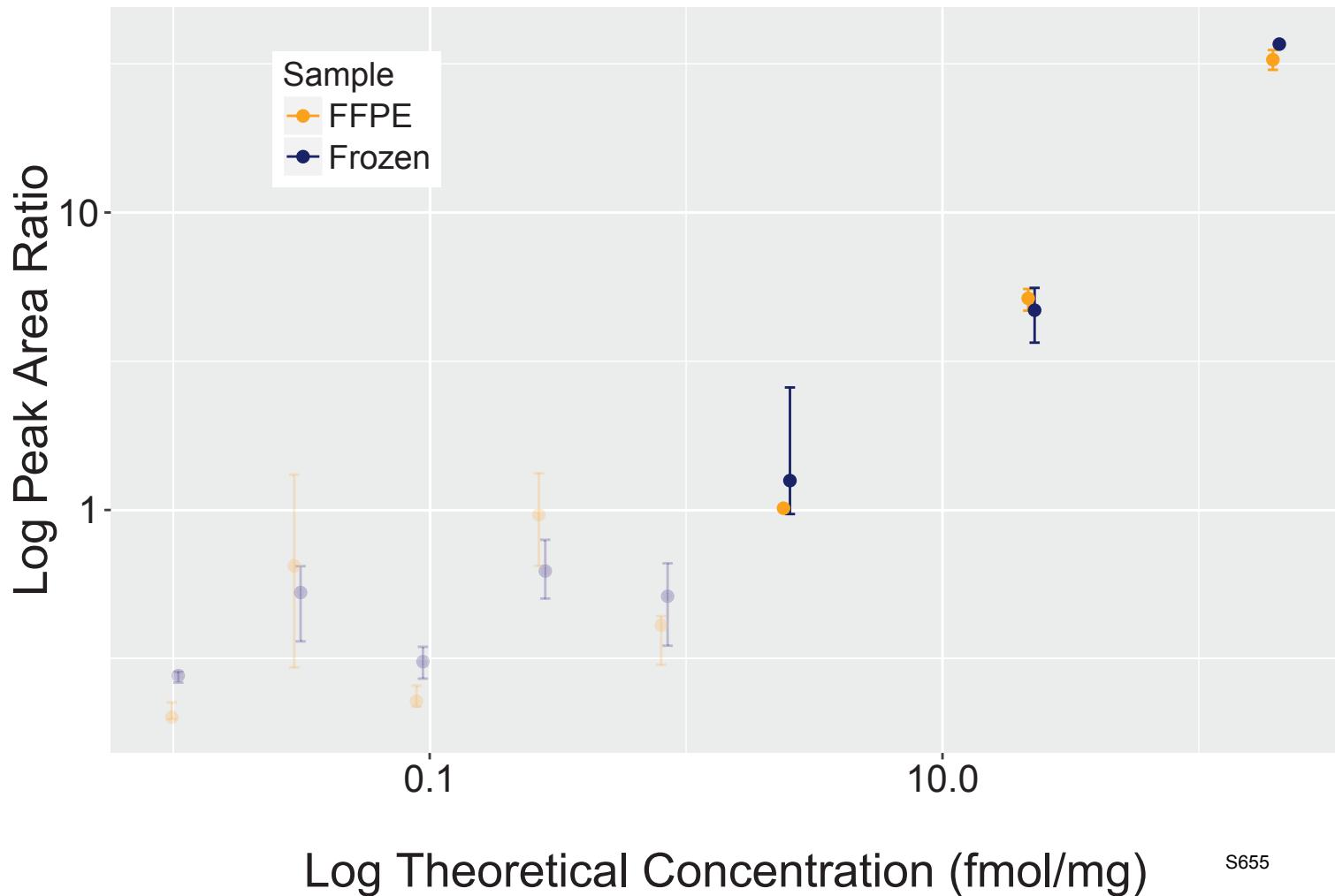
Analyte: LCP1.VYALPEDLVEVNPK



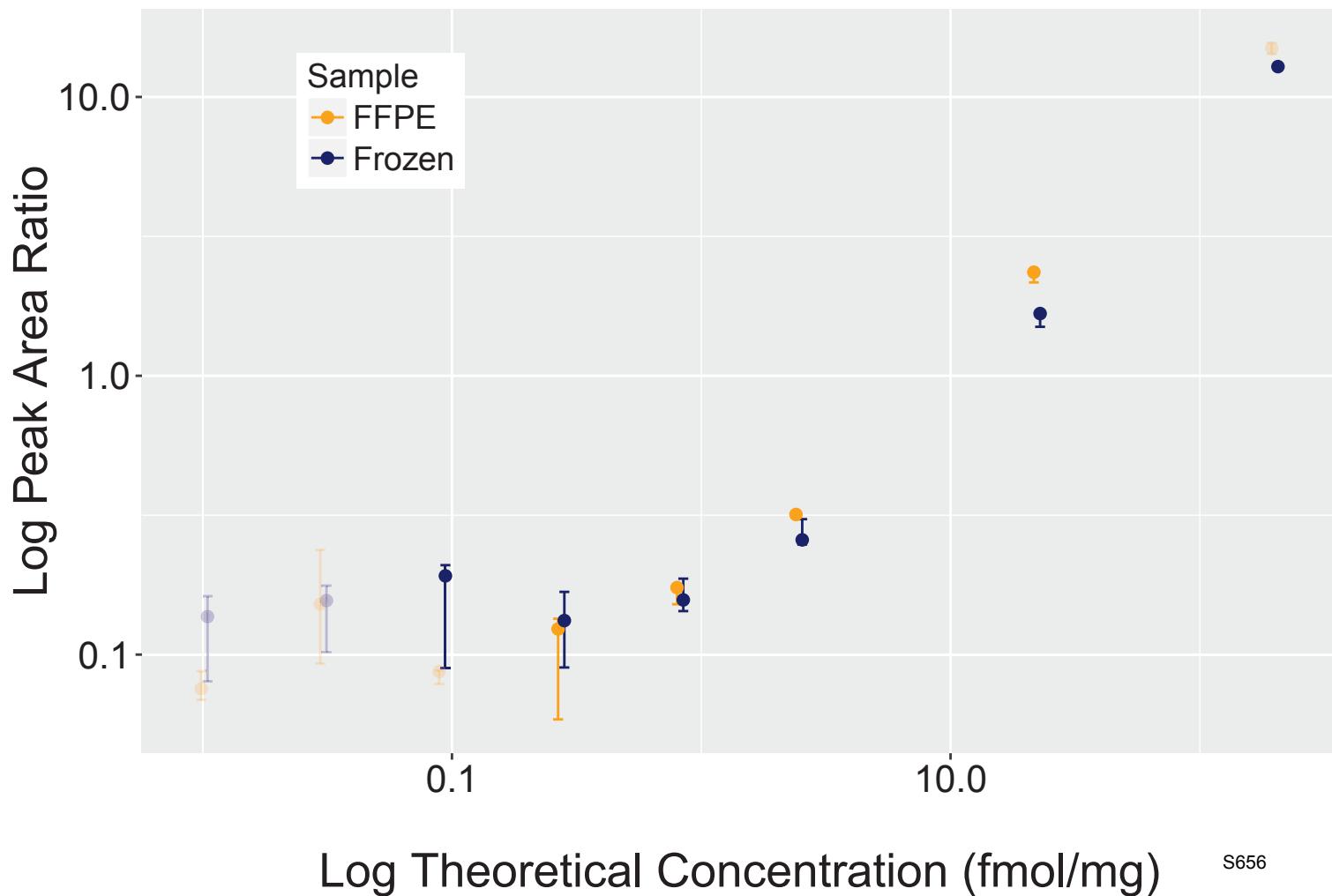
Analyte: BUB3.VYTLSVSGDR



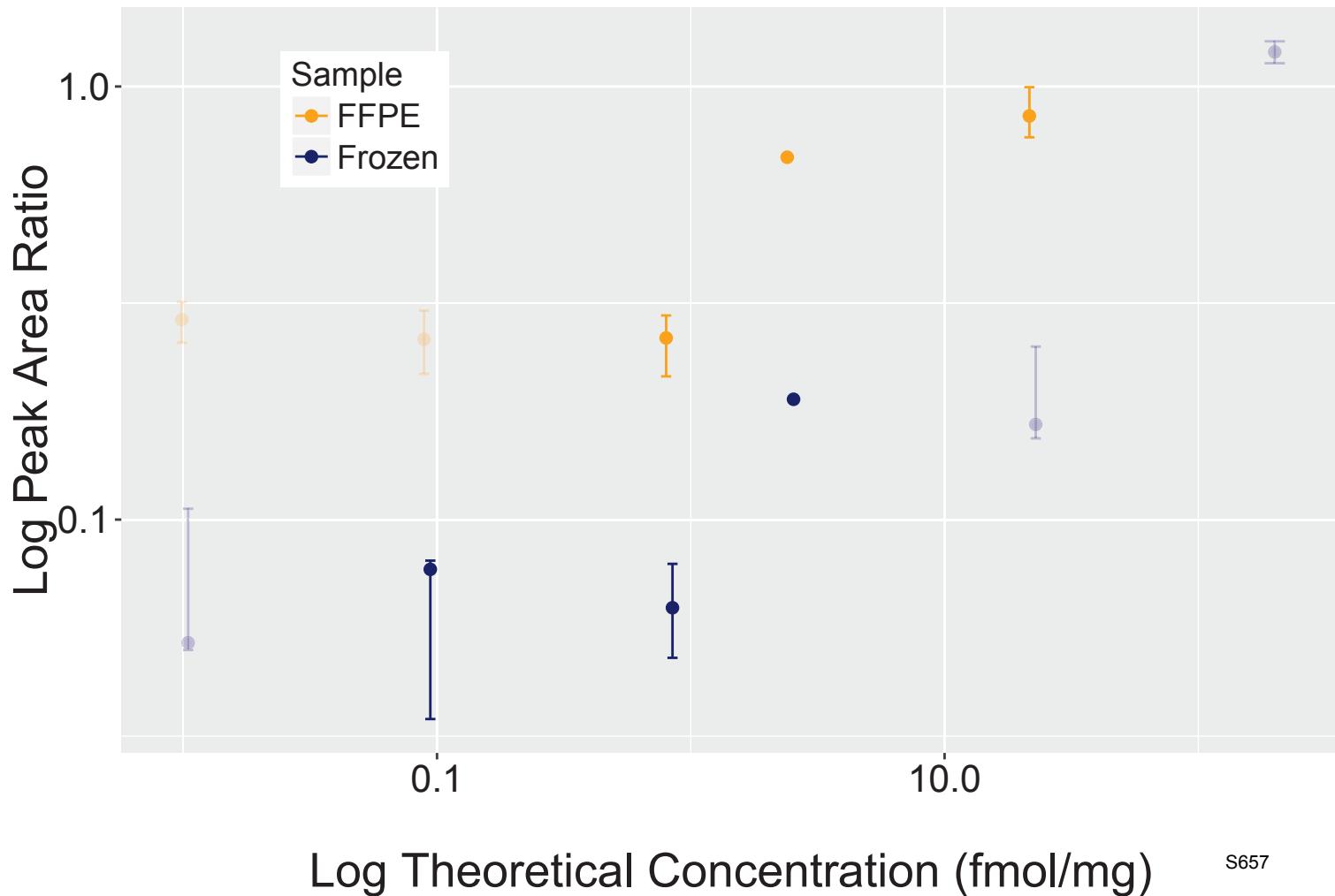
Analyte: PAPSS1.VYWNDGLDQYR



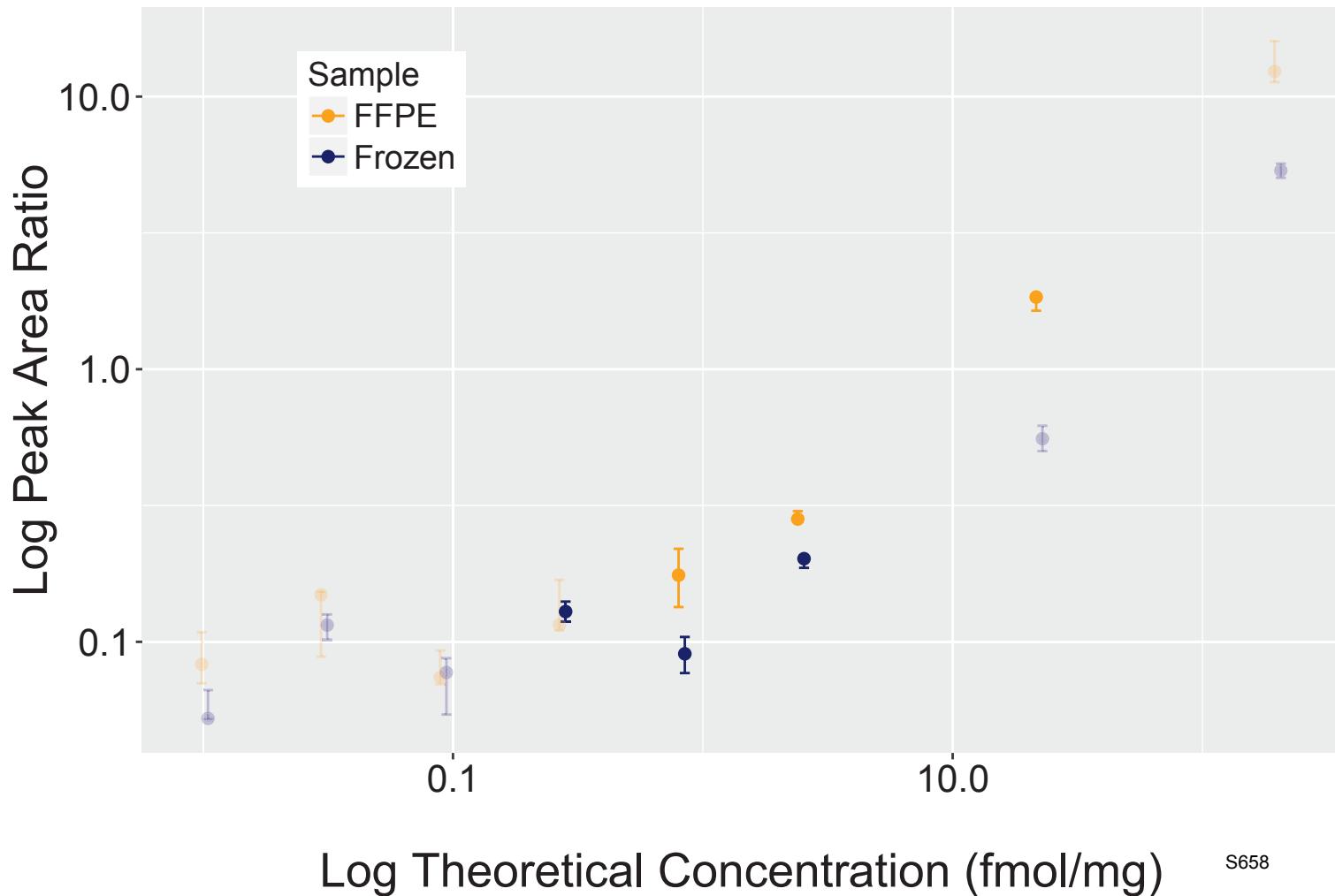
Analyte: VCP.WALSQSNPSALR



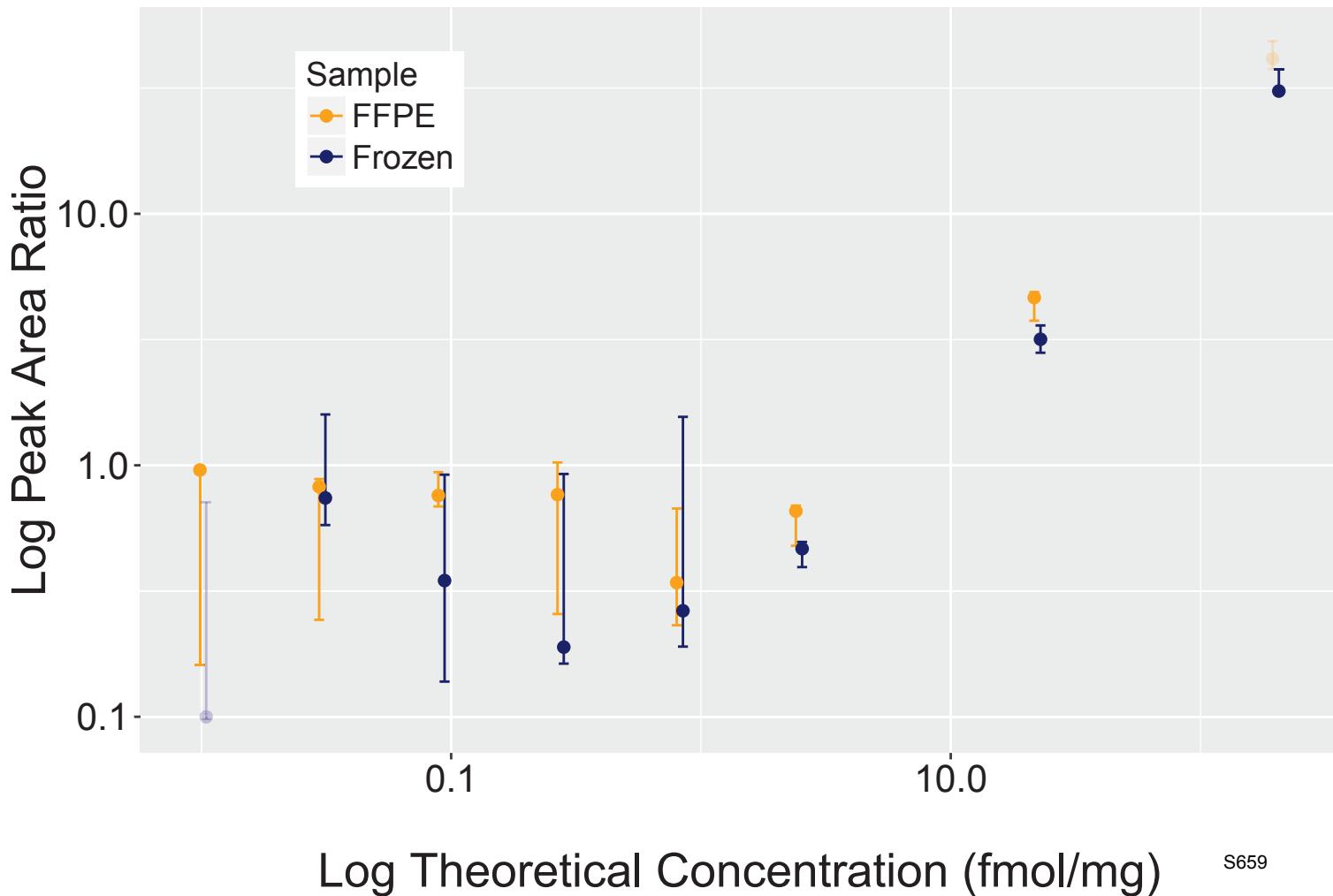
Analyte: ANXA6.WGTDEAQFIYILGNR



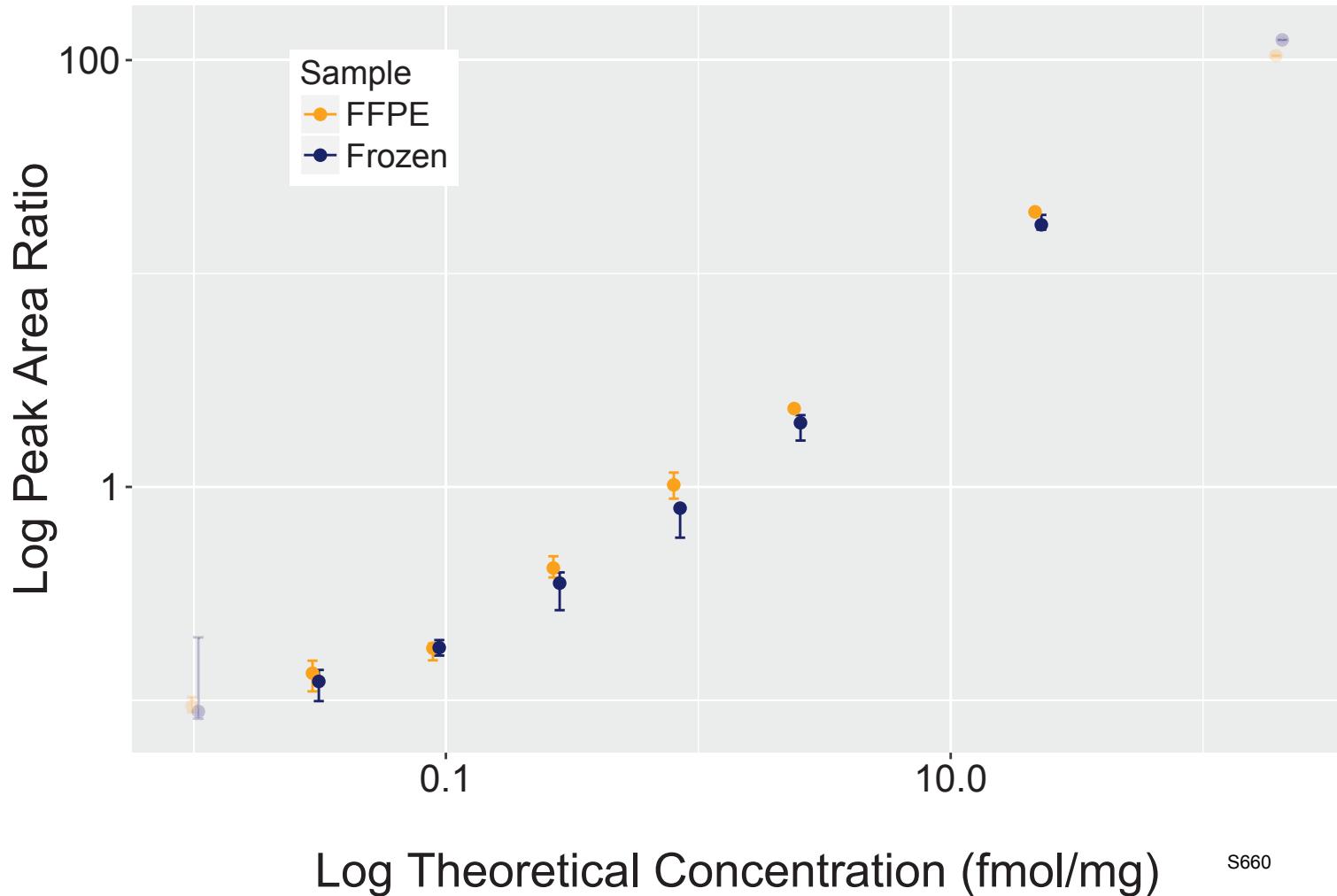
Analyte: CLTC.WLLTGISAQQNR



Analyte: NAPA.YEELFPAFSDSR

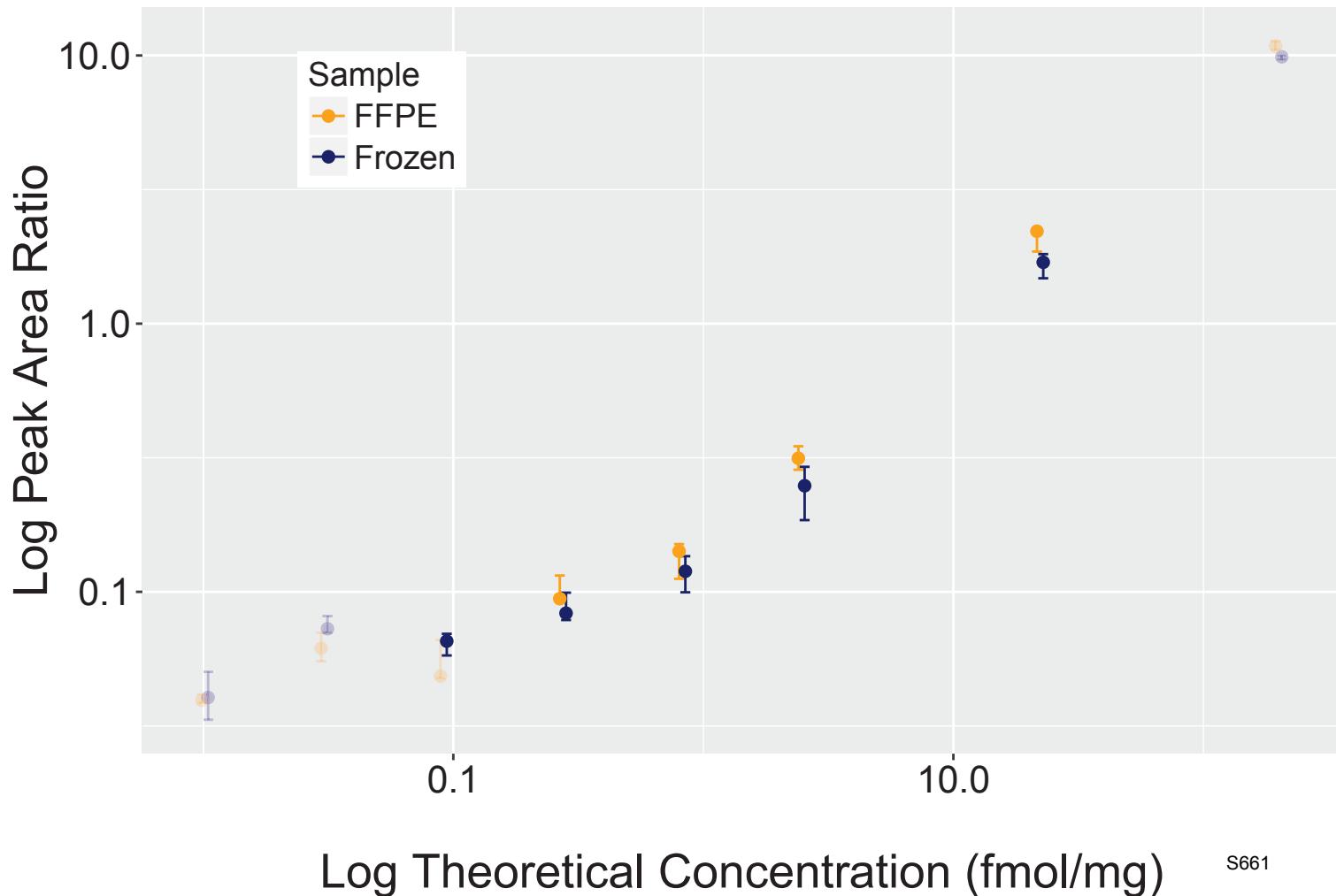


Analyte: IDH2.YFDLGLPNR

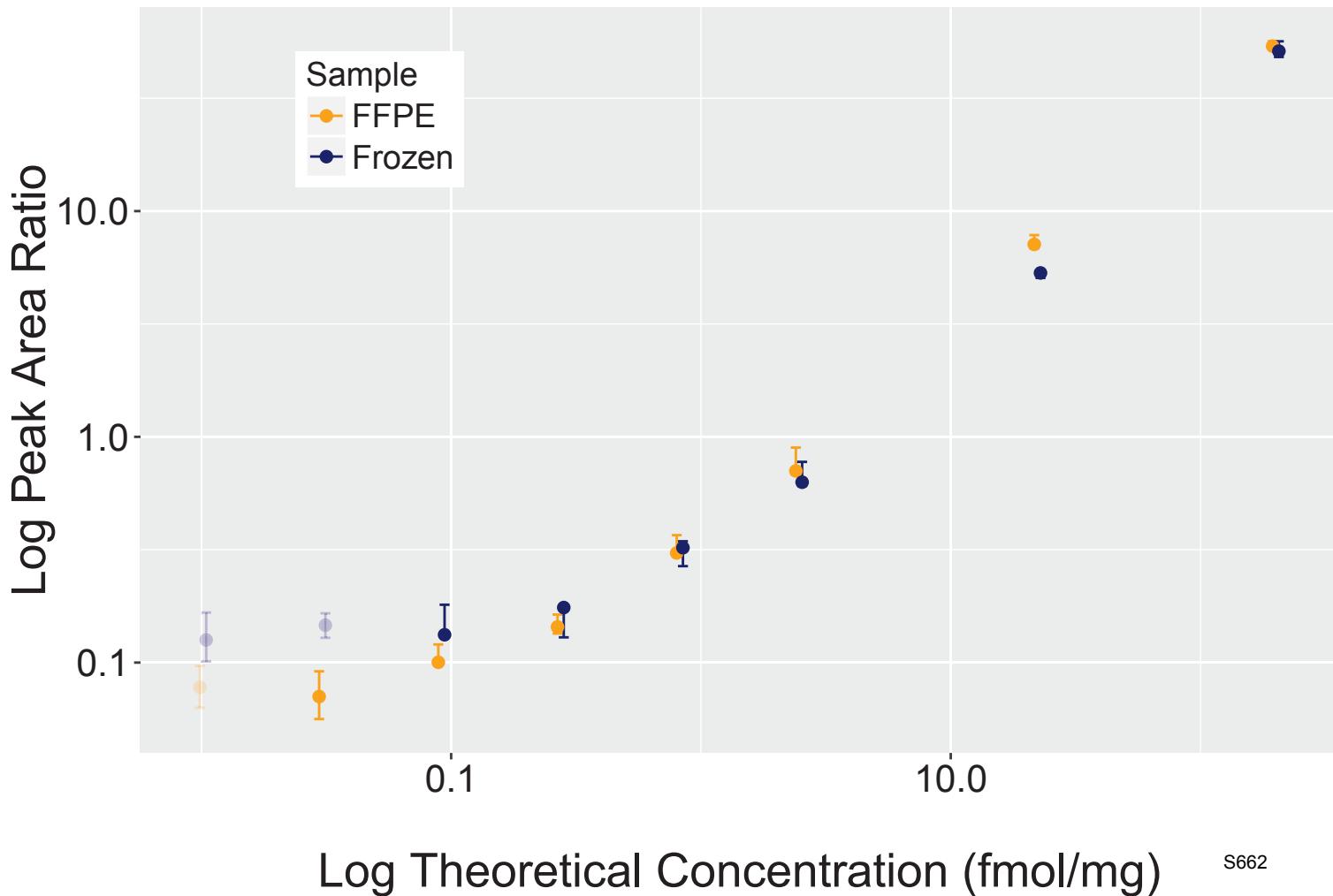


S660

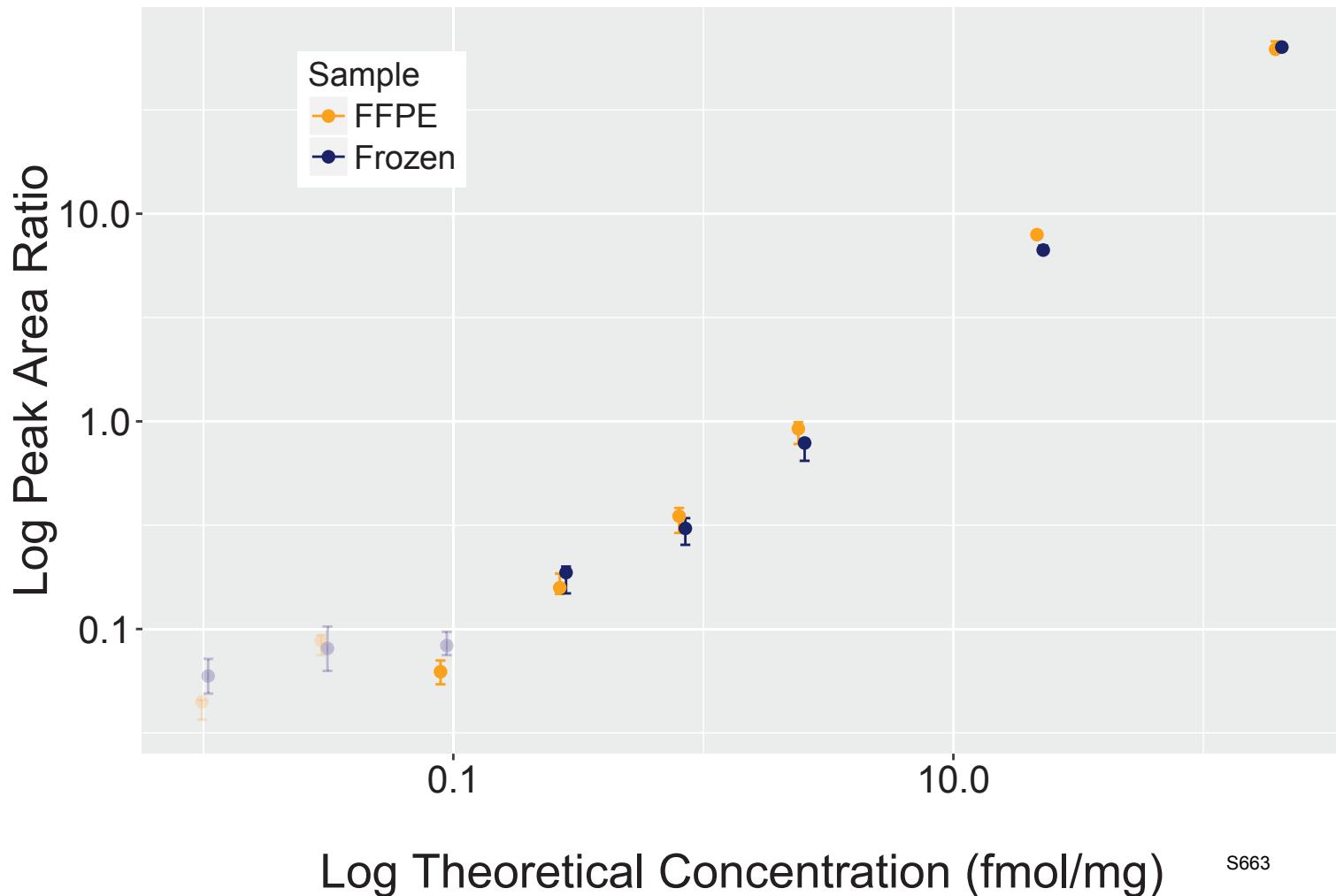
Analyte: ISOC1.YFGDIISVGQR



Analyte: DSP.YGDGIQLTR

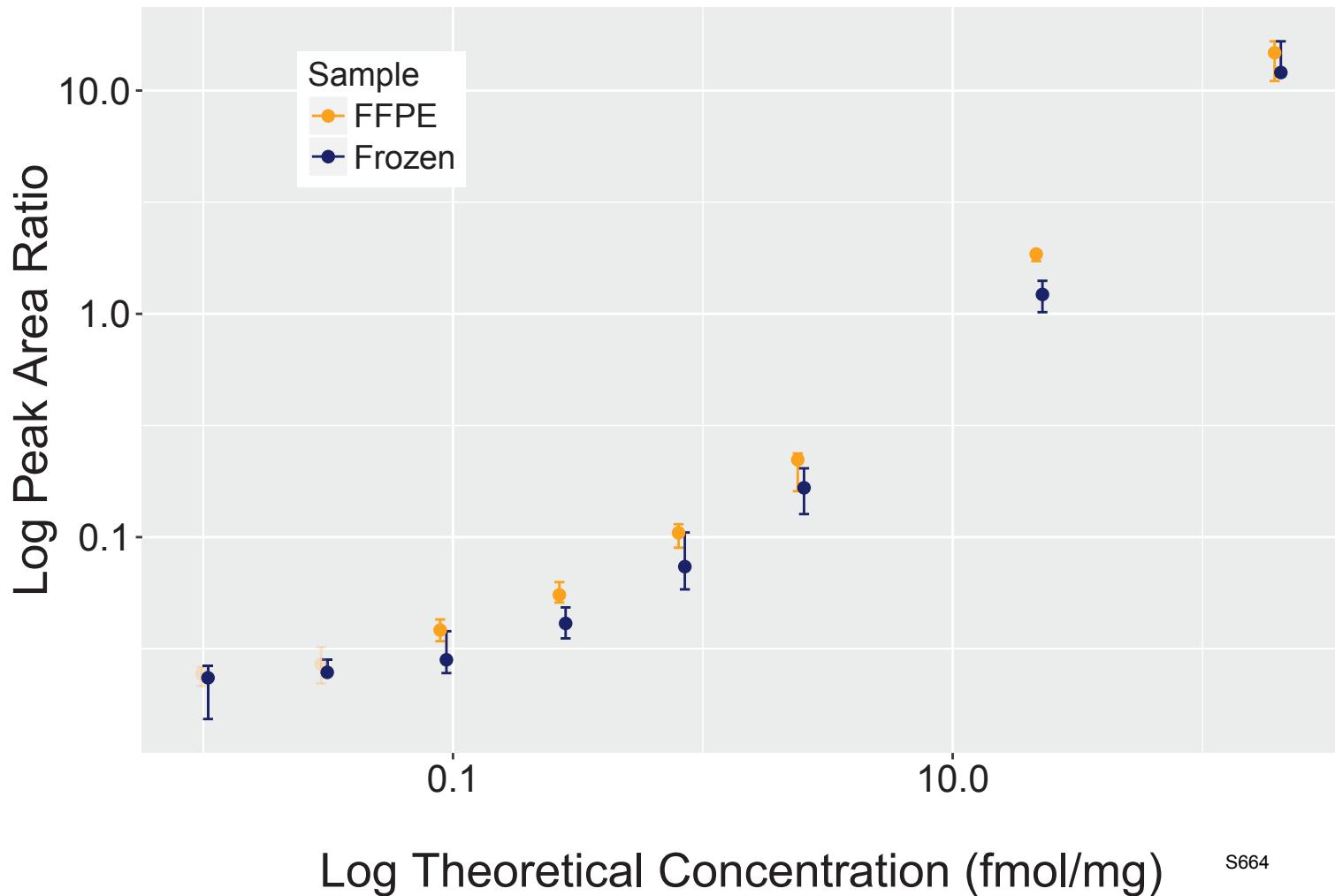


Analyte: PSPC1.YGEPSEVFINR

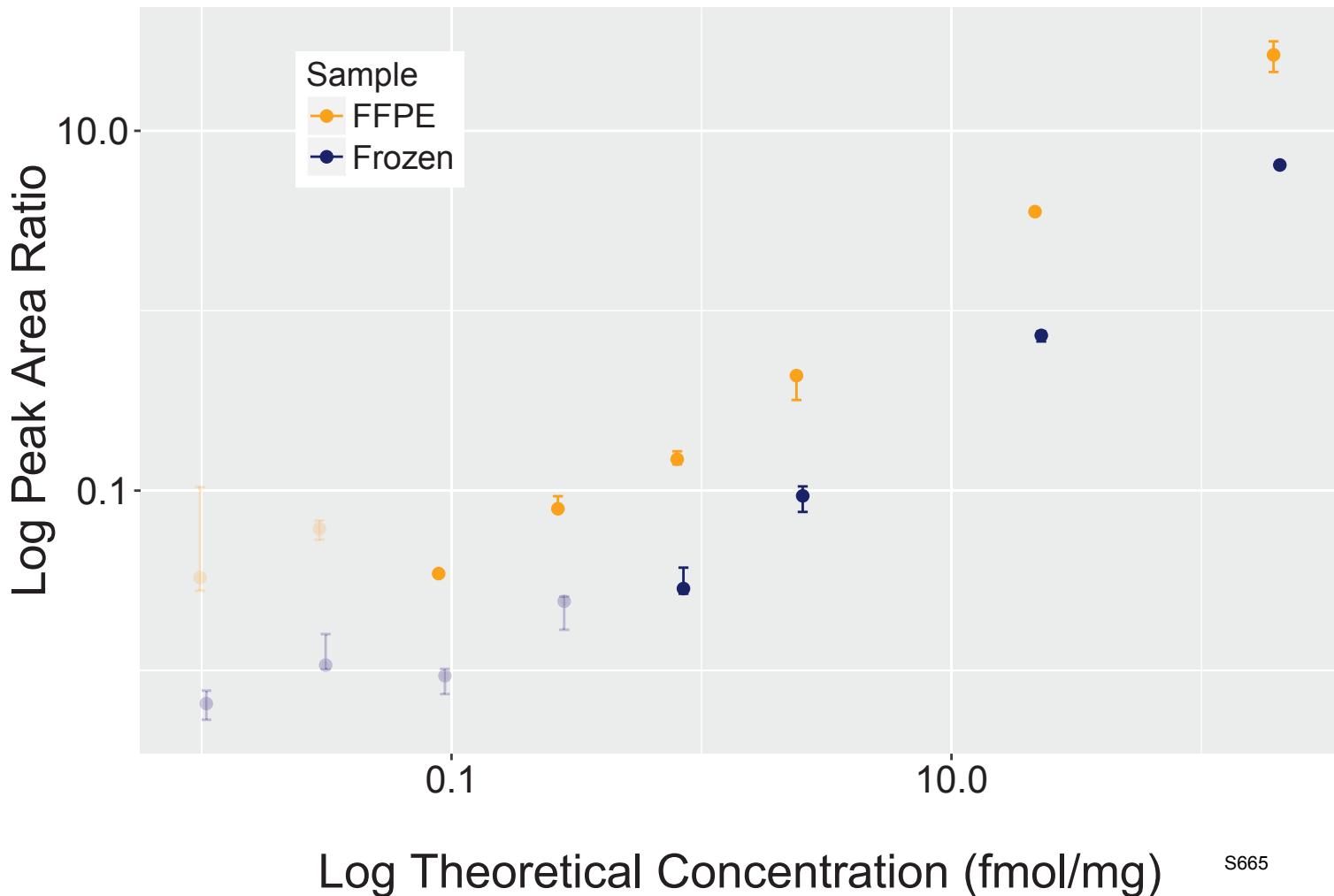


S663

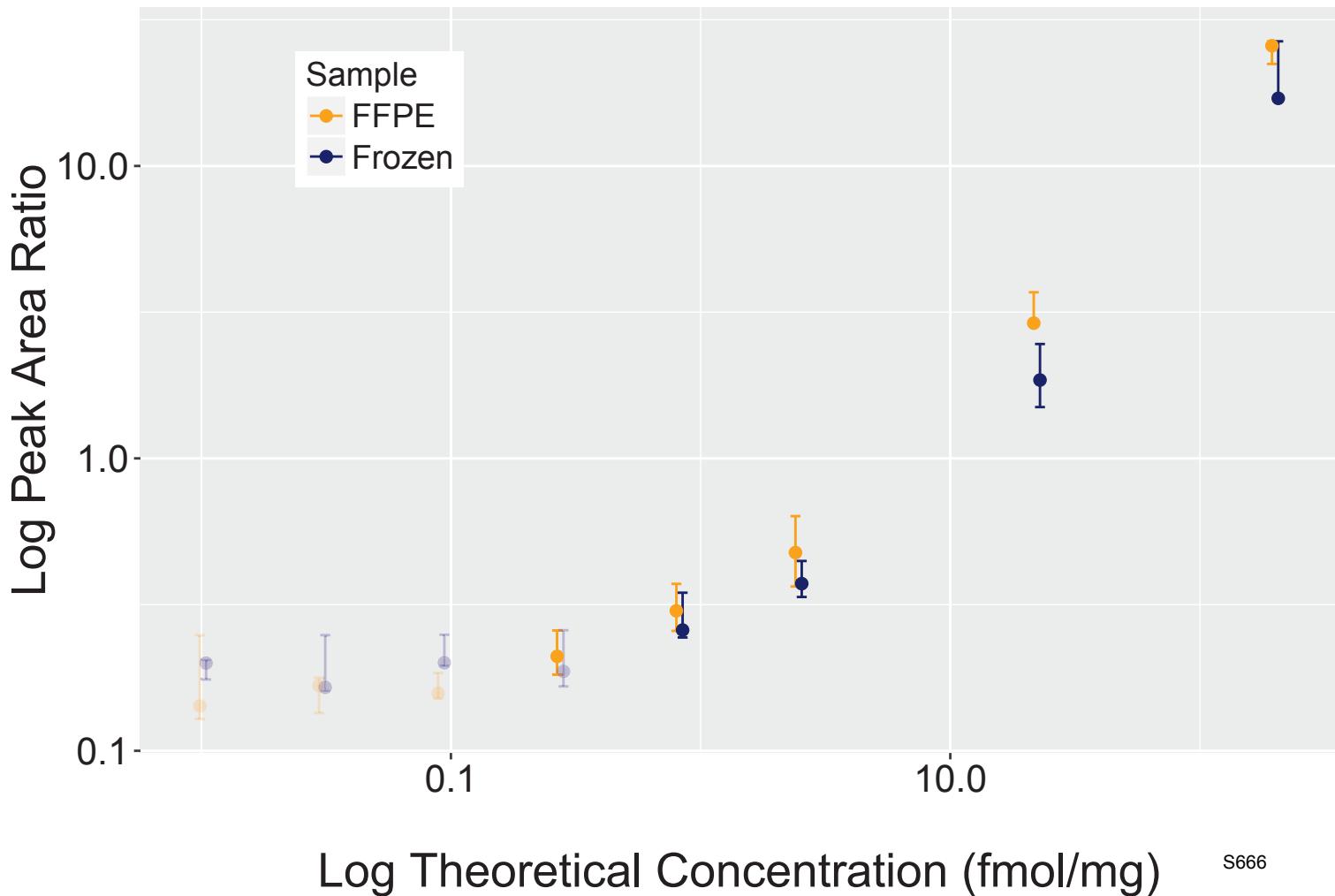
Analyte: FLNA.YGGDEIPFSPYR



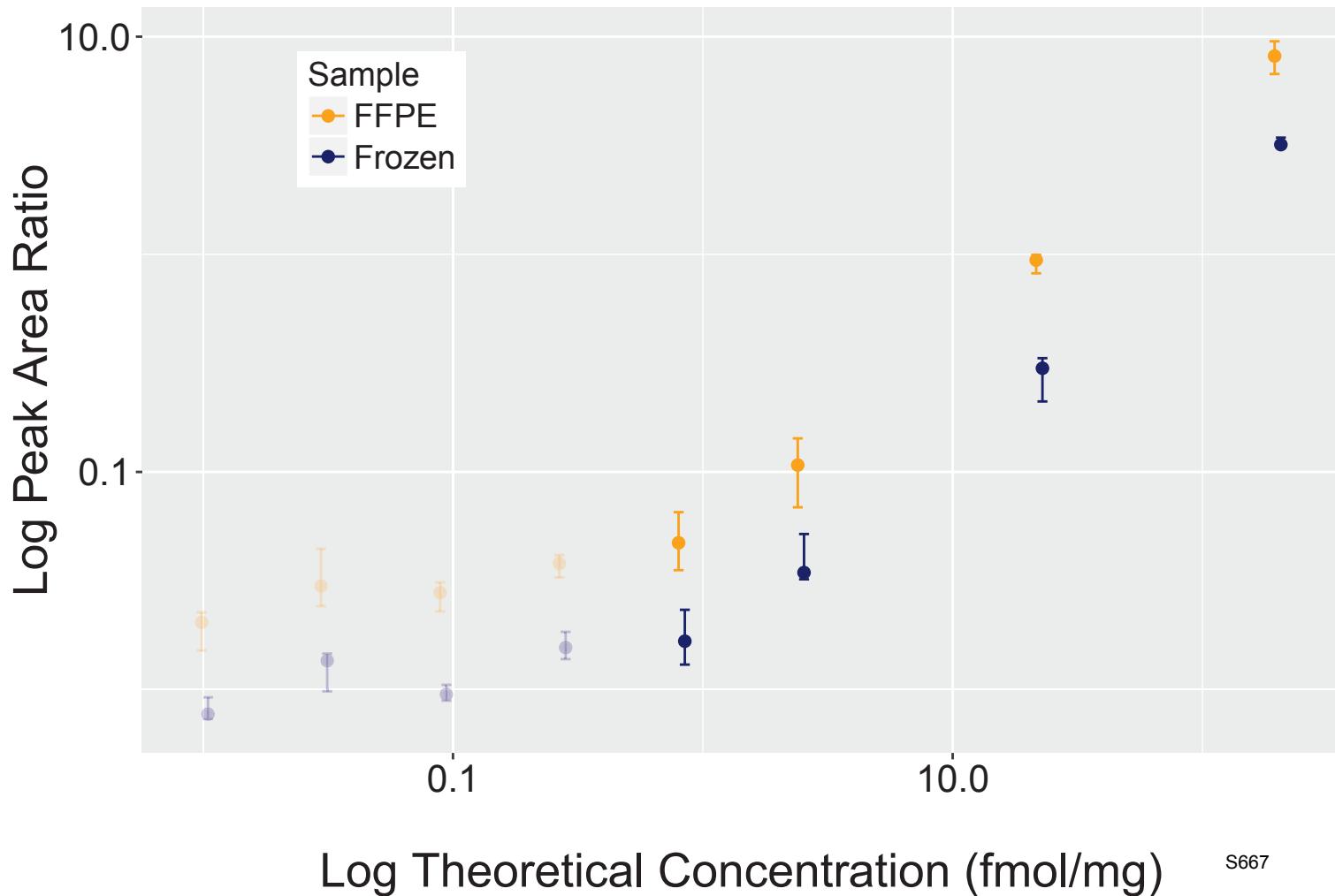
Analyte: PDIA3.YGVSGYPTLK



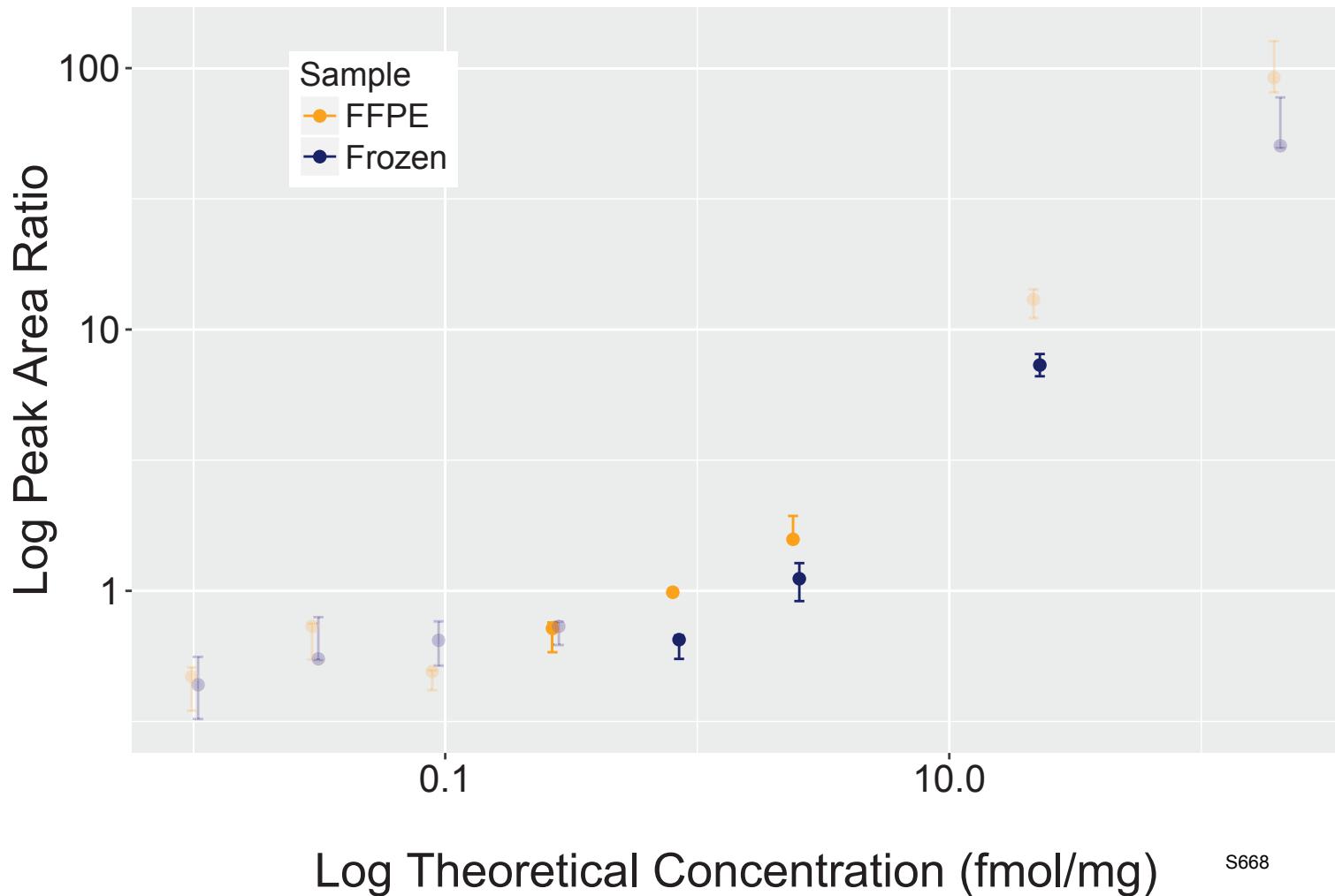
Analyte: GDI2.YIAIVSTTVETK



Analyte: ENO1.YISPDQLADLYK

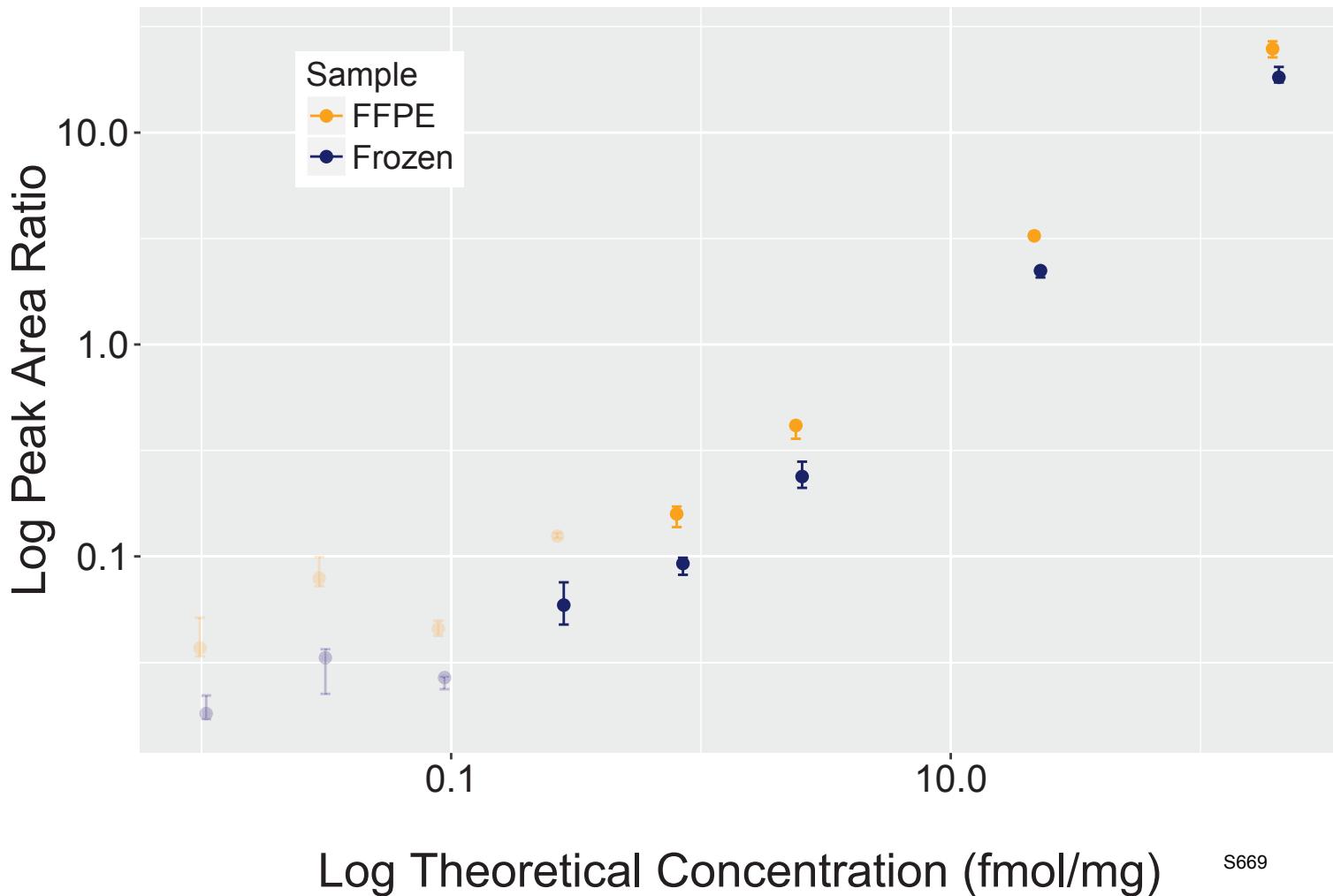


Analyte: ACSF2.YIVFVTNYPLTISGK



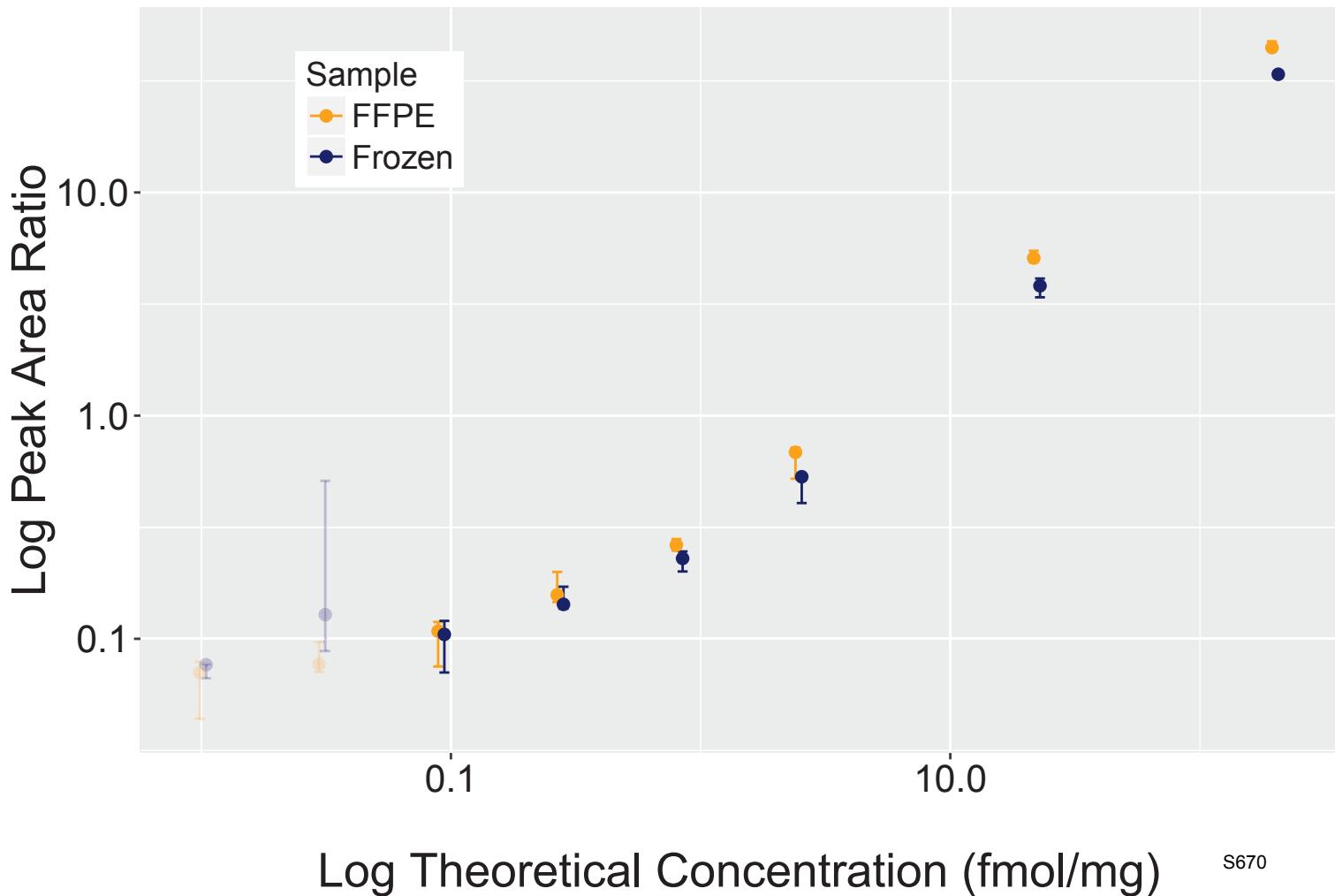
S668

Analyte: YWHAQ.YLAEVAC[+57]GDDR



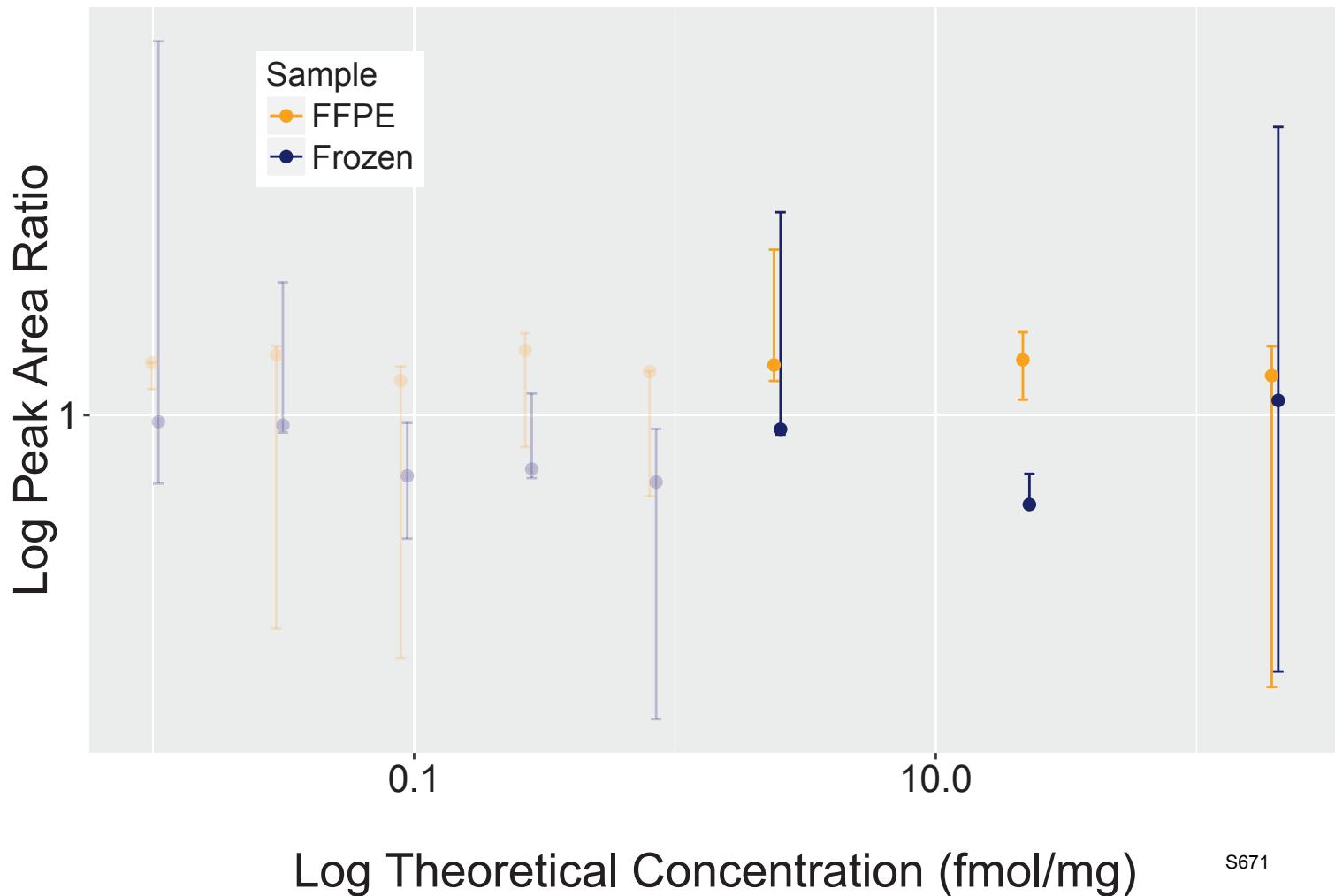
S669

Analyte: MAT2A.YLDEDТИYHLQPSGR



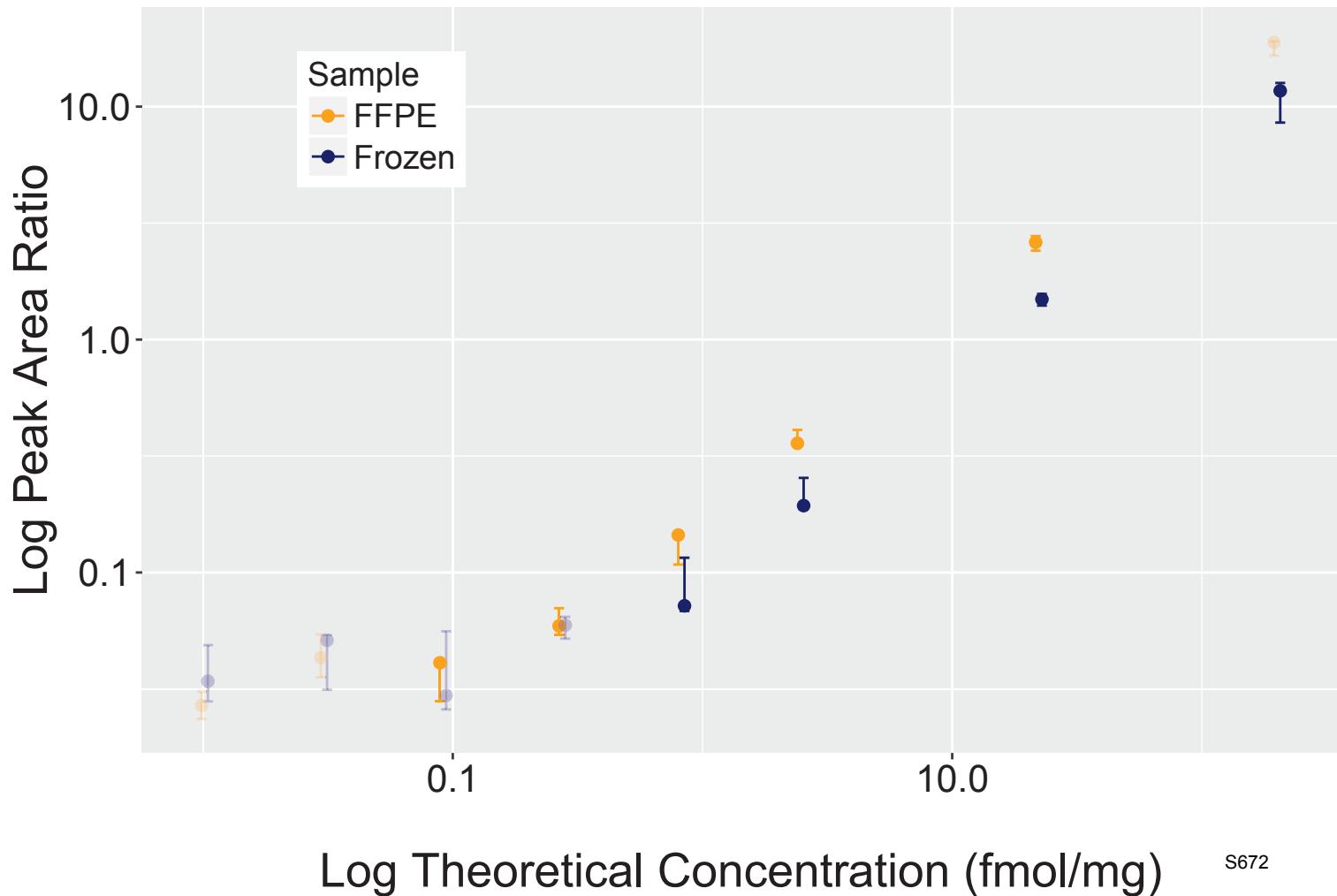
S670

Analyte: KARS.YLDLILNDFVR

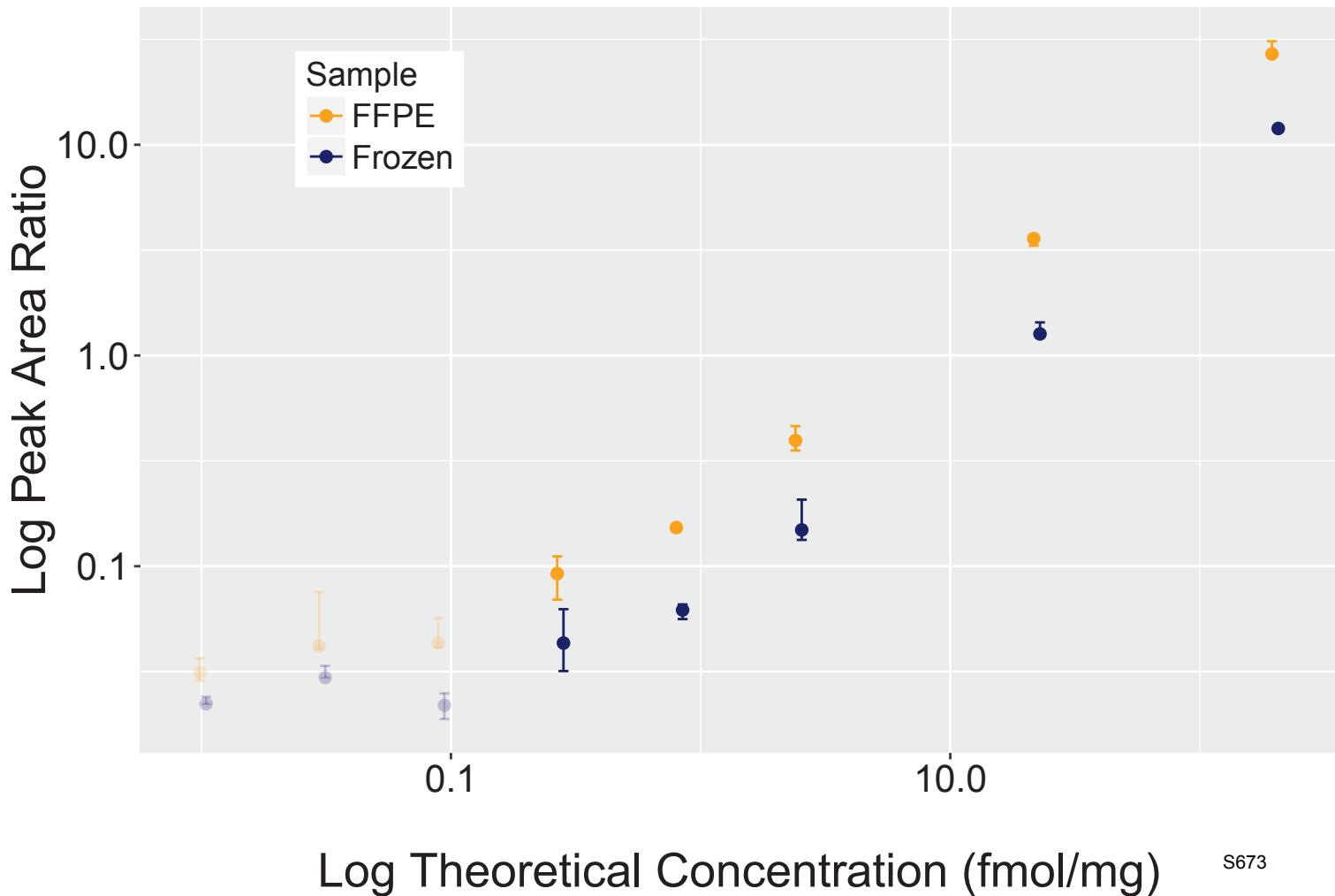


S671

Analyte: YWHAQ.YLIANATNPESK

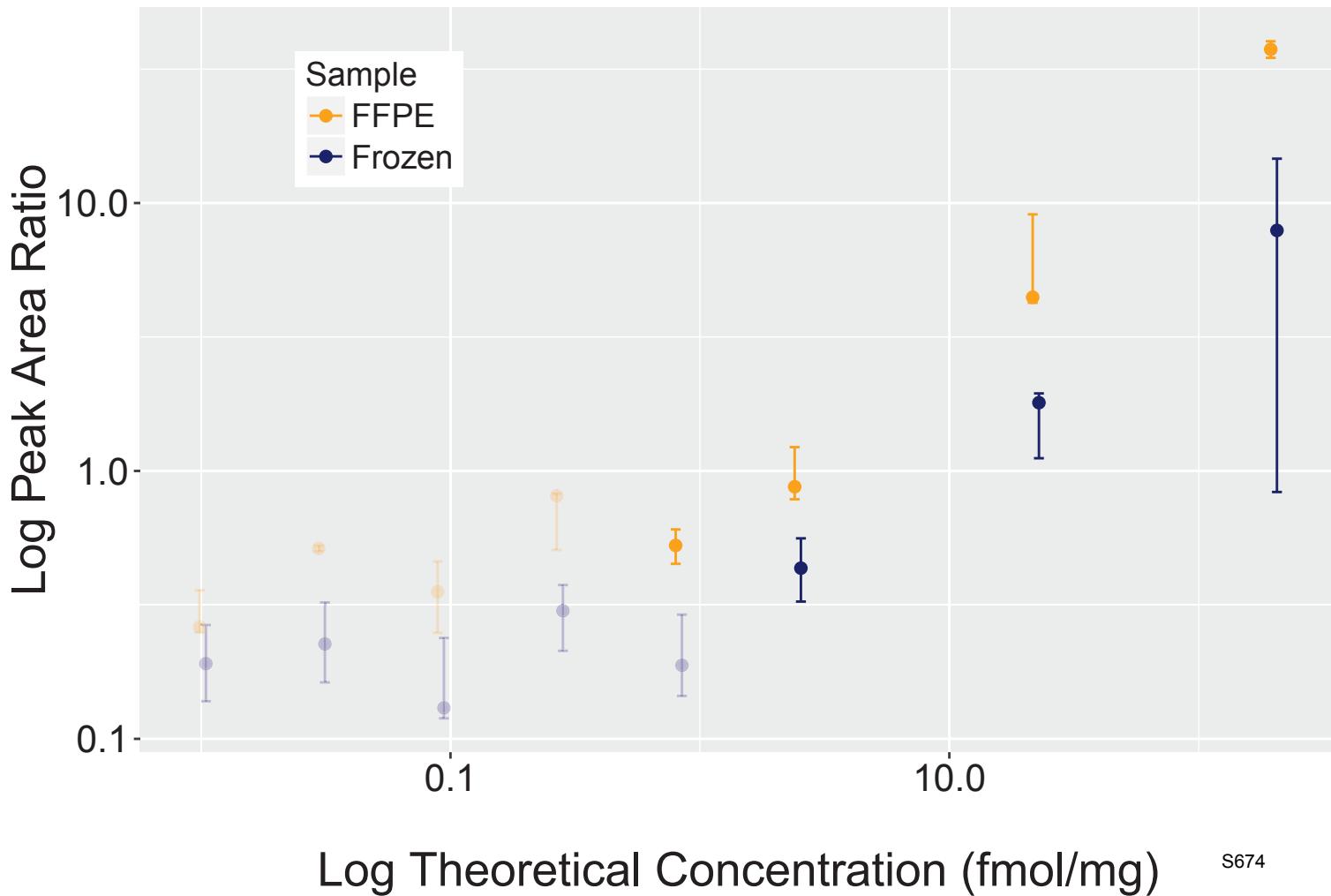


Analyte: YWHAB.YLIPNATQPESK



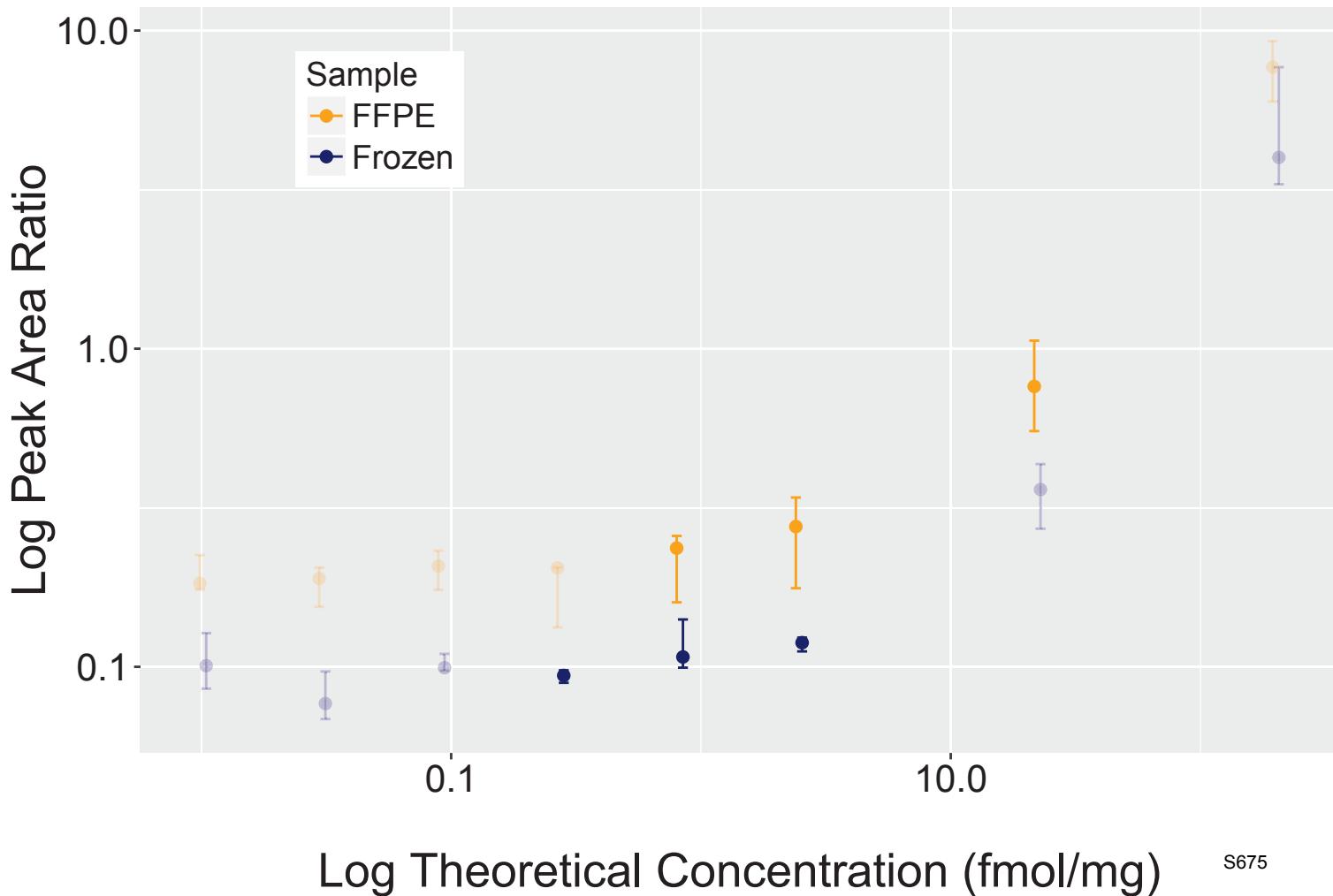
S673

Analyte: NAMPT.YLLETSGNLDGLEYK

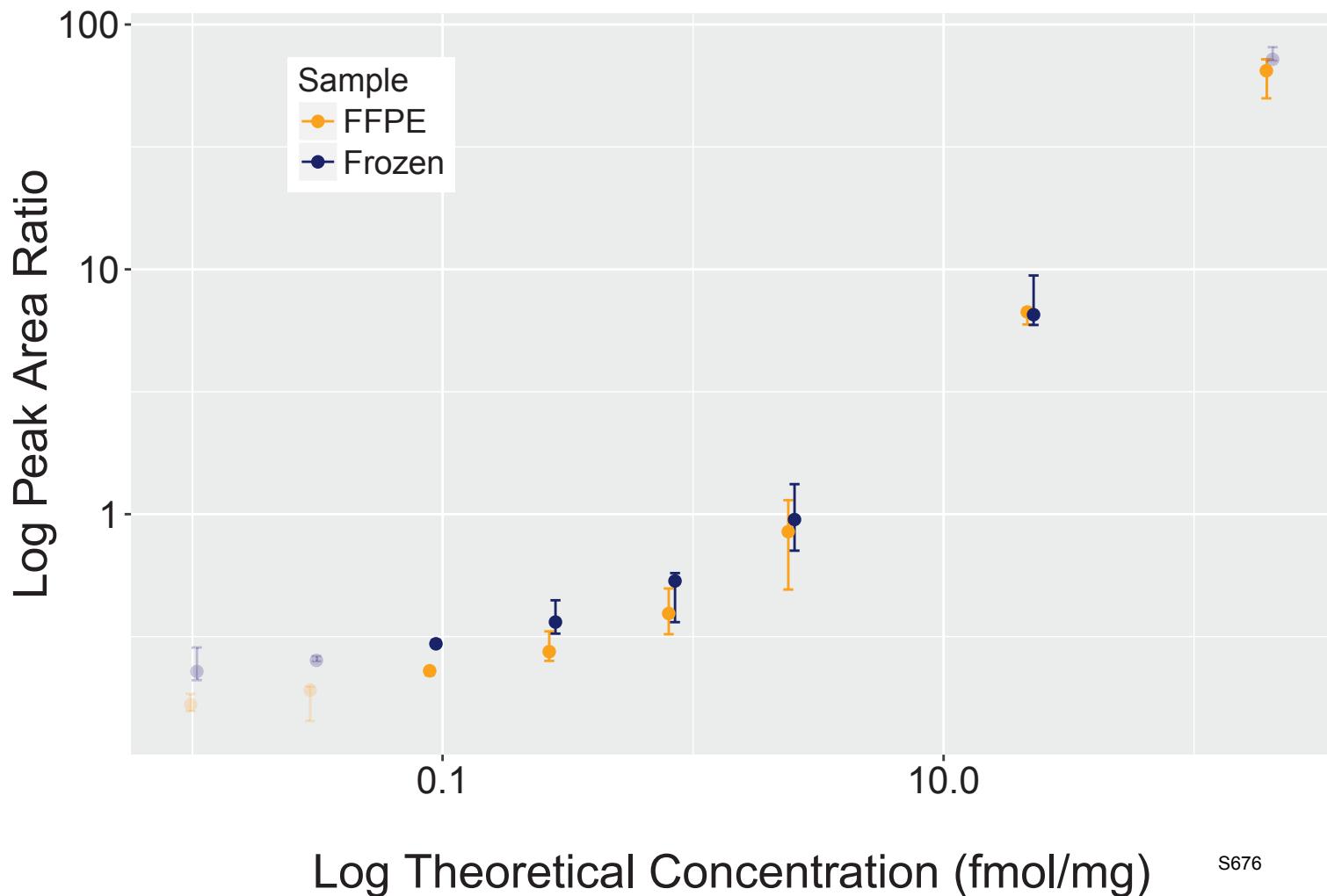


S674

Analyte: COMT.YLPDTLLLEEC[+57]GLLR

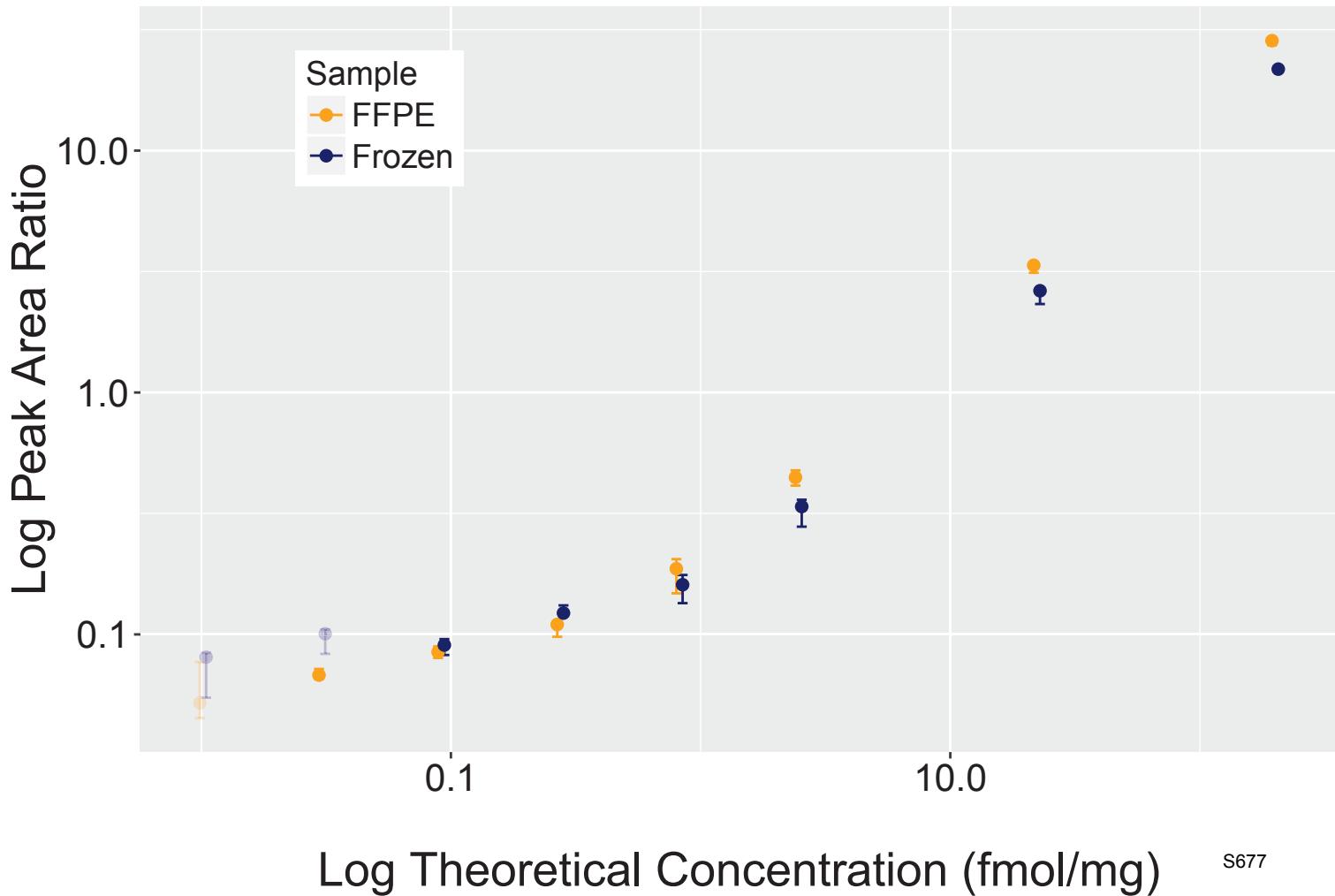


Analyte: ANPEP.YLSYTLNPDLIR

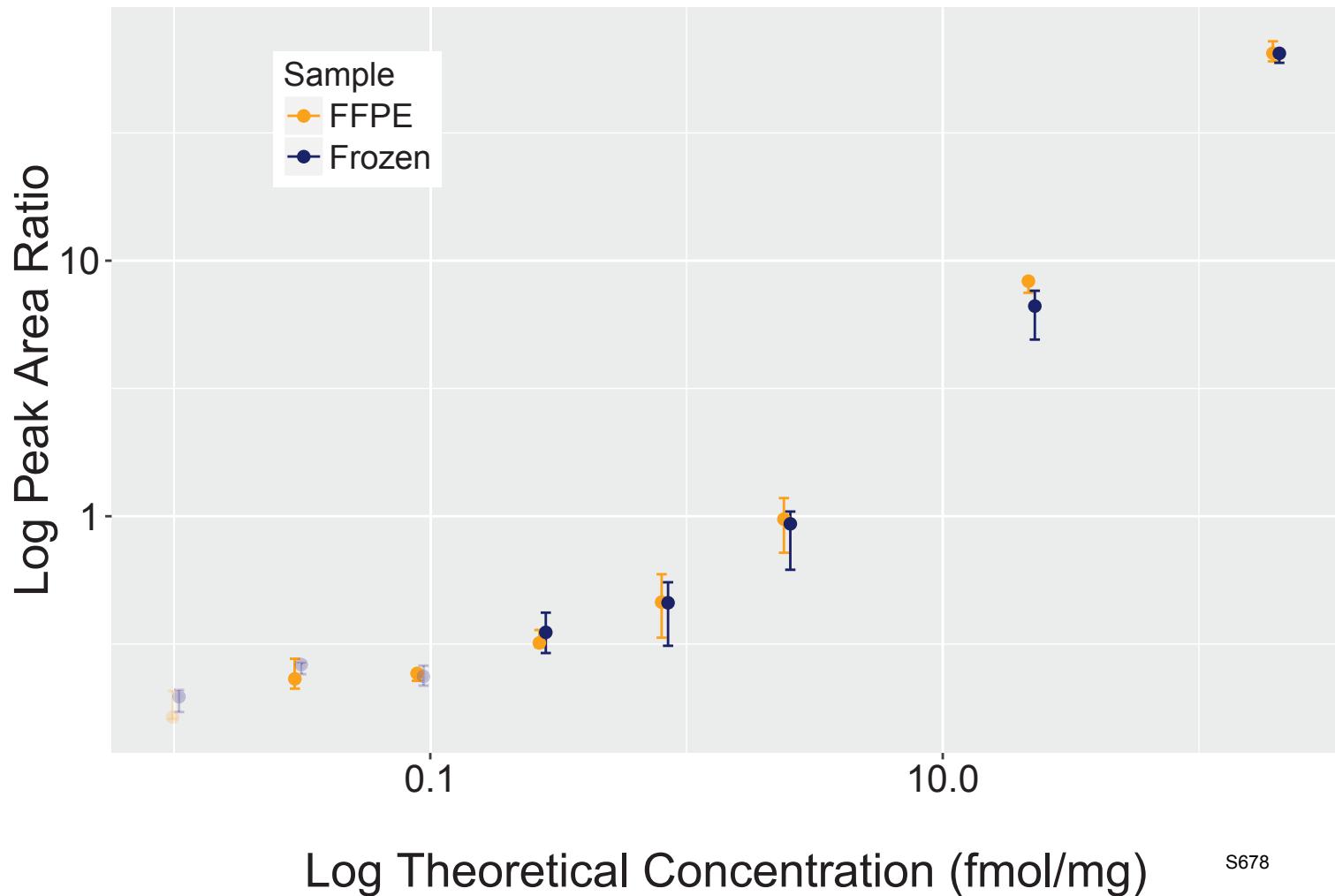


S676

Analyte: PSMD2.YLYSSEDYIK

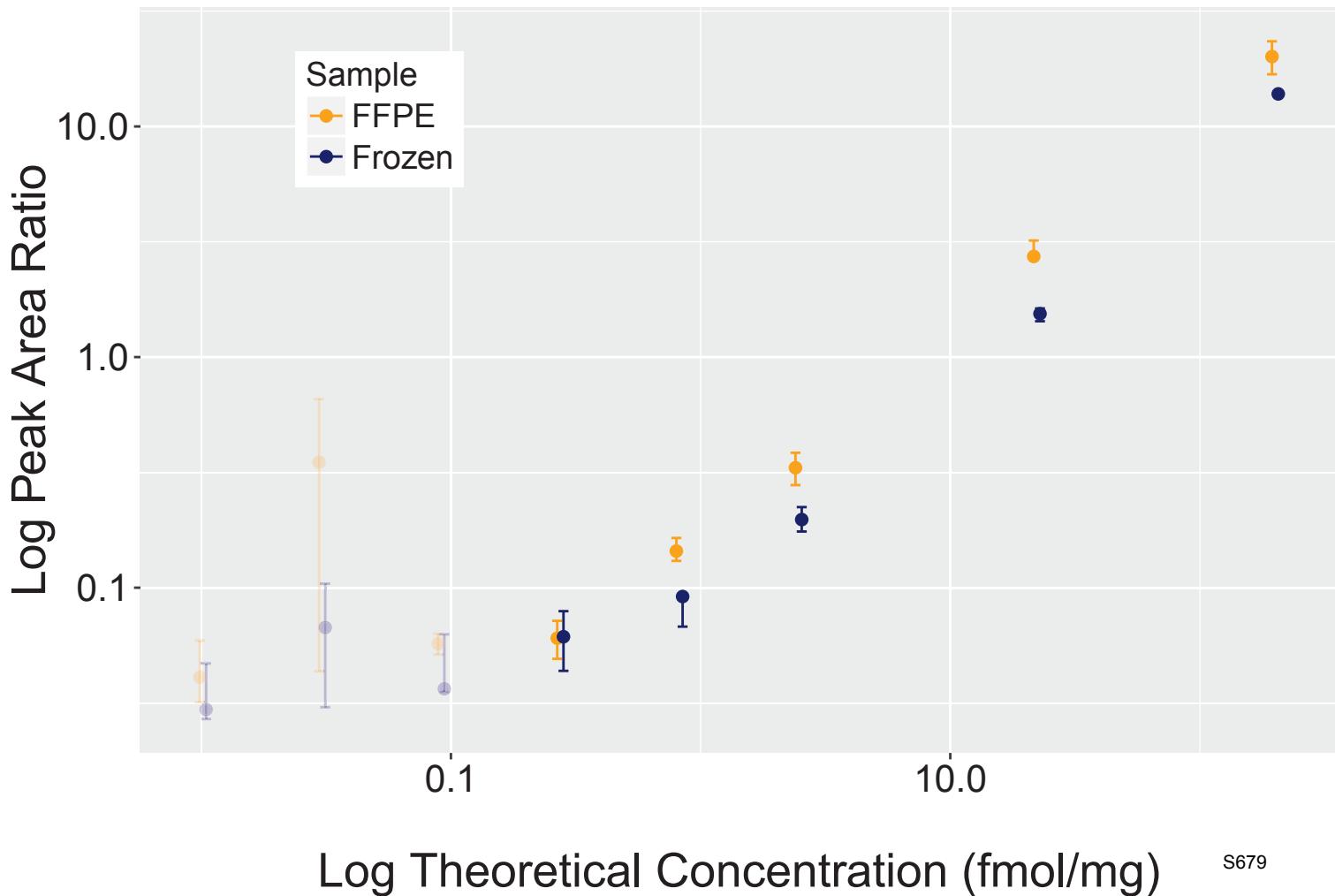


Analyte: DHX9.YPSPFFVFGEK

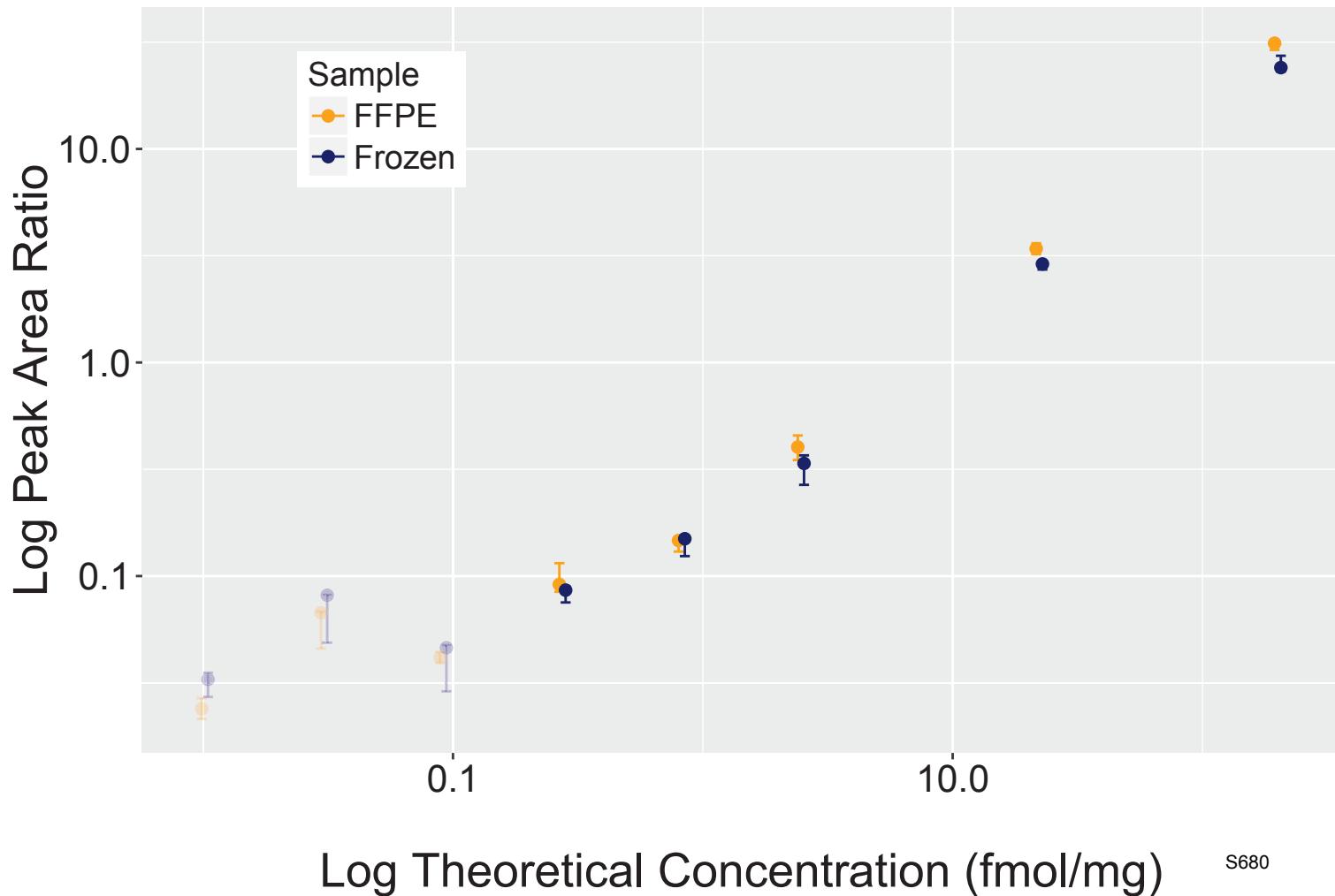


S678

Analyte: CAPG.YQEGGVESAFHK

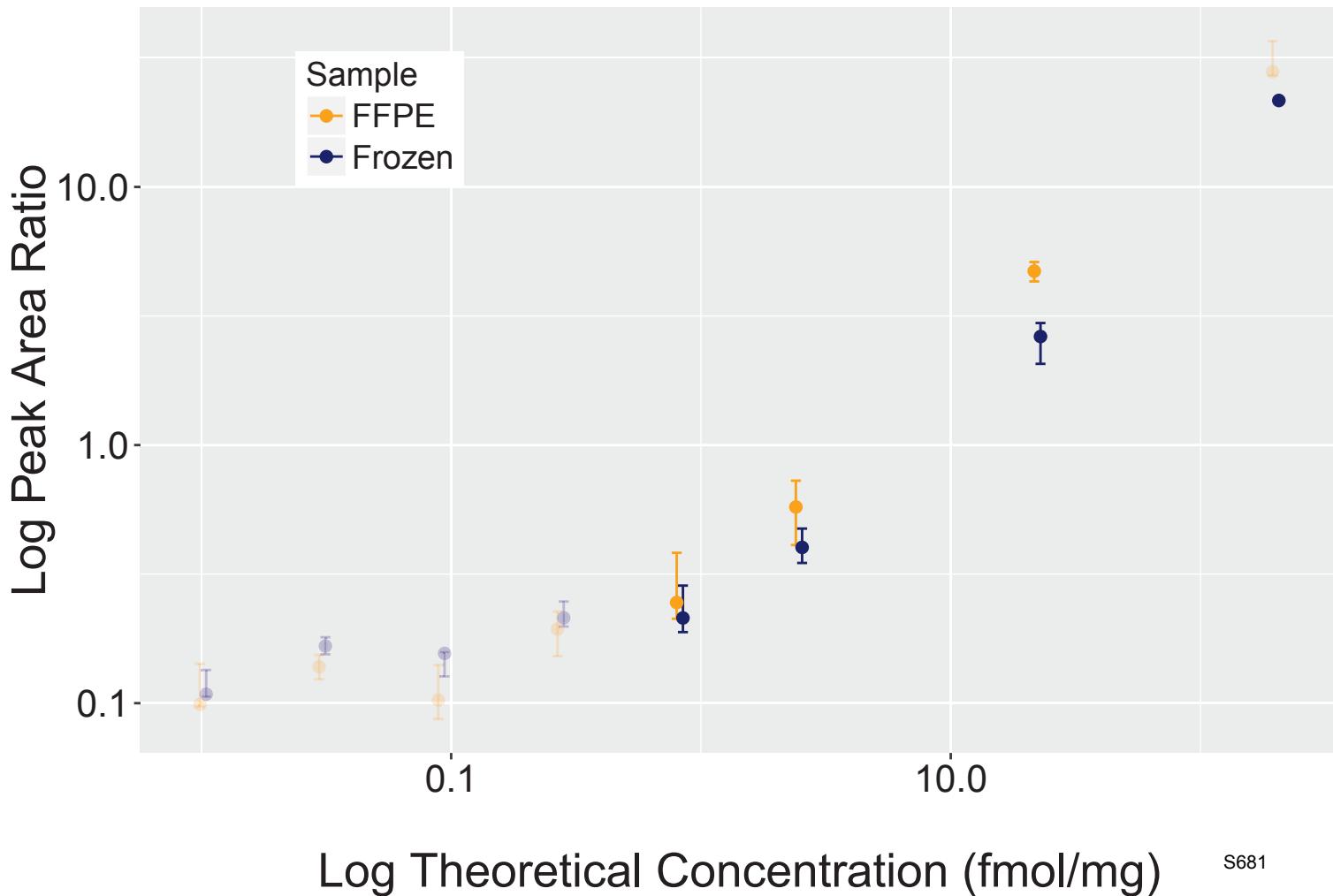


Analyte: CAPRIN1.YQEVTNNLEFAK



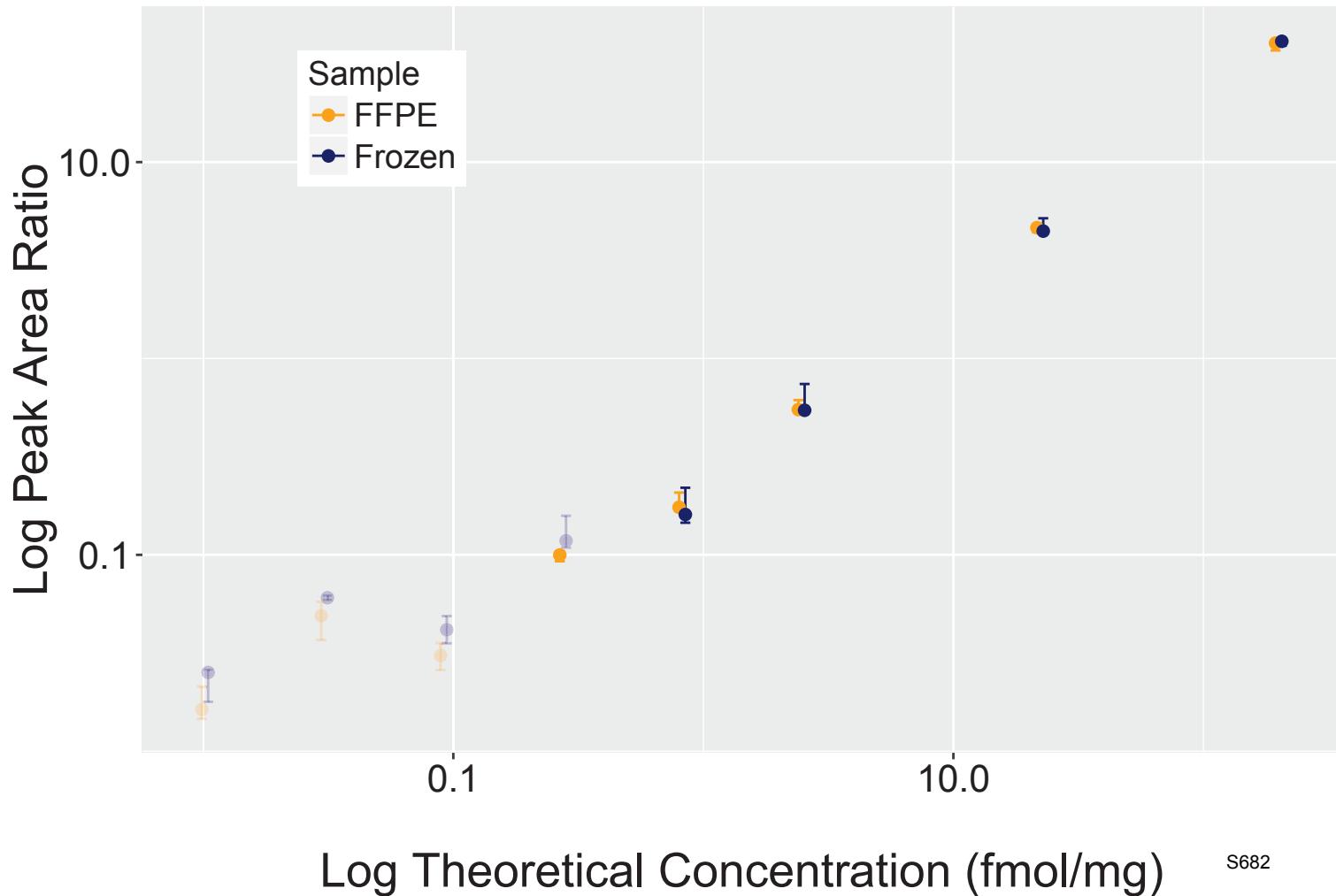
S680

Analyte: RUVBL1.YSVQLLTPANLLAK



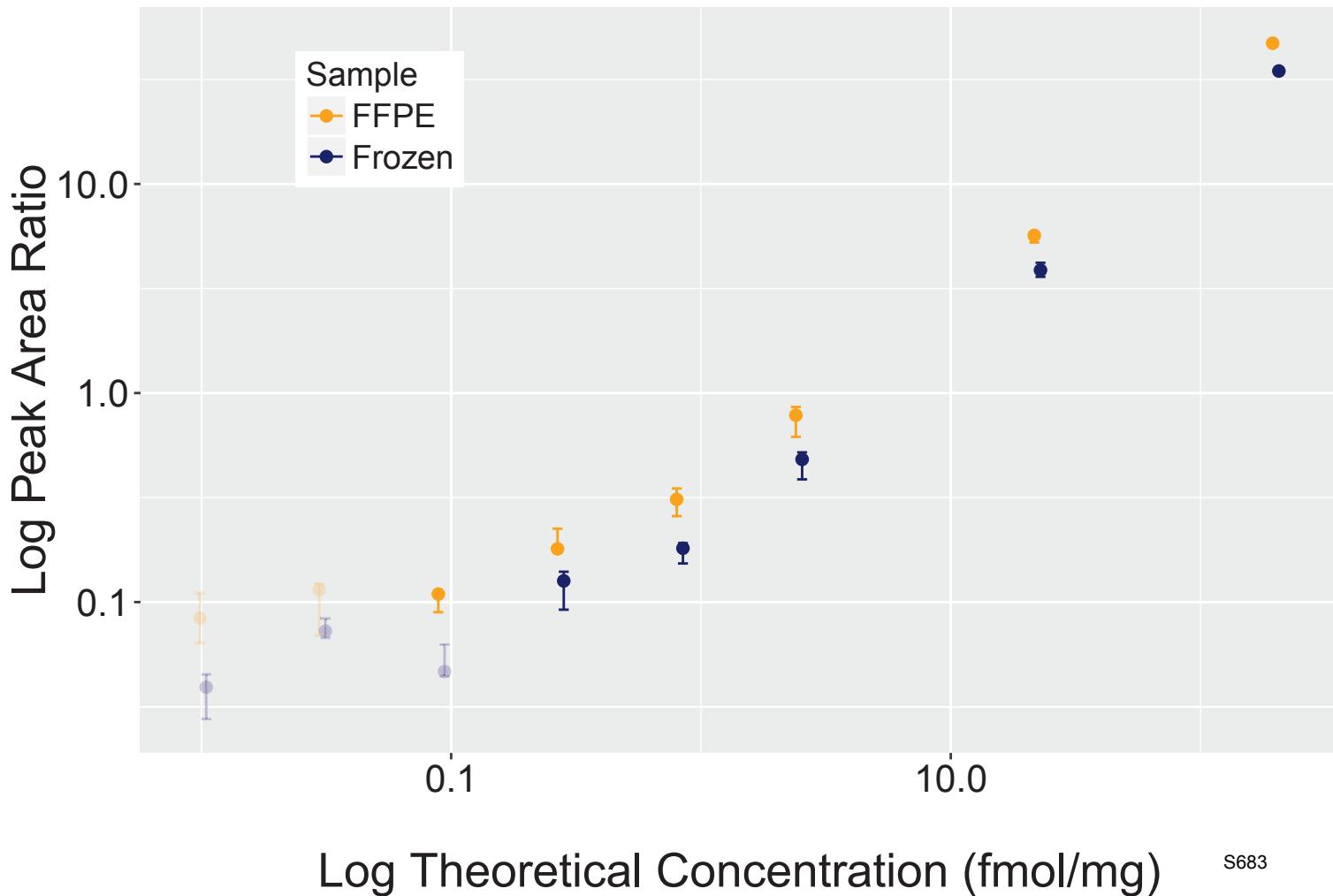
S681

Analyte: DHCR7.YTAAVPYR



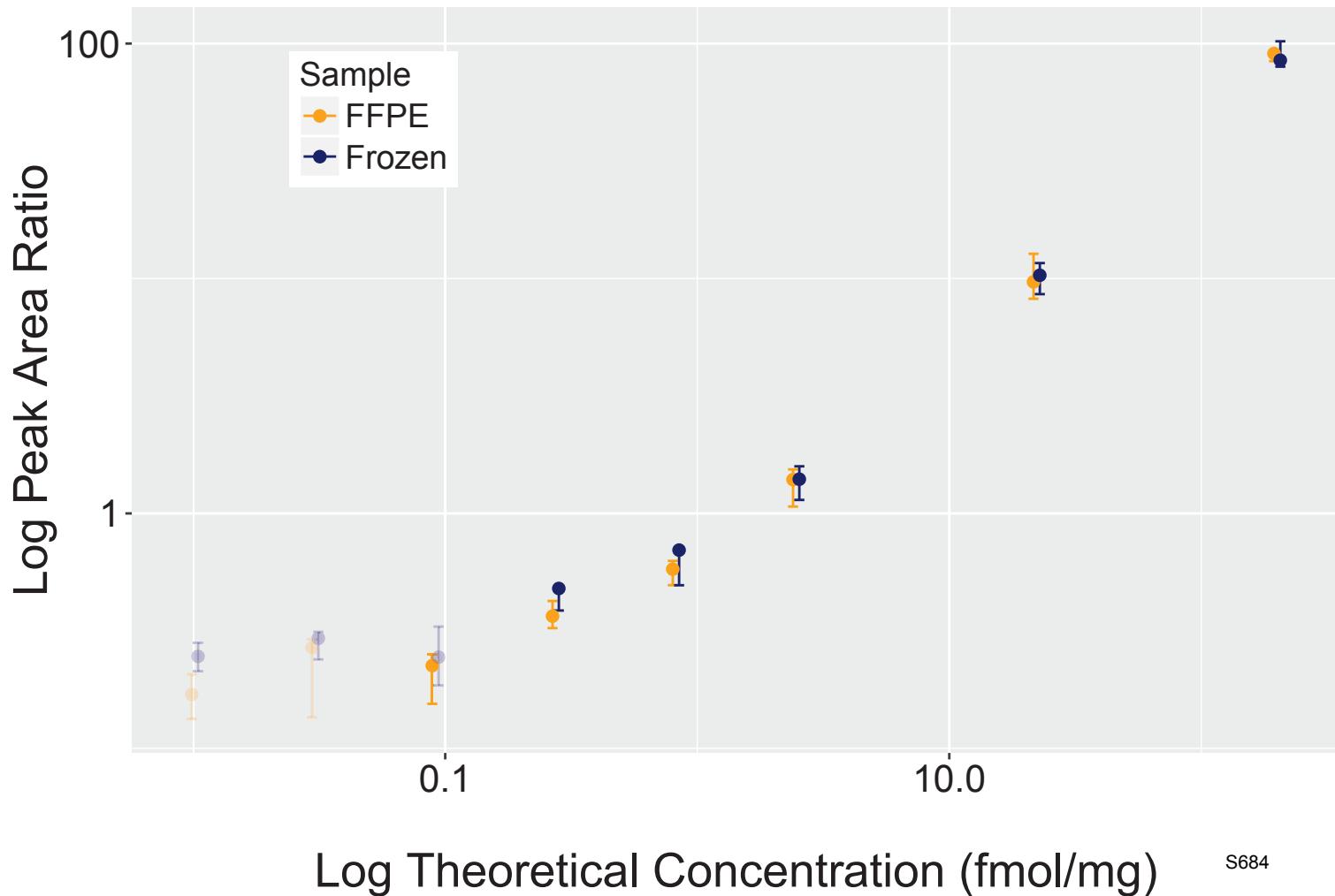
S682

Analyte: PDLM7.YTFAPSVSLNK



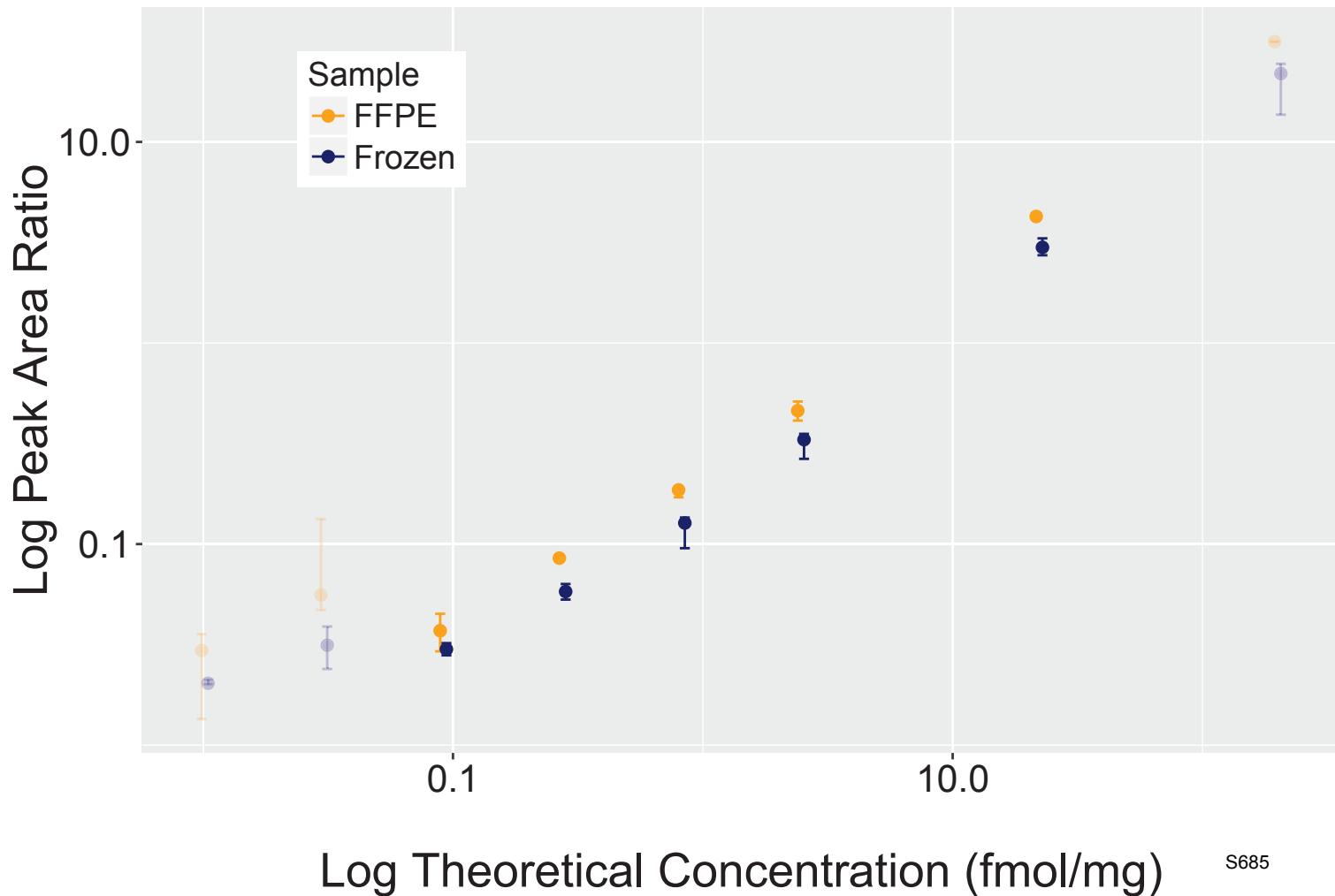
S683

Analyte: DSG3.YTGPYTFALEDQPVK

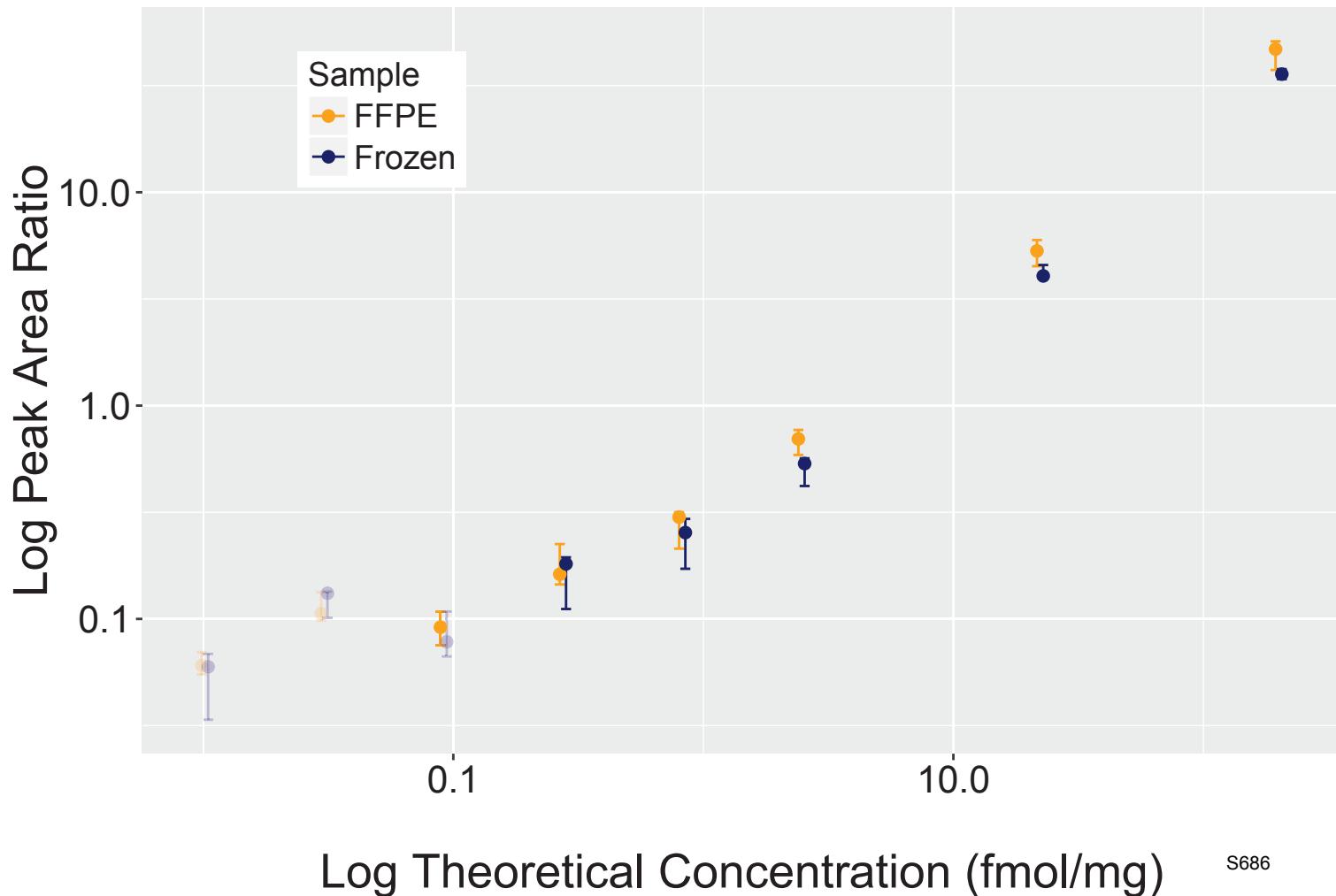


S684

Analyte: TBCB.YTISQEAYDQR

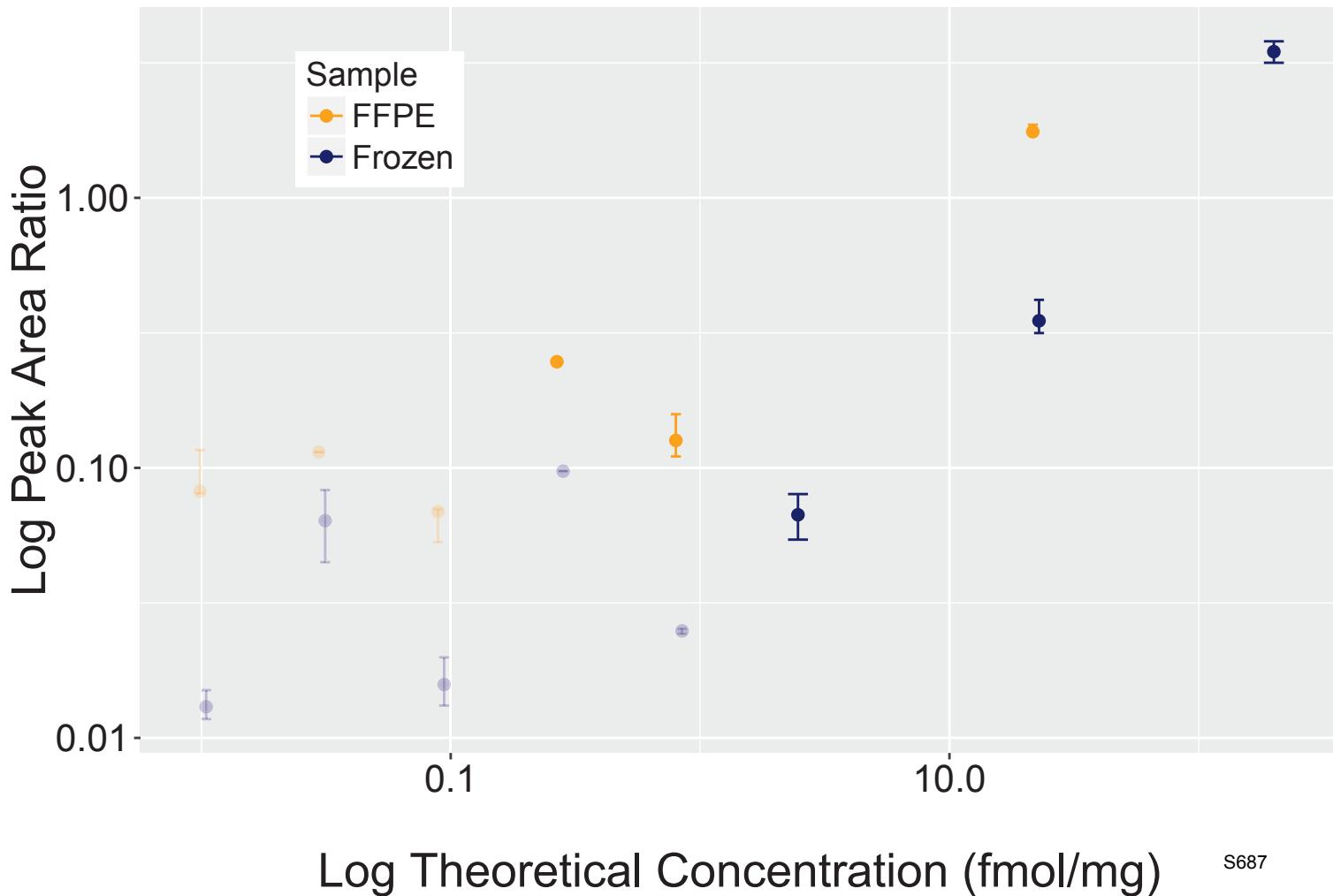


Analyte: MTHFD1.YVVVTGITPTPLGEGK

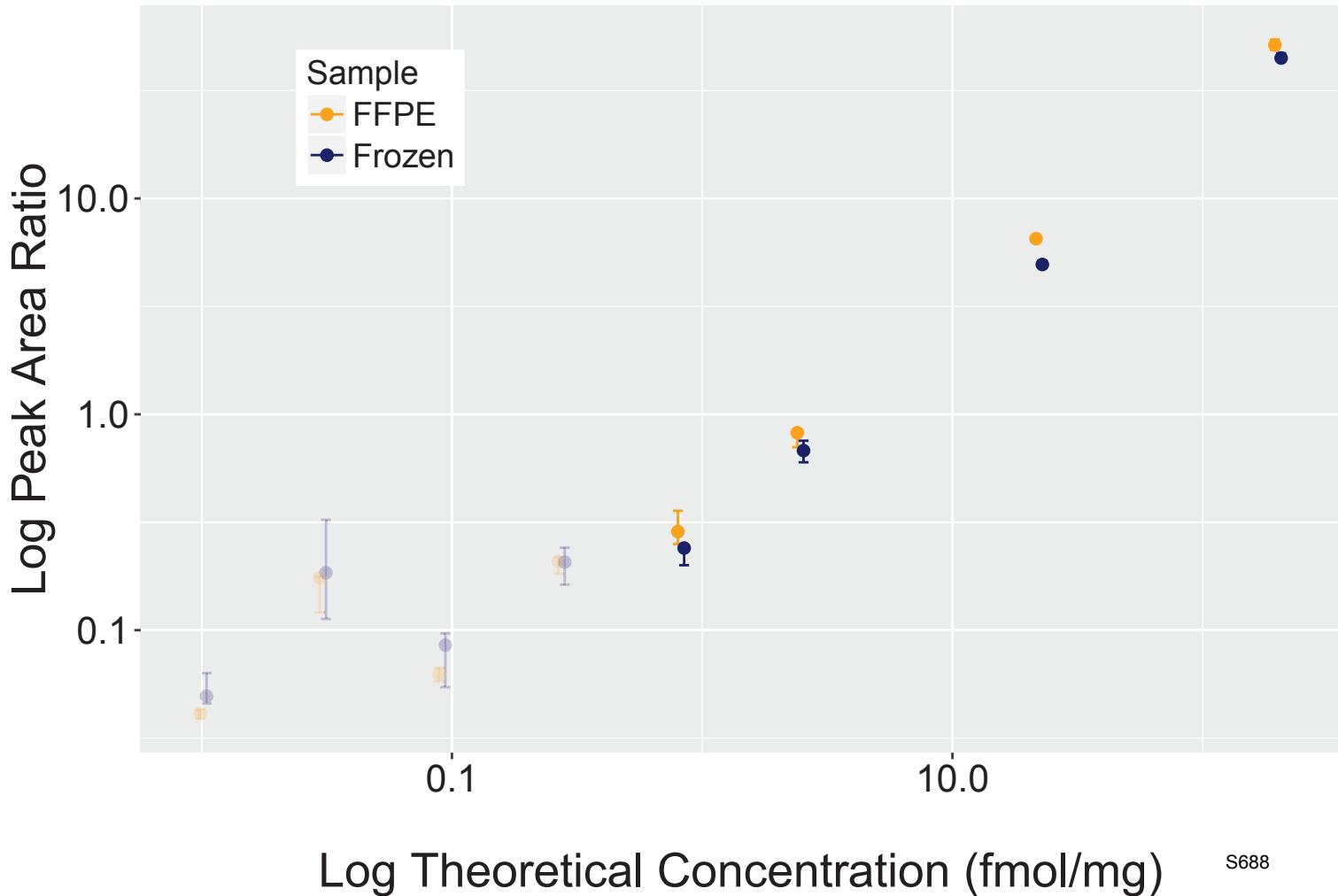


S686

Analyte: PEBP1.YVWLVYEQDRPLK



Analyte: AIP.YYDAIAC[+57]LK



Analyte: PDCD6IP.YYDQIC[+57]SIEPK

