

Table S1. The proteins and the technologies used to measure their level in blood plasma.

Protein	Gene Name	UniProt	Peptide	SIS (fmol/uL)
Alpha-2-antiplasmin	SERPINF2	P08697	DFLQSLK	312.97
Alpha-2-antiplasmin	SERPINF2	P08697	LGNQEPGGQTALK	95.21
Alpha-2-macroglobulin	A2M	P01023	AIGYLNTGYQR	481.75
Alpha-2-macroglobulin	A2M	P01023	LLIYAVLPTGDVIGDSAK	505.65
Alpha-2-macroglobulin	A2M	P01023	TEHPFTVEEFVLPK	494.20
Antithrombin	SERPINC1	P01008	DDLVSDAFHK	466.75
Antithrombin	SERPINC1	P01008	FATTFYQHLADSK	422.52
Antithrombin	SERPINC1	P01008	TSDQIHFFFAK	456.89
Beta-2-glycoprotein 1	APOH	P02749	ATVVYQGER	479.76
C4b-binding protein alpha chain	C4BPA	P04003	EDVYVVGTVLR	425.72
C4b-binding protein alpha chain	C4BPA	P04003	GYILVGQAK	420.45
C4b-binding protein alpha chain	C4BPA	P04003	LNNGEITQHR	356.00
Carboxypeptidase B2	CPB2	Q96IY4	DHEELSLVASEAVR	371.11
Carboxypeptidase B2	CPB2	Q96IY4	IHIGSSFEEK	510.40
Carboxypeptidase B2	CPB2	Q96IY4	YSFTIELR	1344.21
Coagulation factor IX	F9	P00740	IIPHHNYNAINK	405.97
Coagulation factor IX	F9	P00740	SALVLQYLR	485.22
Coagulation factor IX	F9	P00740	VSVSQTSK	292.80
Coagulation factor V	F5	P12259	AEVDDVIQVR	419.10
Coagulation factor V	F5	P12259	GEYEEHLGILGPIIR	564.34
Coagulation factor V	F5	P12259	SQHLDNFSNQIGK	417.94
Coagulation factor VII	F7	P08709	VAQVIIPSTYVPGTTNHDIALLR	506.54
Coagulation factor X	F10	P00742	ETYDFDIAVLR	304.18
Coagulation factor X	F10	P00742	GYTLADNGK	351.84
Coagulation factor X	F10	P00742	TGIVSGFGR	469.73
Coagulation factor XI	F11	P03951	EDTSFFGVQEIIHDQYK	333.15
Coagulation factor XI	F11	P03951	TSESGLPSTR	297.99
Coagulation factor XI	F11	P03951	VYSGILNQSEIK	460.21
Coagulation factor XII	F12	P00748	TEQAAVAR	622.89
Coagulation factor XII	F12	P00748	VVGGLVALR	522.59
Coagulation factor XIII A chain	F13A1	P00488	ETFDVTLEPLSFK	484.83
Coagulation factor XIII A chain	F13A1	P00488	GVNLQEFNLNVTSVHLFK	458.00
Coagulation factor XIII A chain	F13A1	P00488	HVYGELDVQIQR	376.74
Coagulation factor XIII B chain	F13B	P05160	IAQYYTFK	387.31
Coagulation factor XIII B chain	F13B	P05160	IQTHSTTYR	589.57
Coagulation factor XIII B chain	F13B	P05160	LIENGYFHPVK	486.05
Endothelial protein C receptor	PROCR	Q9UNN8	TLAFPLTIR	350.49
Fibrinogen alpha chain	FGA	P02671	ESSSHHPGIAEFPSR	573.34
Fibrinogen alpha chain	FGA	P02671	GSESGIFTNTK	586.08
Fibrinogen alpha chain	FGA	P02671	VQHIQLLQK	474.99
Fibrinogen beta chain	FGB	P02675	AHYGGFTVQNEANK	467.83
Fibrinogen beta chain	FGB	P02675	HQLYIDETVNSNIPTNLR	513.25
Fibrinogen beta chain	FGB	P02675	YQISVNK	523.84
Fibrinogen gamma chain	FGG	P02679	IHLISTQSAIPYALR	384.42

Fibrinogen gamma chain	FGG	P02679	YEASILTHDSSIR	444.94
Fibrinogen gamma chain	FGG	P02679	YLQEIYNSNNQK	1082.69
Heparin cofactor 2	SERPIND1	P05546	NYNLVESLK	548.65
Heparin cofactor 2	SERPIND1	P05546	SVNDLYIQK	534.94
Heparin cofactor 2	SERPIND1	P05546	TLEAQLTPR	485.51
Histidine-rich glycoprotein	HRG	P04196	ADLFYDVEALDLESPK	519.28
Histidine-rich glycoprotein	HRG	P04196	DGYLFQLLR	211.32
Histidine-rich glycoprotein	HRG	P04196	GGEGTGYFVDFSVR	625.94
Kininogen-1	KNG1	P01042	DIPTNSPELEETLHTITK	762.28
Kininogen-1	KNG1	P01042	TVGSDFYFSFK	614.53
Plasma protease C1 inhibitor	SERPING1	P05155	FQPTLLTLP	473.64
Plasma protease C1 inhibitor	SERPING1	P05155	GVTSVSQIFHSPDLAIR	450.12
Plasma protease C1 inhibitor	SERPING1	P05155	LLDSLPSDTR	456.35
Plasma serine protease inhibitor	SERPINA5	P05154	AVVEVDESCTR	463.84
Plasma serine protease inhibitor	SERPINA5	P05154	FSIEGSYQLEK	663.06
Plasma serine protease inhibitor	SERPINA5	P05154	GFOQLLQELNQPR	420.83
Plasminogen	PLG	P00747	LFLEPTR	353.34
Protein Z-dependent protease inhibitor	SERPINA10	Q9UK55	ETSNFGFSLLR	559.15
Protein Z-dependent protease inhibitor	SERPINA10	Q9UK55	LFDEINPETK	339.78
Protein Z-dependent protease inhibitor	SERPINA10	Q9UK55	LILVDYILFK	403.07
Prothrombin	F2	P00734	ELLESYIDGR	159.14
Prothrombin	F2	P00734	ETAASLLQAGYK	666.94
Prothrombin	F2	P00734	TATSEYQTFNPR	752.62
Vitamin K-dependent protein C	PROC	P04070	DTEDQEDQVDPR	559.87
Vitamin K-dependent protein C	PROC	P04070	LGEYDLR	550.20
Vitamin K-dependent protein C	PROC	P04070	TFVLNFIK	402.68
Vitamin K-dependent protein S	PROS1	P07225	IETISHEDLQR	399.74
Vitamin K-dependent protein S	PROS1	P07225	SFQTGLFTAAR	551.55
Vitamin K-dependent protein S	PROS1	P07225	VYFAGFPR	573.24
Vitamin K-dependent protein Z	PROZ	P22891	APDLQDLPWQVK	560.00
Vitamin K-dependent protein Z	PROZ	P22891	DFAEHLIPR	368.73
Vitamin K-dependent protein Z	PROZ	P22891	GLLSGWAR	700.00
Vitamin K-dependent protein Z variant 1	PROZ	B0YJC6	ENFVLTTAK	468.06
von Willebrand Factor	VWF	P04275	HIVTFDQGNFK	467.44
von Willebrand Factor	VWF	P04275	ILAGPAGDSNVVK	454.68

Table S2. An overview of failed MRM measurements and the corresponding proteins and peptides.

Protein	UniProtKB Accession	Antibody assay	Activity assay	LC-MRM/MS assay
Alpha-2-antiplasmin	P08697		X	X
Antithrombin	P01008		X	X
Coagulation factor IX	P00740	X		X
Coagulation factor V	P12259	X		X
Coagulation factor VII	P08709		X	X
Coagulation factor X	P00742	X		X
Coagulation factor XI	P03951	X		X
Fibrinogen alpha chain	P02671		X	X
Fibrinogen beta chain	P02675		X	X
Fibrinogen gamma chain	P02679		X	X
Plasminogen	P00747		X	X
Prothrombin (FII)	P00734		X	X
Vitamin K-dependent protein C	P04070		X	X
Vitamin K-dependent protein S	P07225	X		X
von Willebrand Factor	P04275	X		X
Alpha-2-macroglobulin	P01023			X
Beta-2-glycoprotein 1	P02749			X
C4b-binding protein alpha chain	P04003			X
Carboxypeptidase B2	Q961Y4			X
Coagulation factor XII	P00748			X
Coagulation factor XIII A chain	P00488			X
Coagulation factor XIII B chain	P05160			X
Endothelial protein C receptor	Q9UNN8			X
Heparin cofactor 2	P05546			X
Histidine-rich glycoprotein	P04196			X
Kininogen-1	P01042			X
Plasma protease C1 inhibitor	P05155			X
Plasma serine protease inhibitor	P05154			X
Protein Z-dependent protease inhibitor	Q9UK55			X
Vitamin K-dependent protein Z	P22891			X
Vitamin K-dependent protein Z variant 1	B0YJC6			X

Table S3. An overview of the correlations between activity/antibody and MRM assays for the 13 proteins from the coagulation pathway.

Protein	Peptide	Number of samples without MRM signal
Carboxypeptidase B2	IHIGSSF EK	69
von Willebrand Factor	HIVTFDGGQNFK	67
Carboxypeptidase B2	DHEELSLVASEAVR	60
von Willebrand Factor	ILAGPAGDSNVVK	32
Vitamin K-dependent protein Z variant 1	ENFVLTTAK	28
Coagulation factor IX	VSVSQTSK	17
Protein Z-dependent protease inhibitor	ETSNFGFSLLR	17
Coagulation factor XIII A chain	ETFDVTLEPLSFK	8
Coagulation factor XIII B chain	IAQYYTFFK	8
Vitamin K-dependent protein C	DTEDQEDQVDPR	8
Prothrombin	ETAASLLQAGYK	6
Vitamin K-dependent protein Z	GLLSGWAR	3
Vitamin K-dependent protein Z	DFAEHLIPR	2
Coagulation factor V	GEYEEHLGILGPIIR	1

Figure S1. Hierarchical clustering analysis based on activity and antibody assays alone.

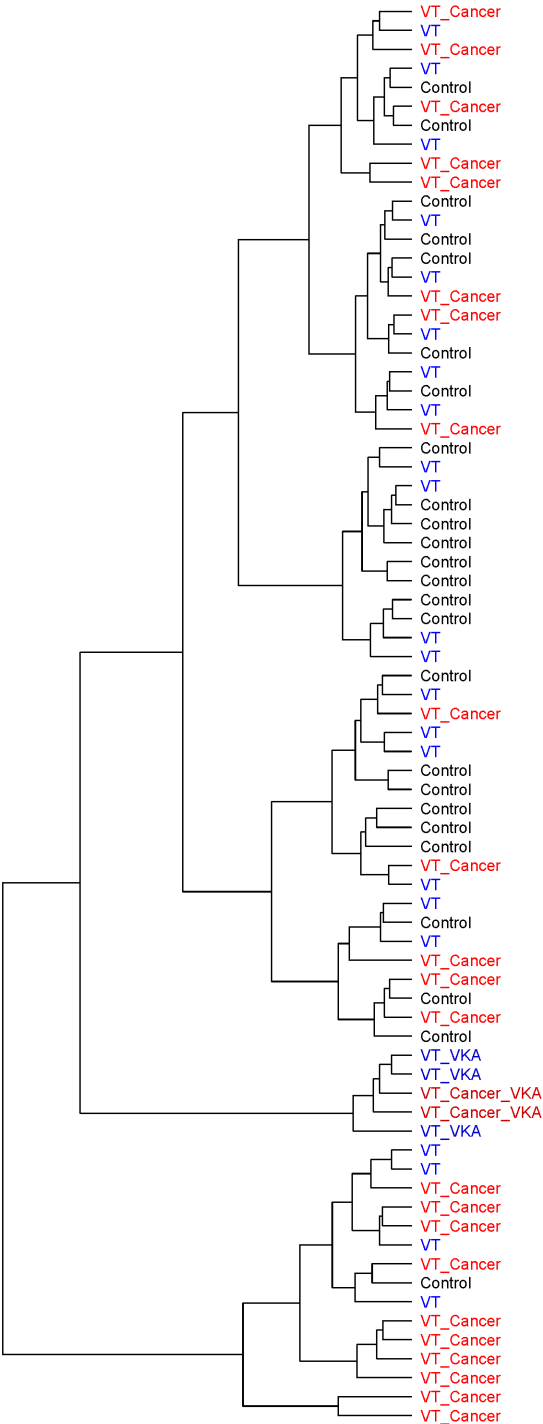
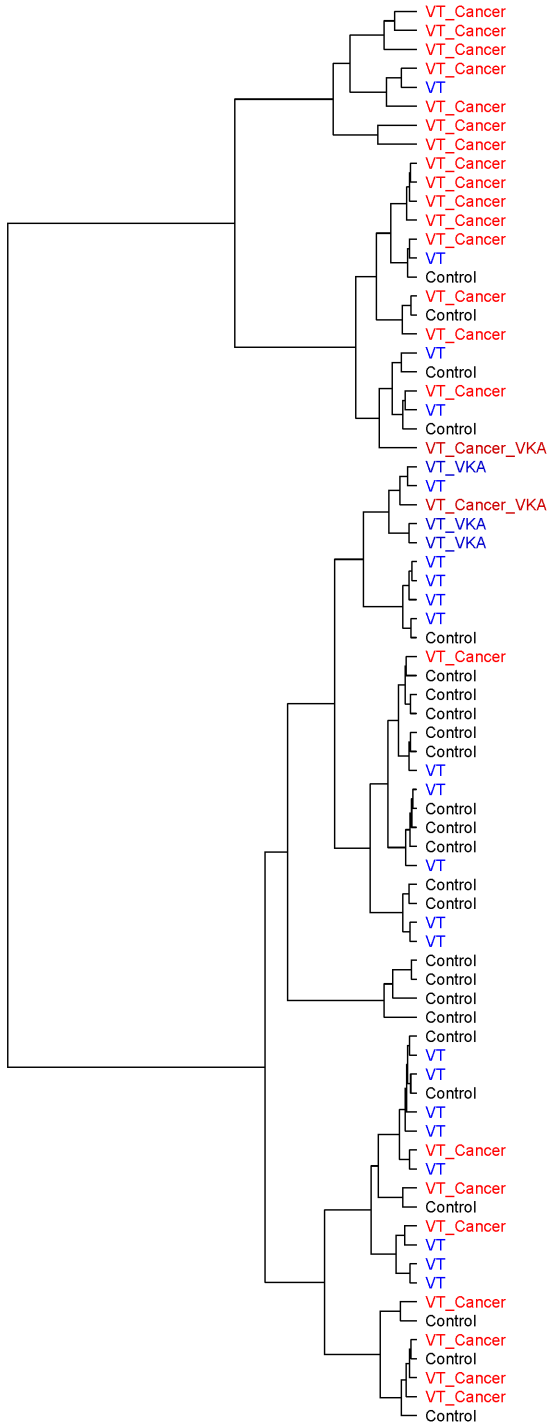
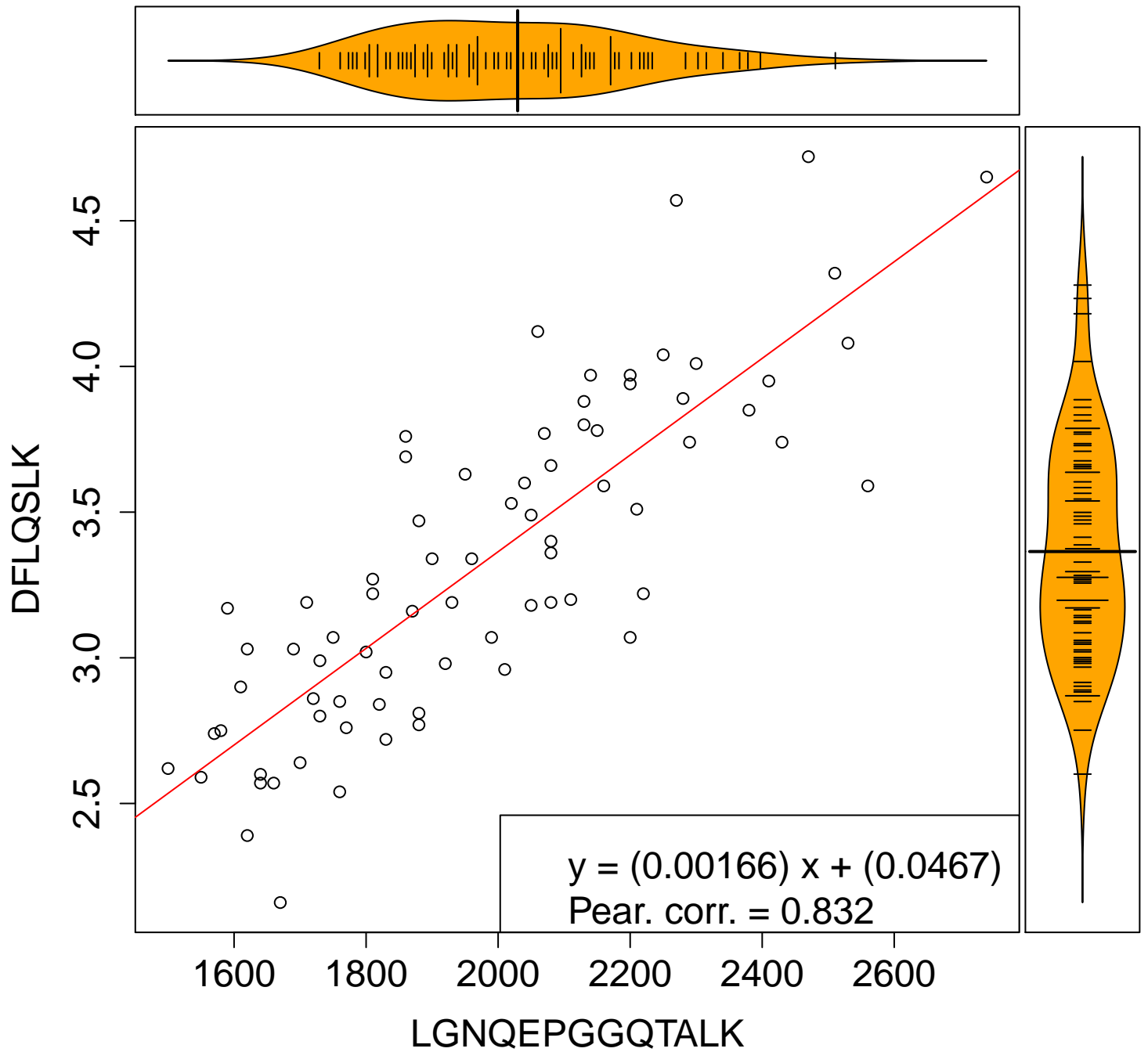


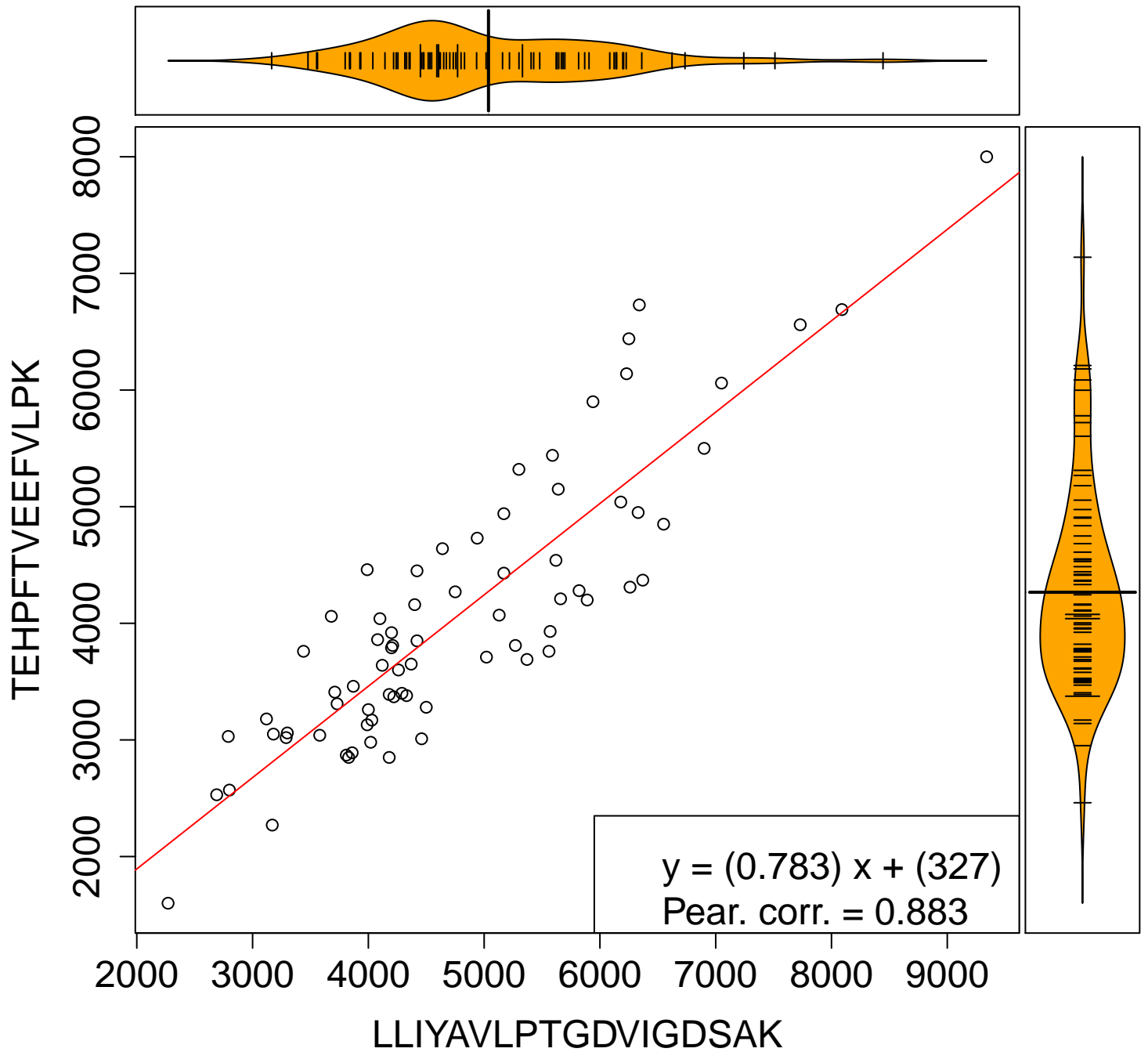
Figure S2. Hierarchical clustering analysis based on the MRM measurements of only the 13 protein targets measured in MRM and activity/antibody assays.



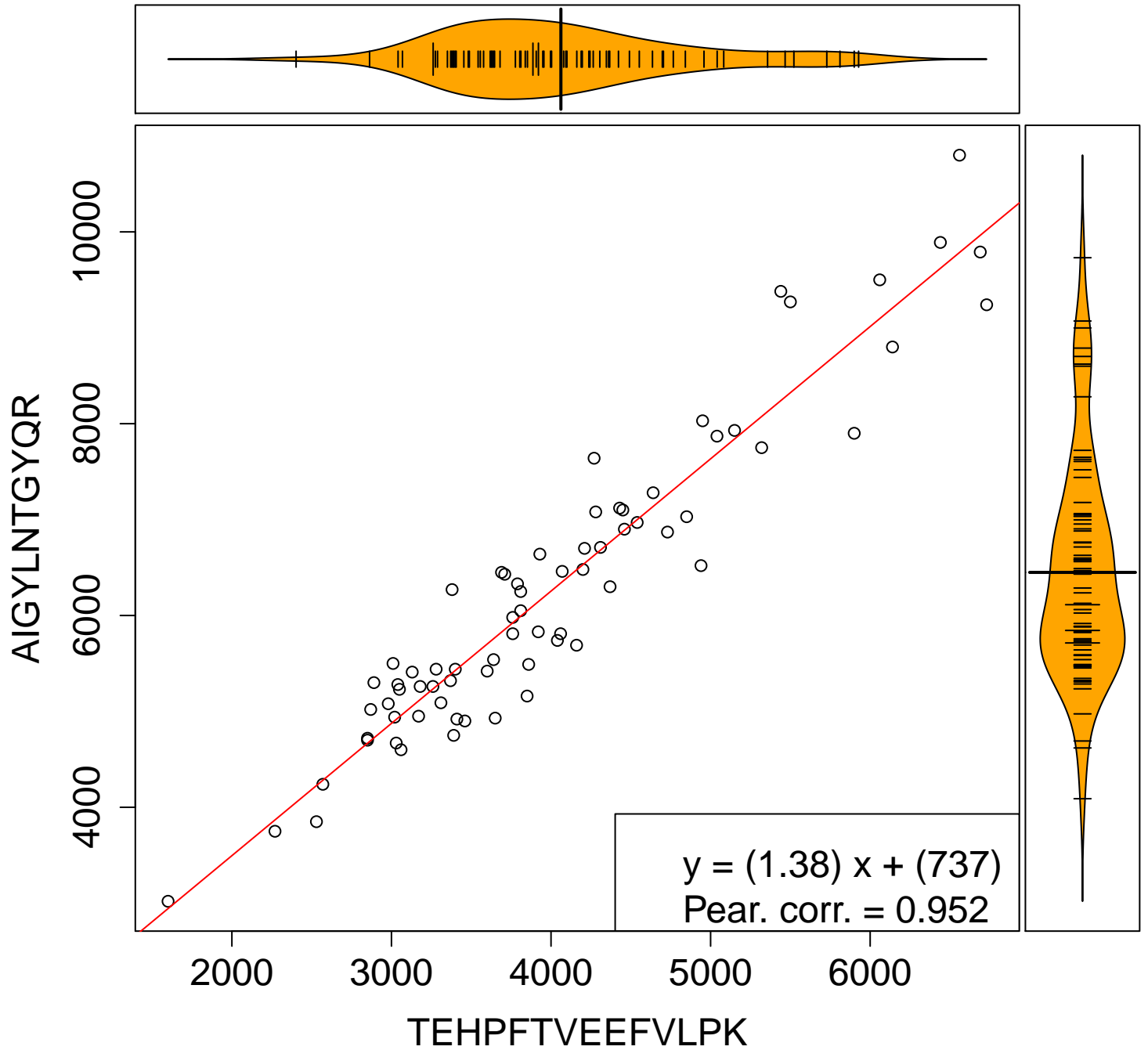
Alpha-2-antiplasmin



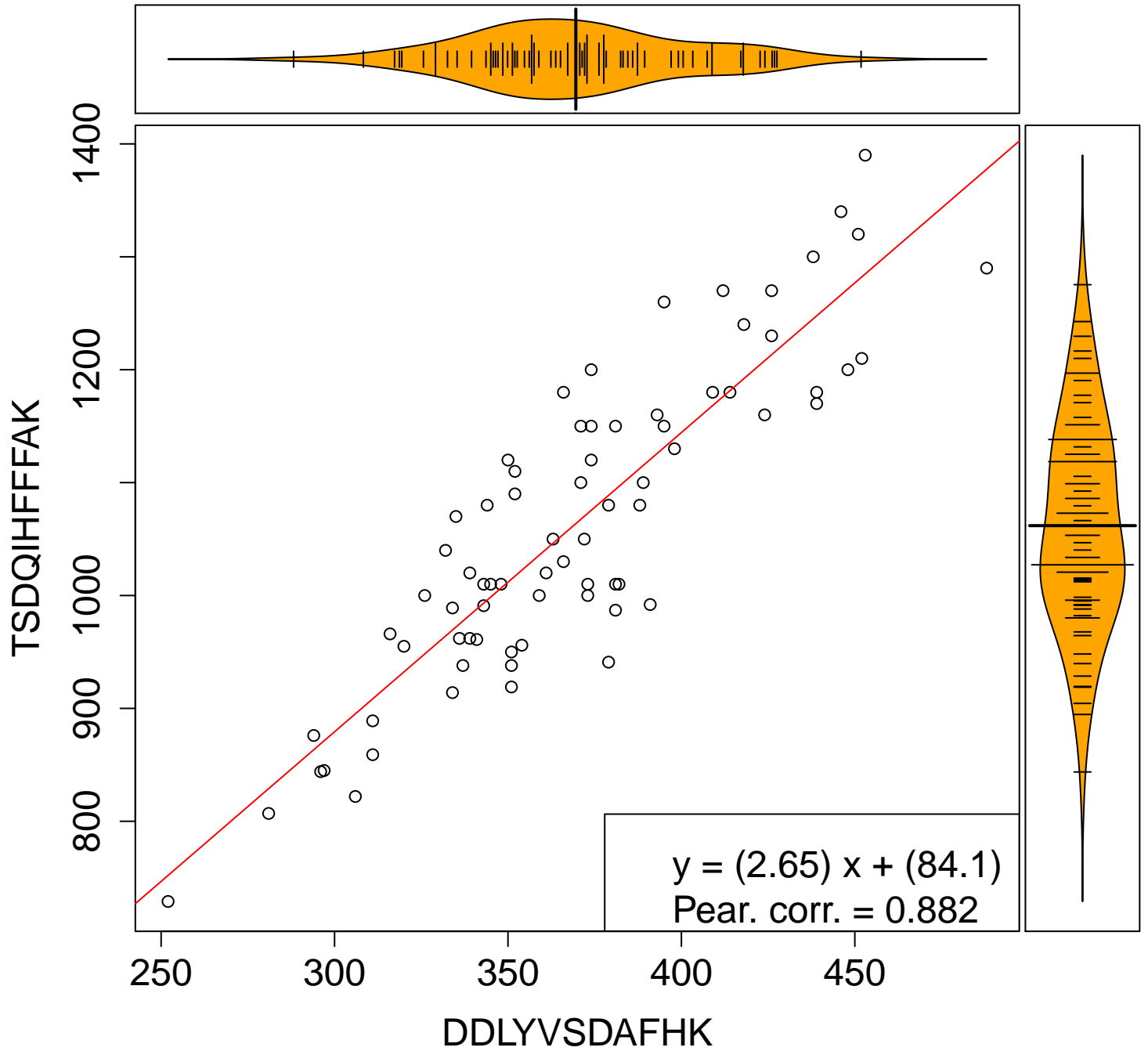
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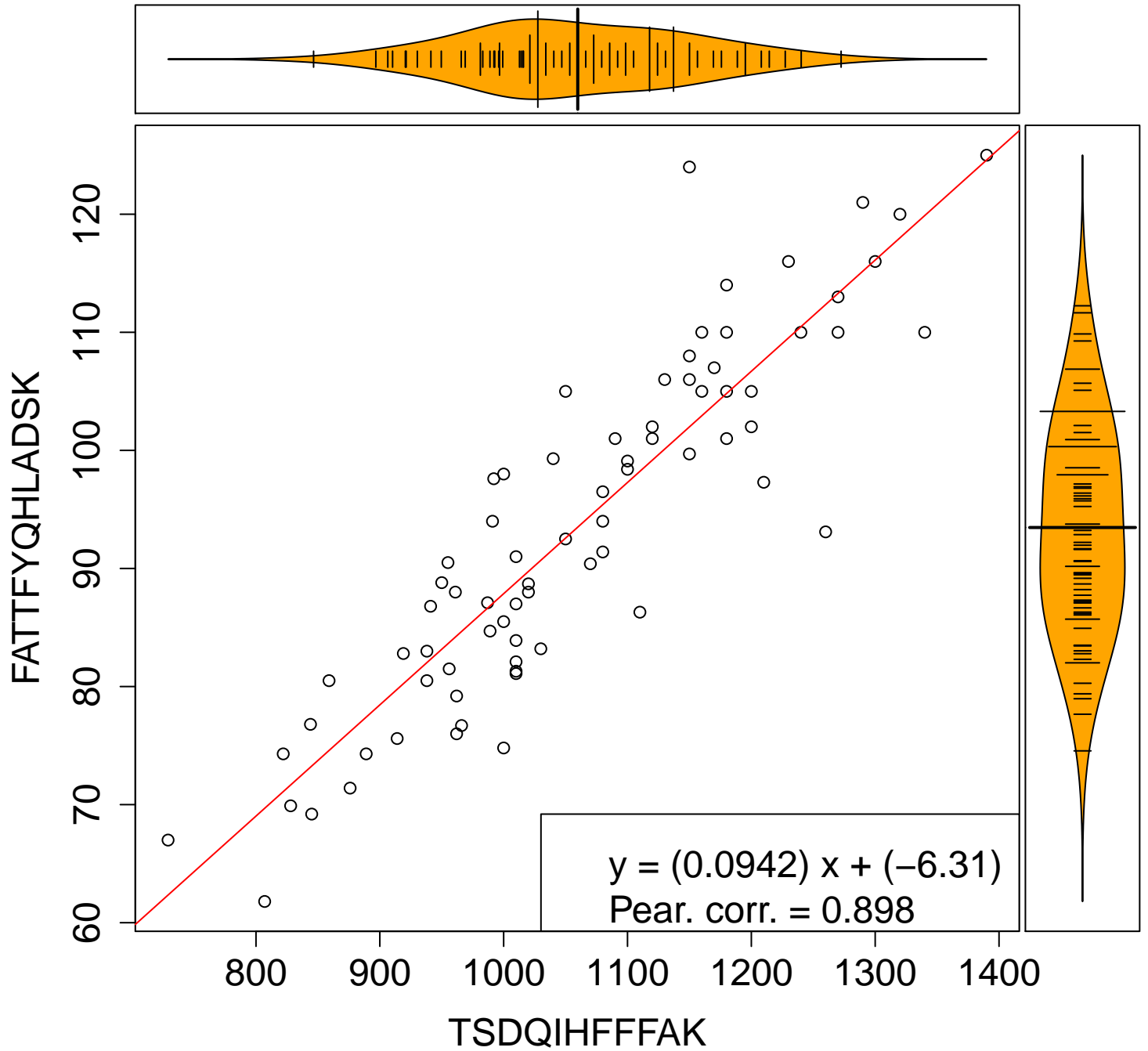
Alpha-2-macroglobulin



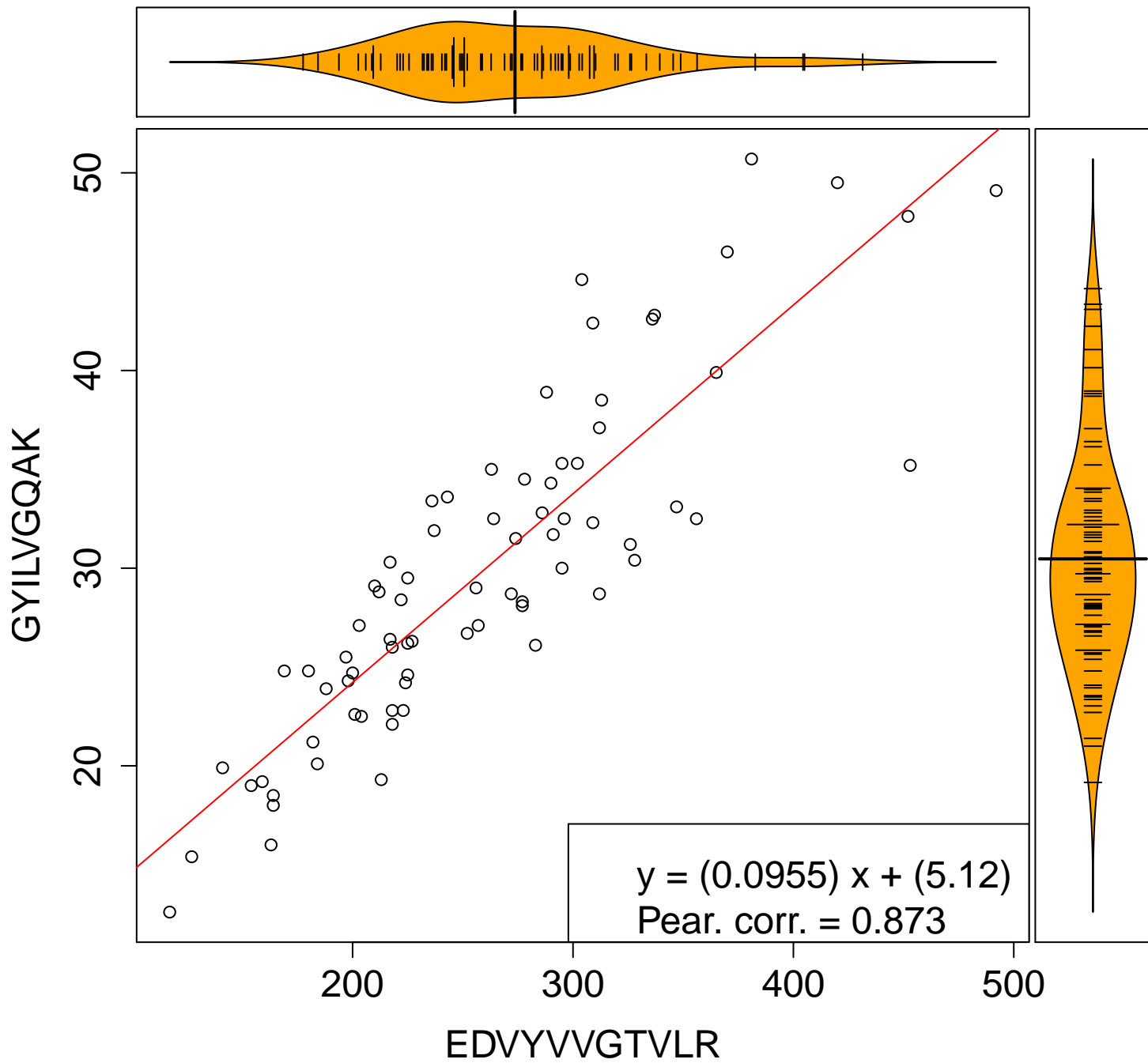
Antithrombin-III



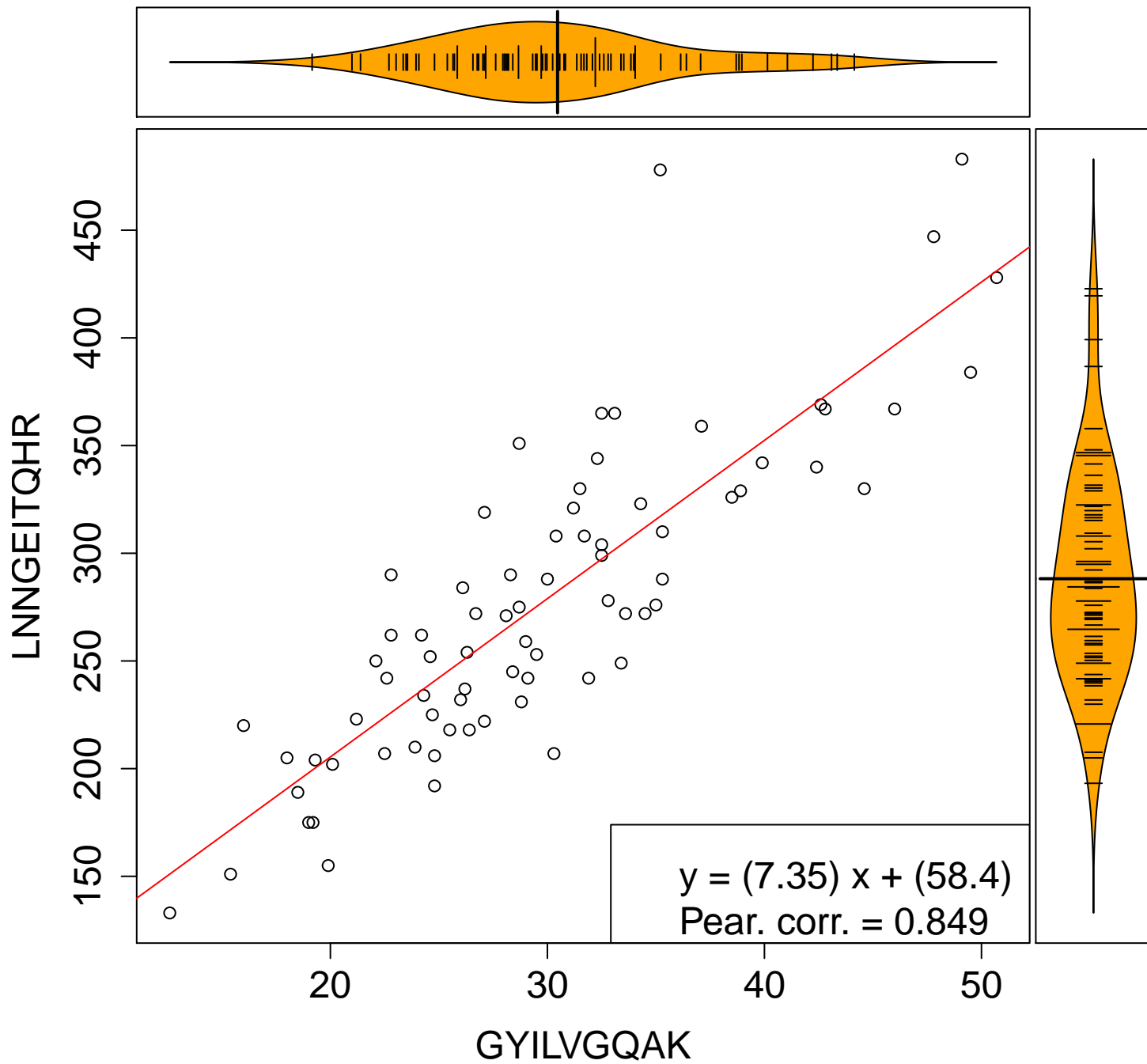
Antithrombin-III



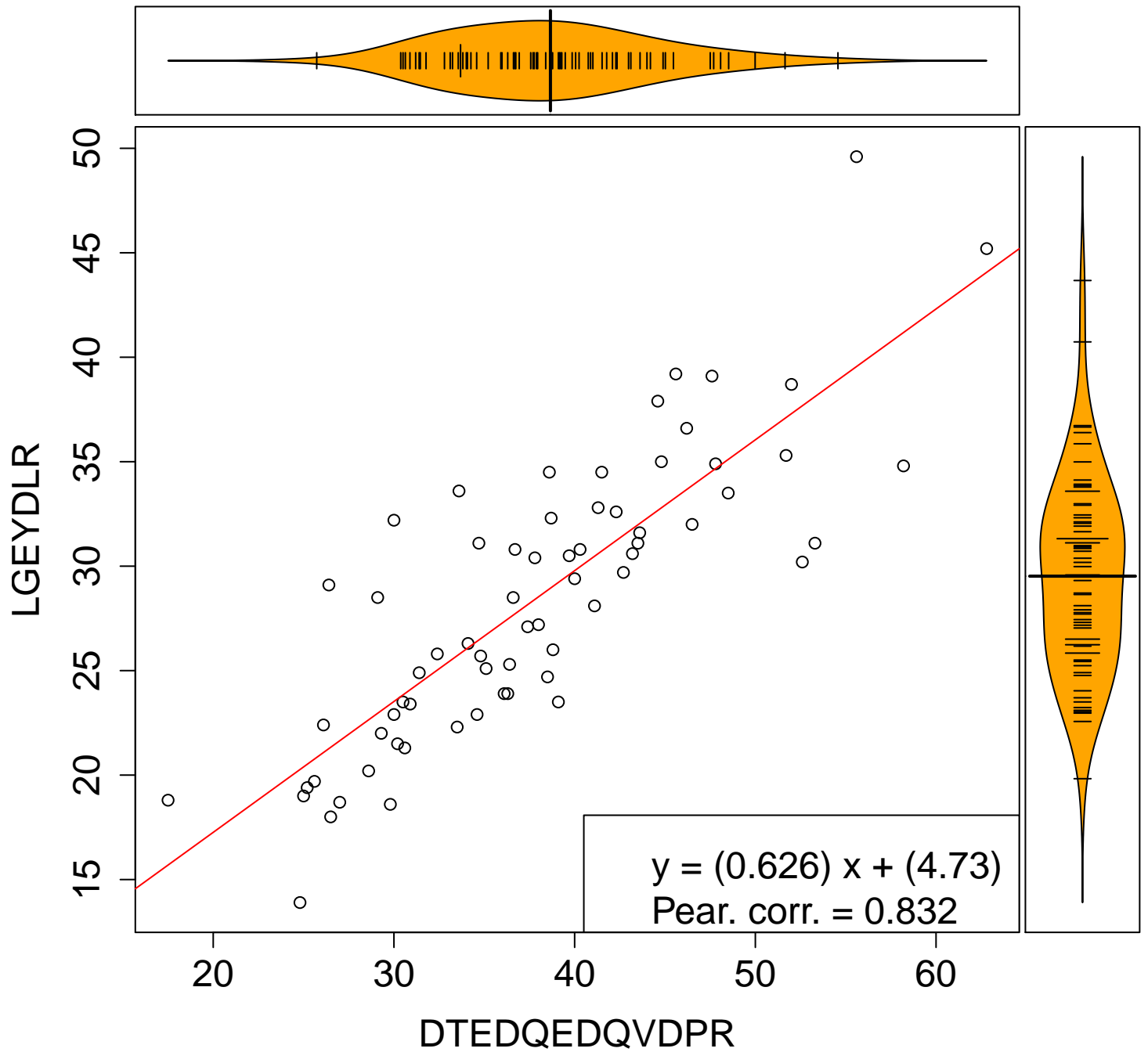
C4b-binding protein alpha chain



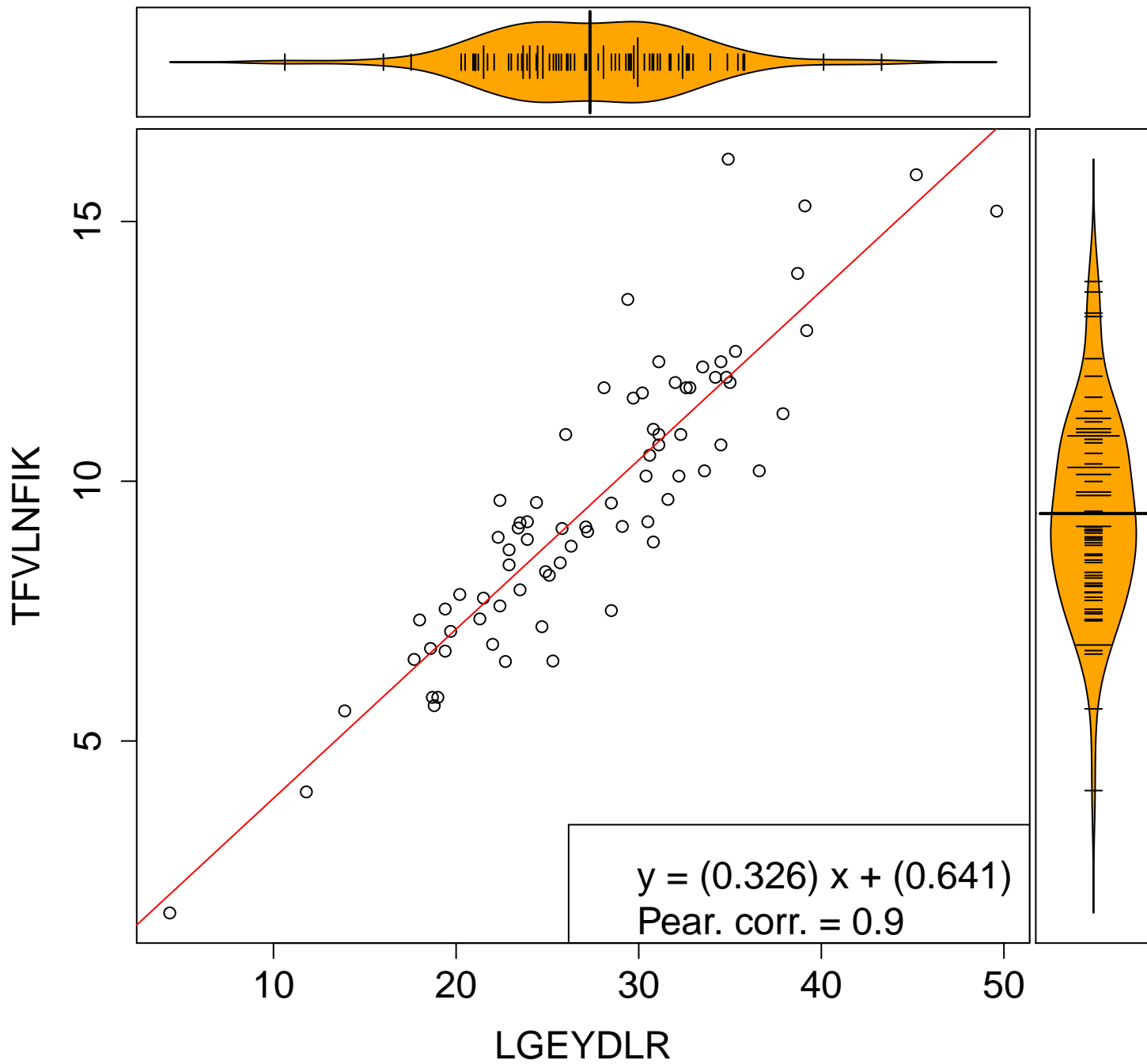
C4b-binding protein alpha chain



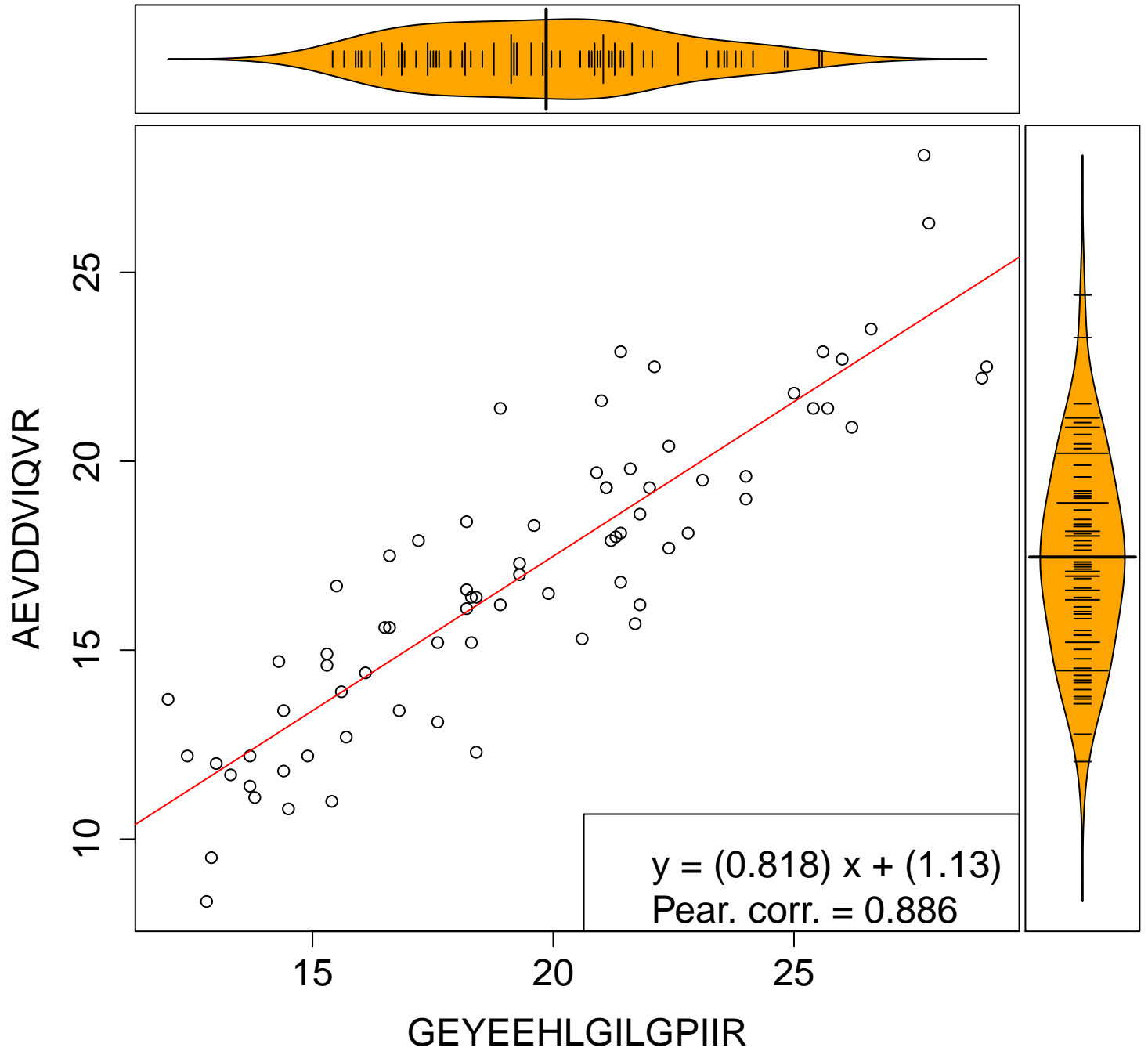
Vitamin K-dependent protein C



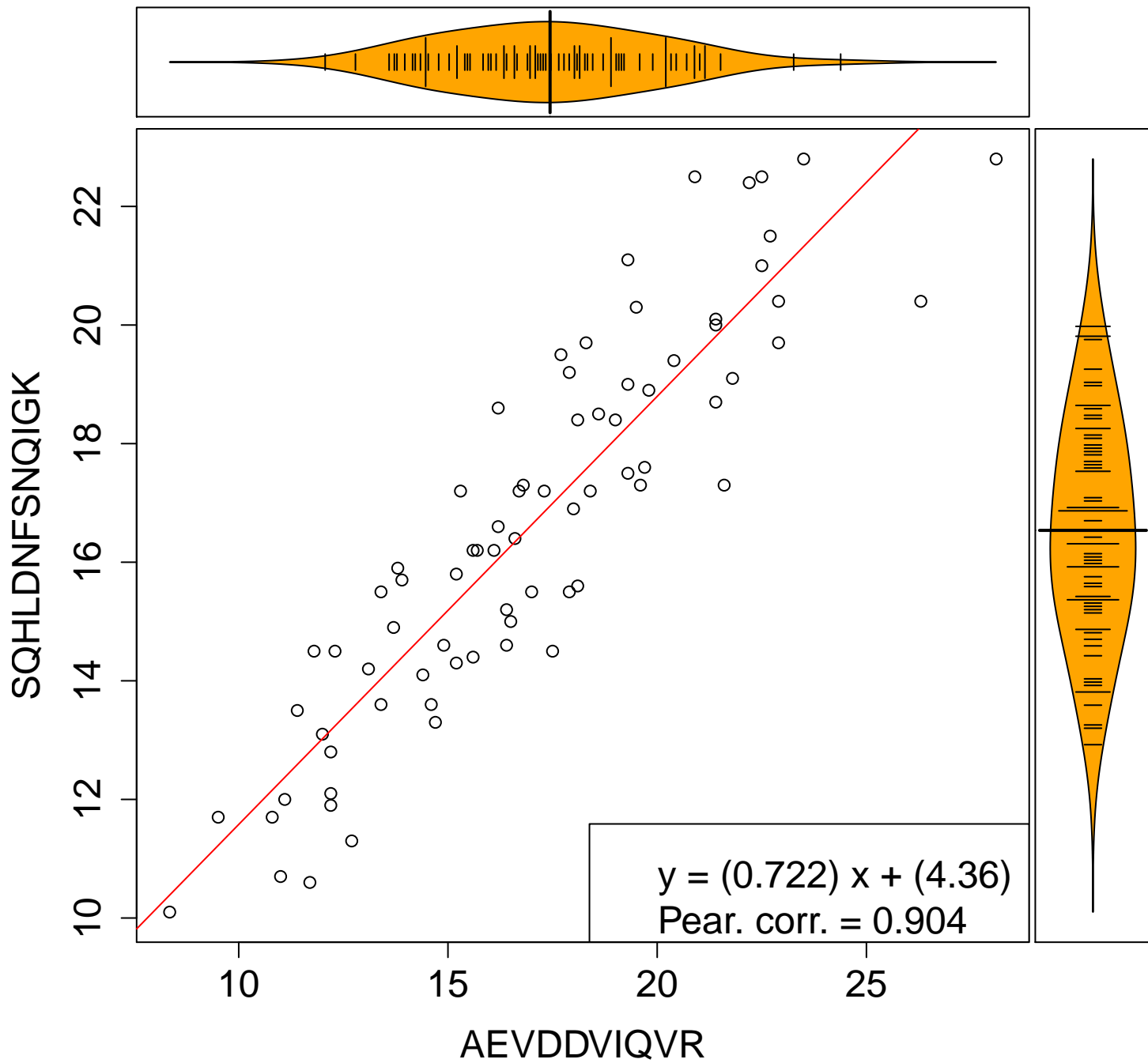
Vitamin K-dependent protein C



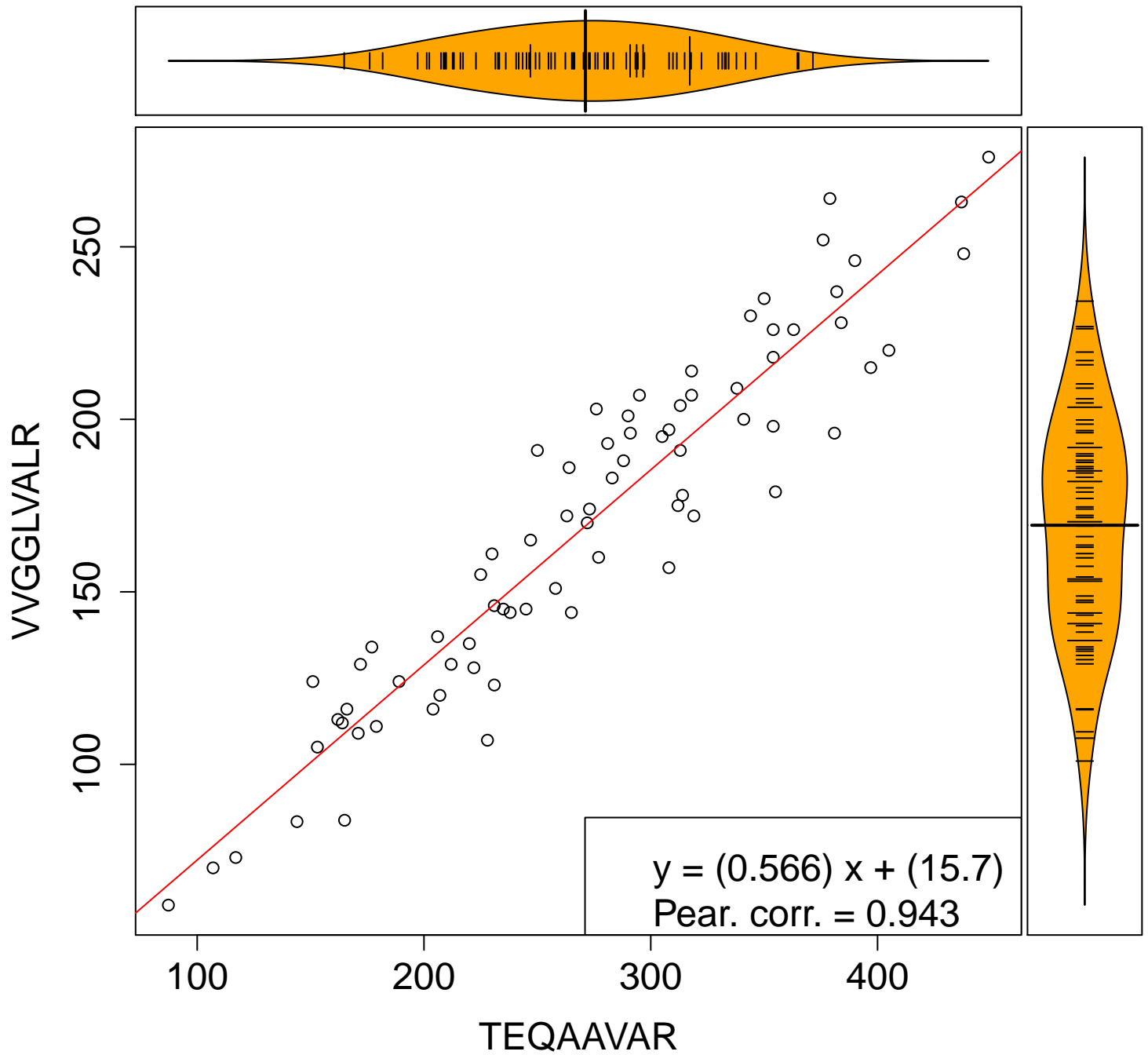
Coagulation factor V



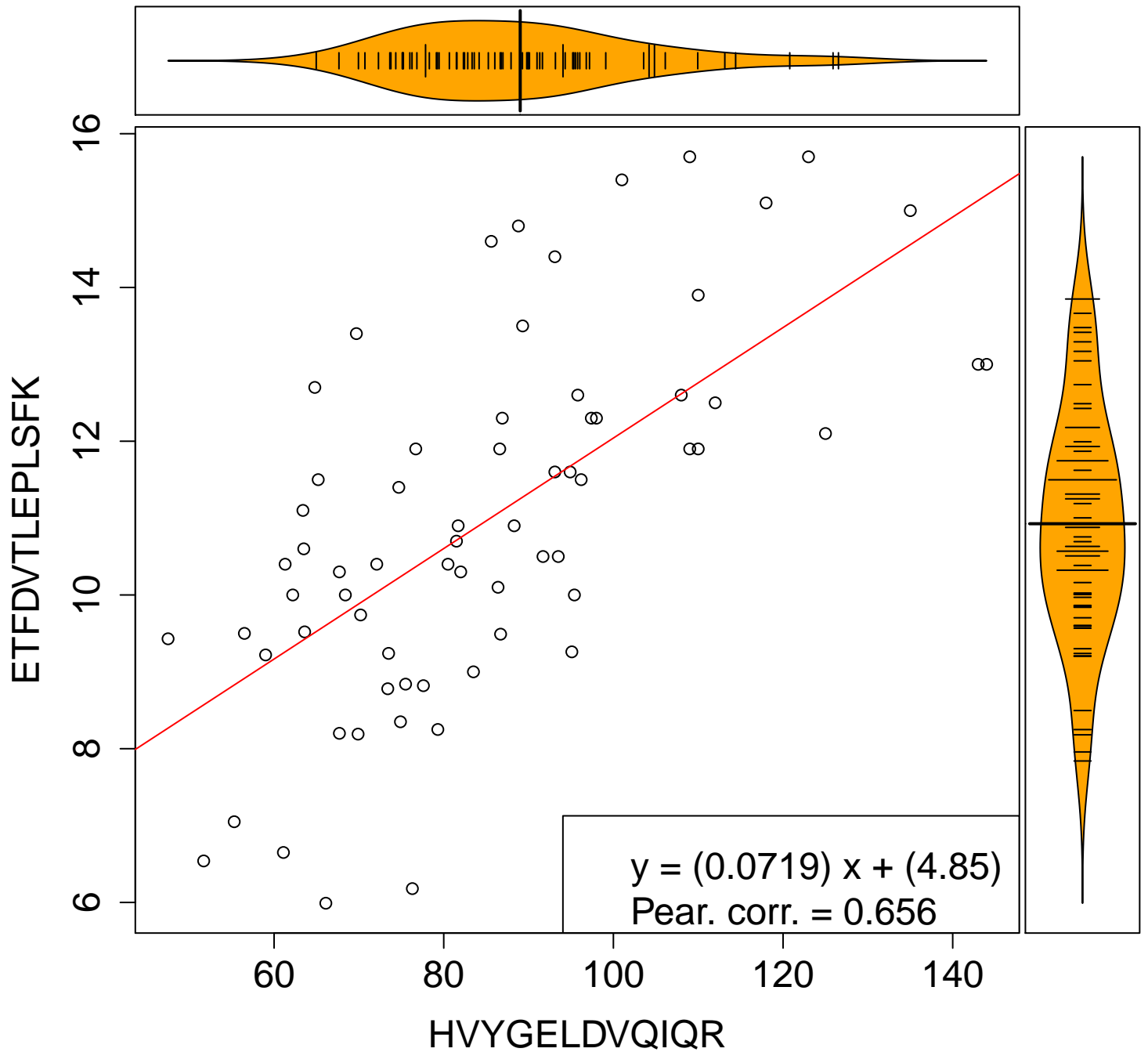
Coagulation factor V



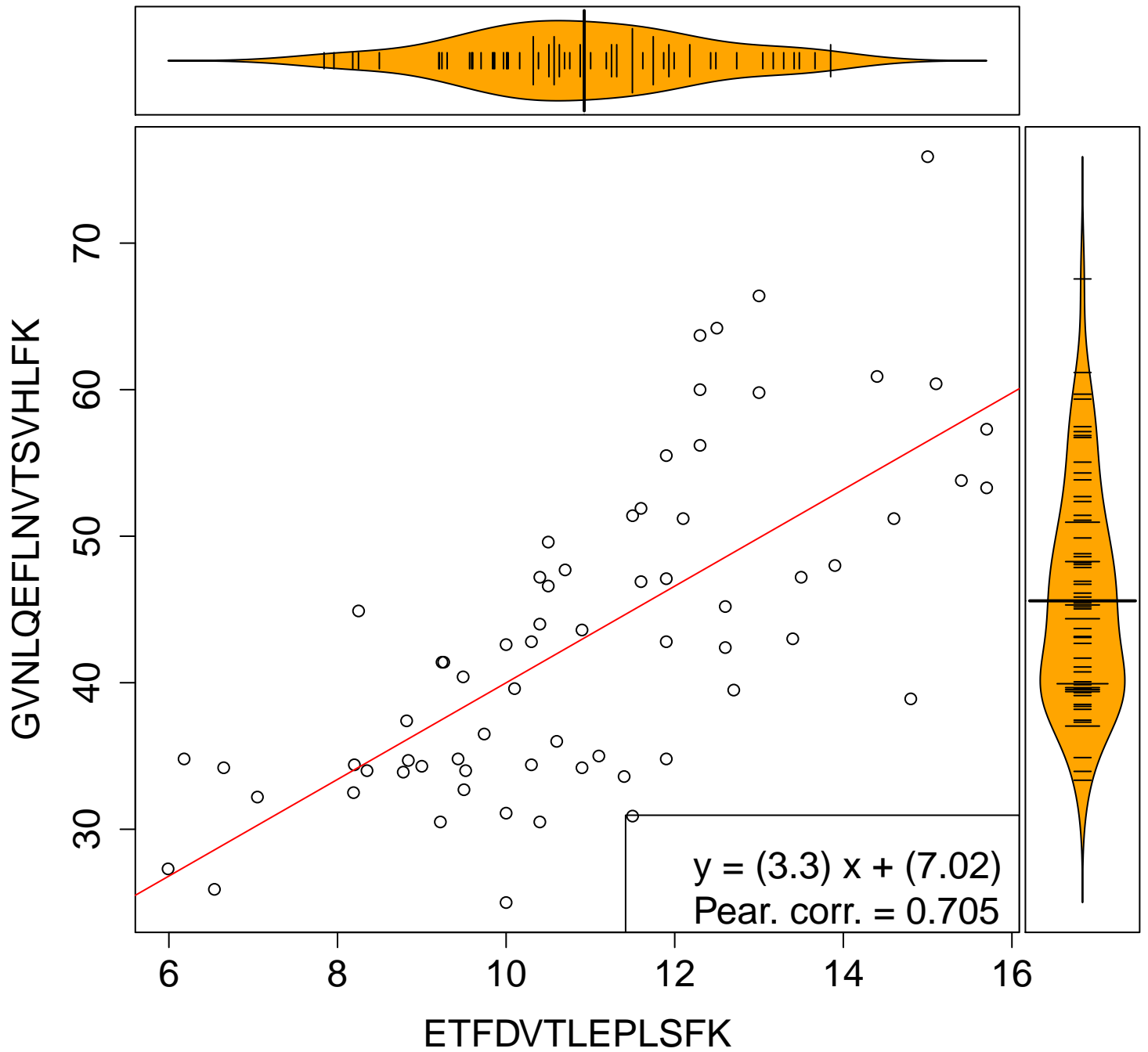
Coagulation factor XII



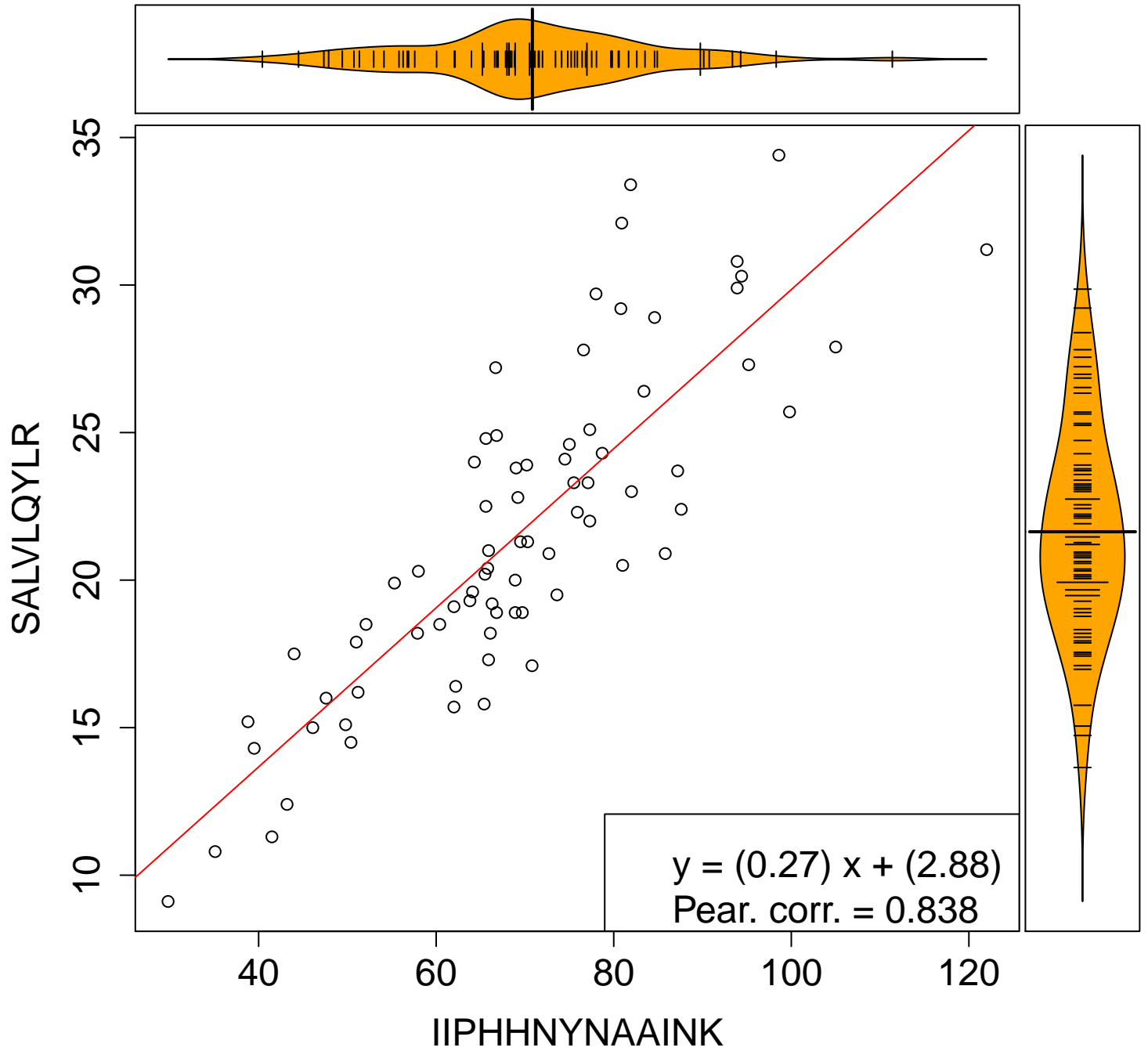
Coagulation factor XIII A chain



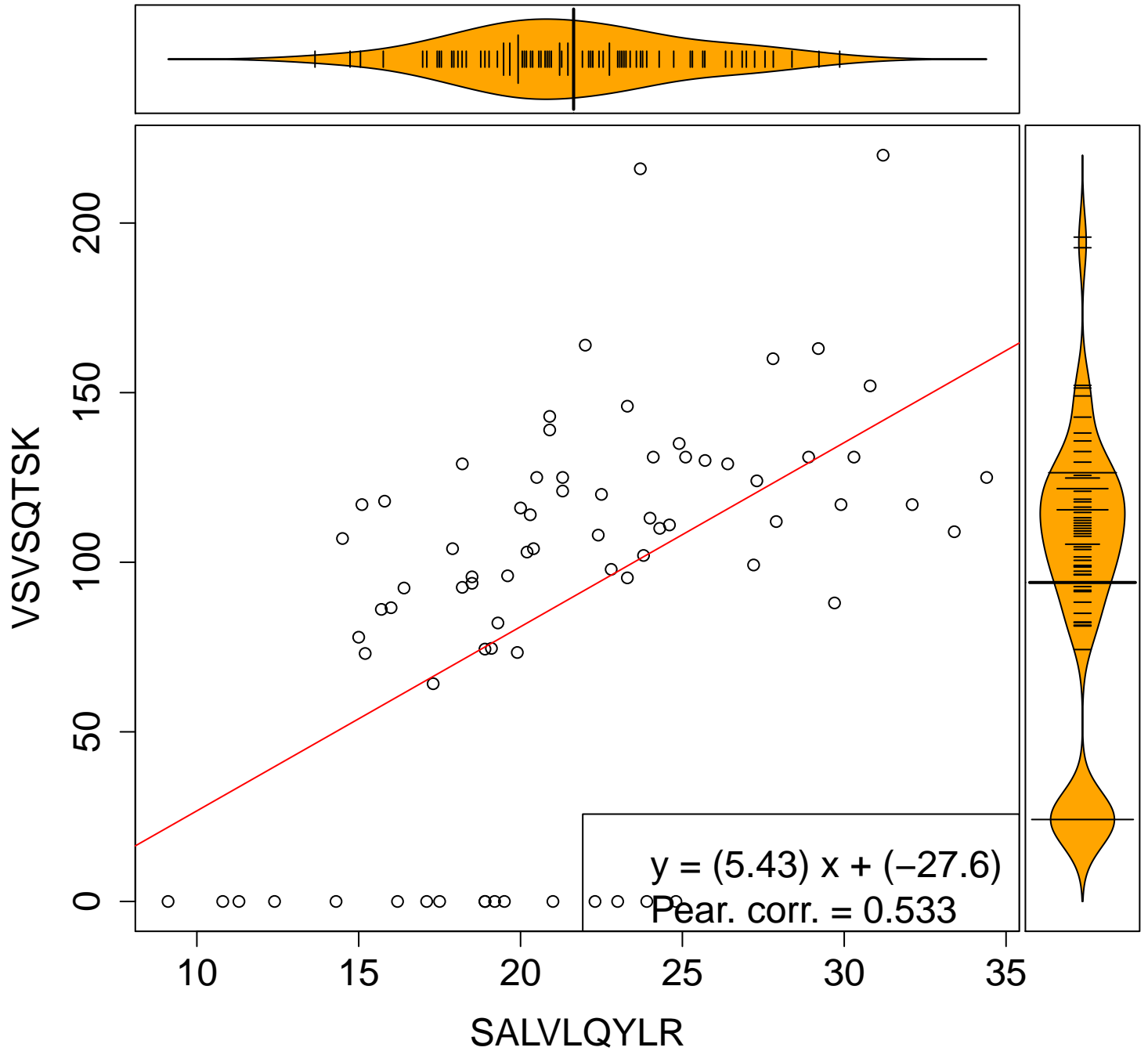
Coagulation factor XIII A chain



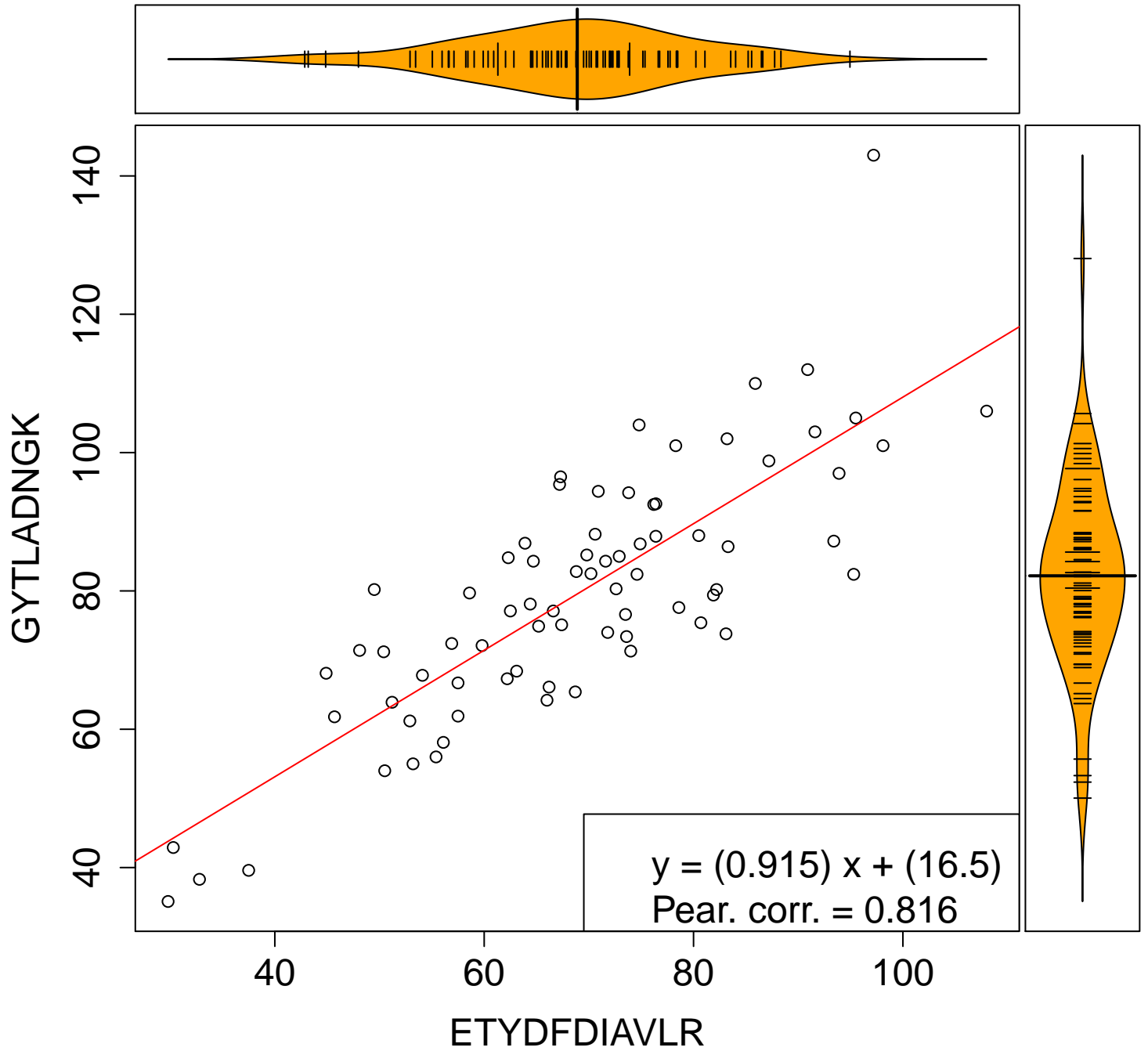
Coagulation factor IX



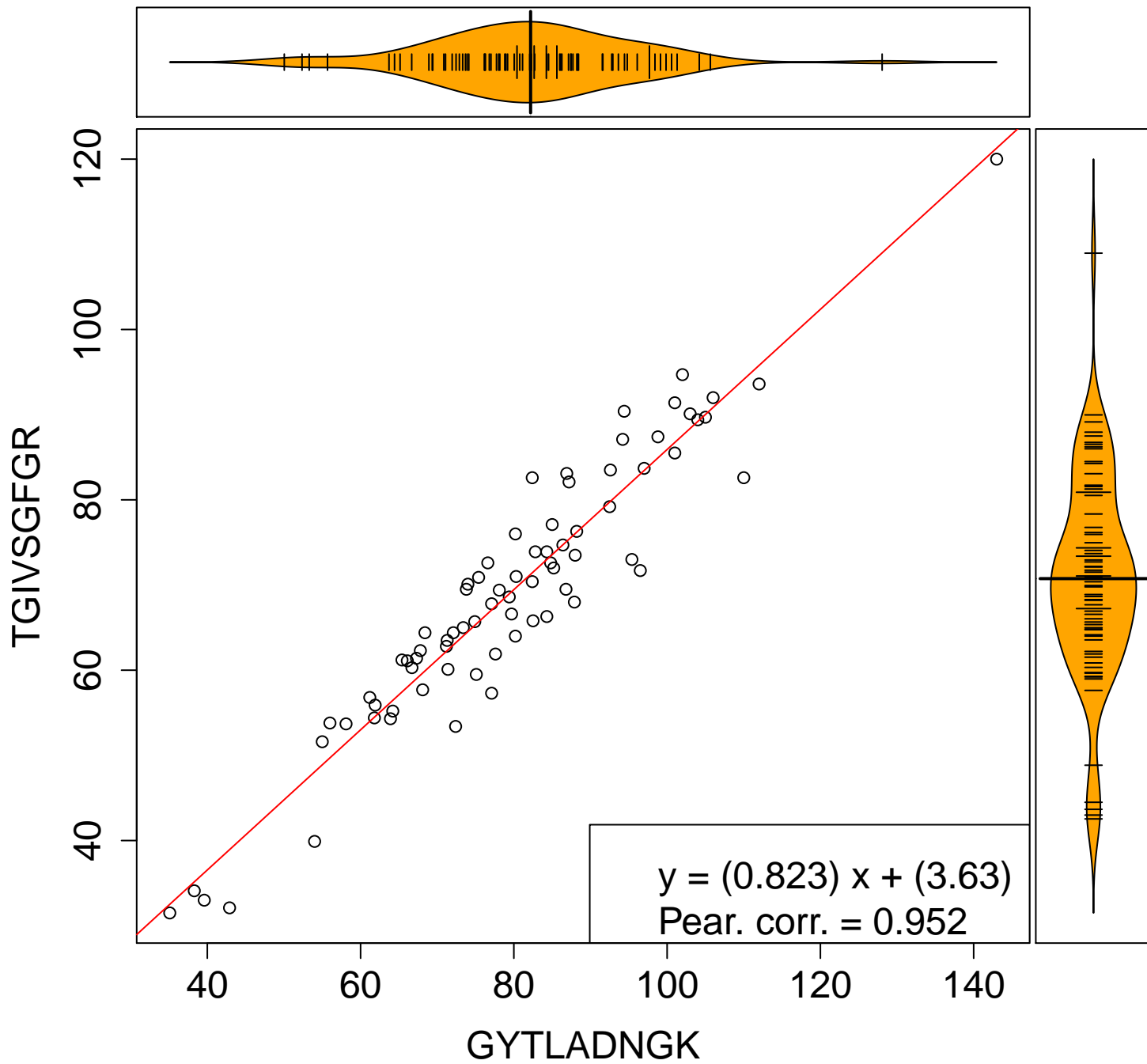
Coagulation factor IX



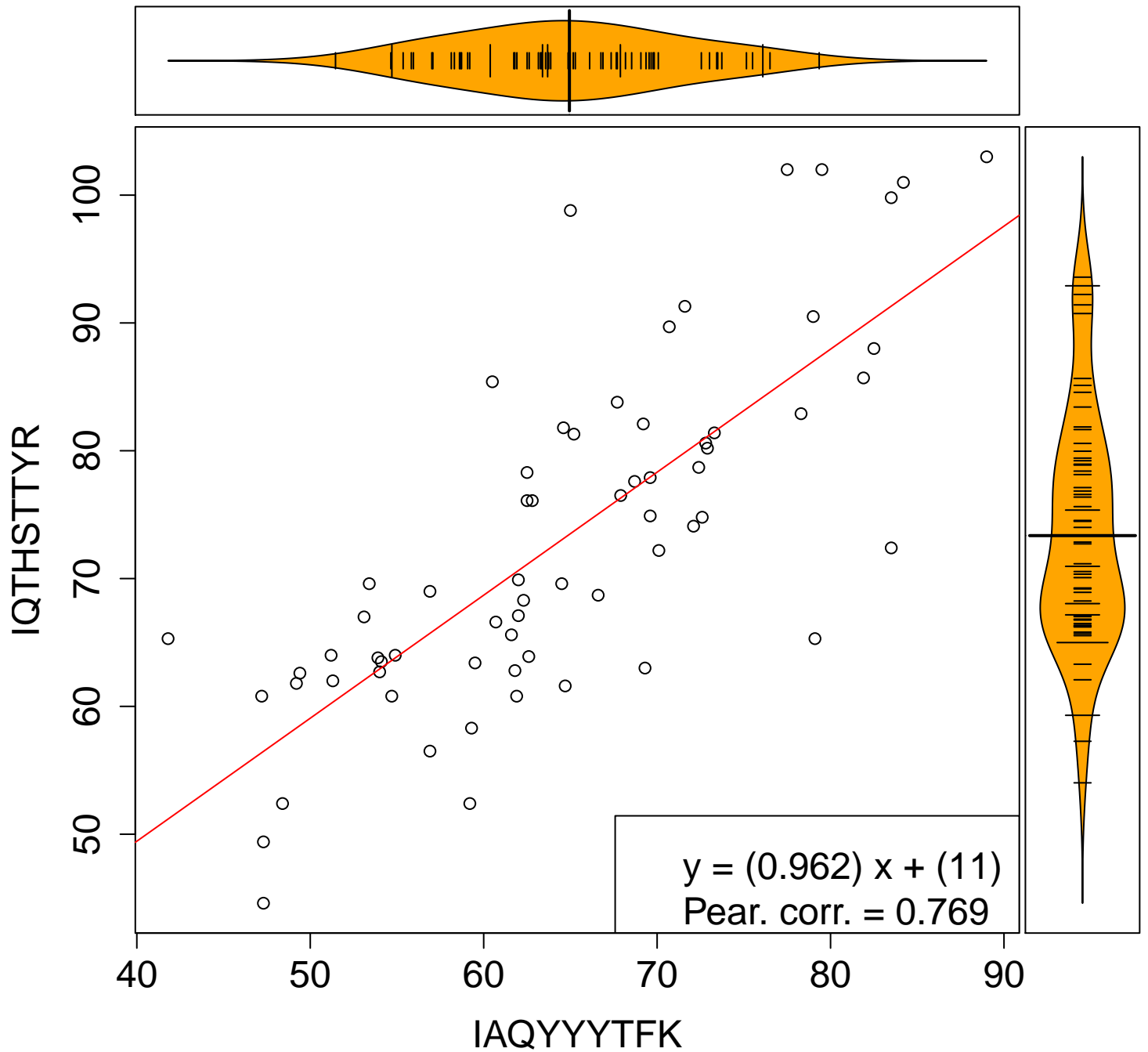
Coagulation factor X



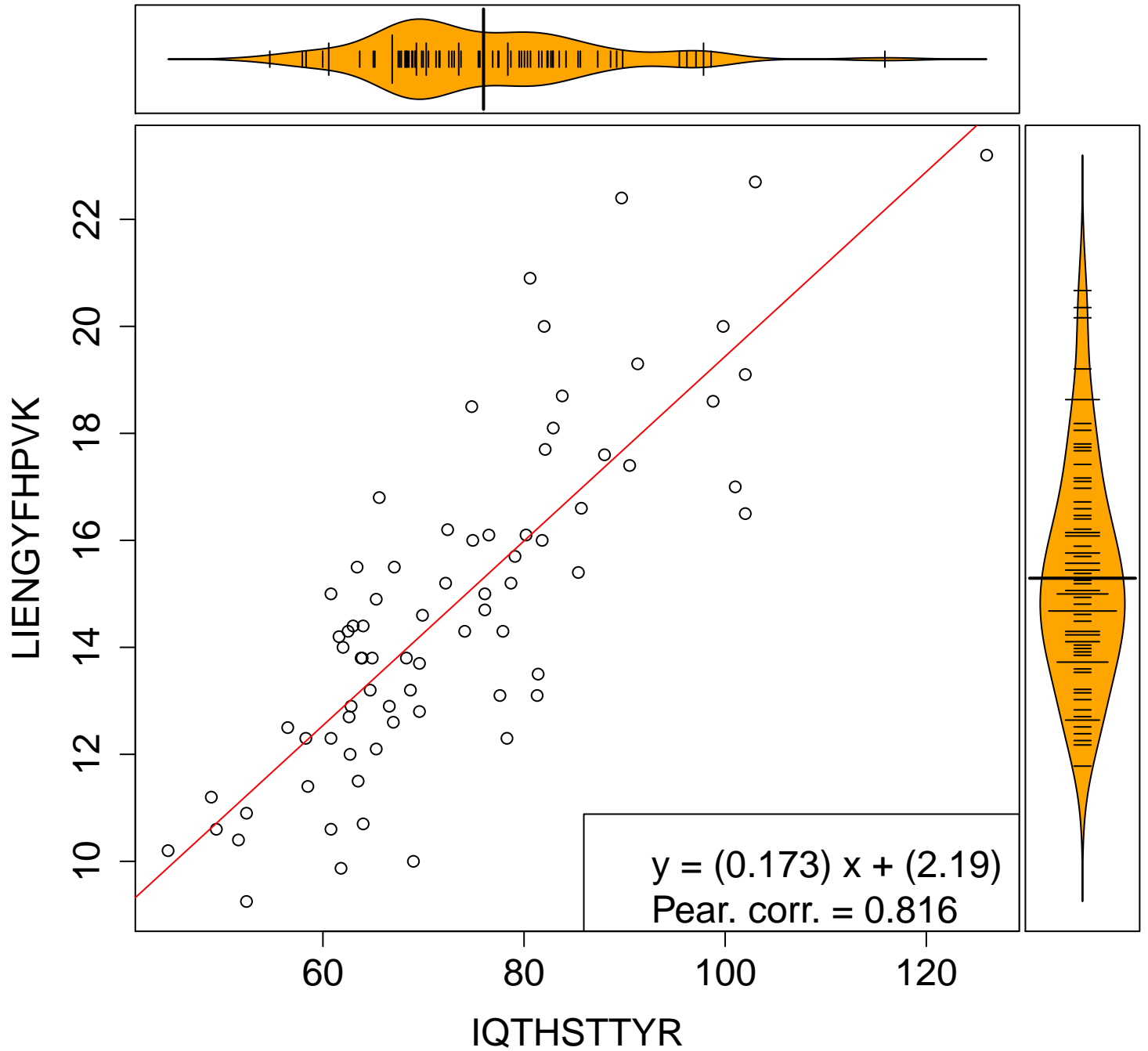
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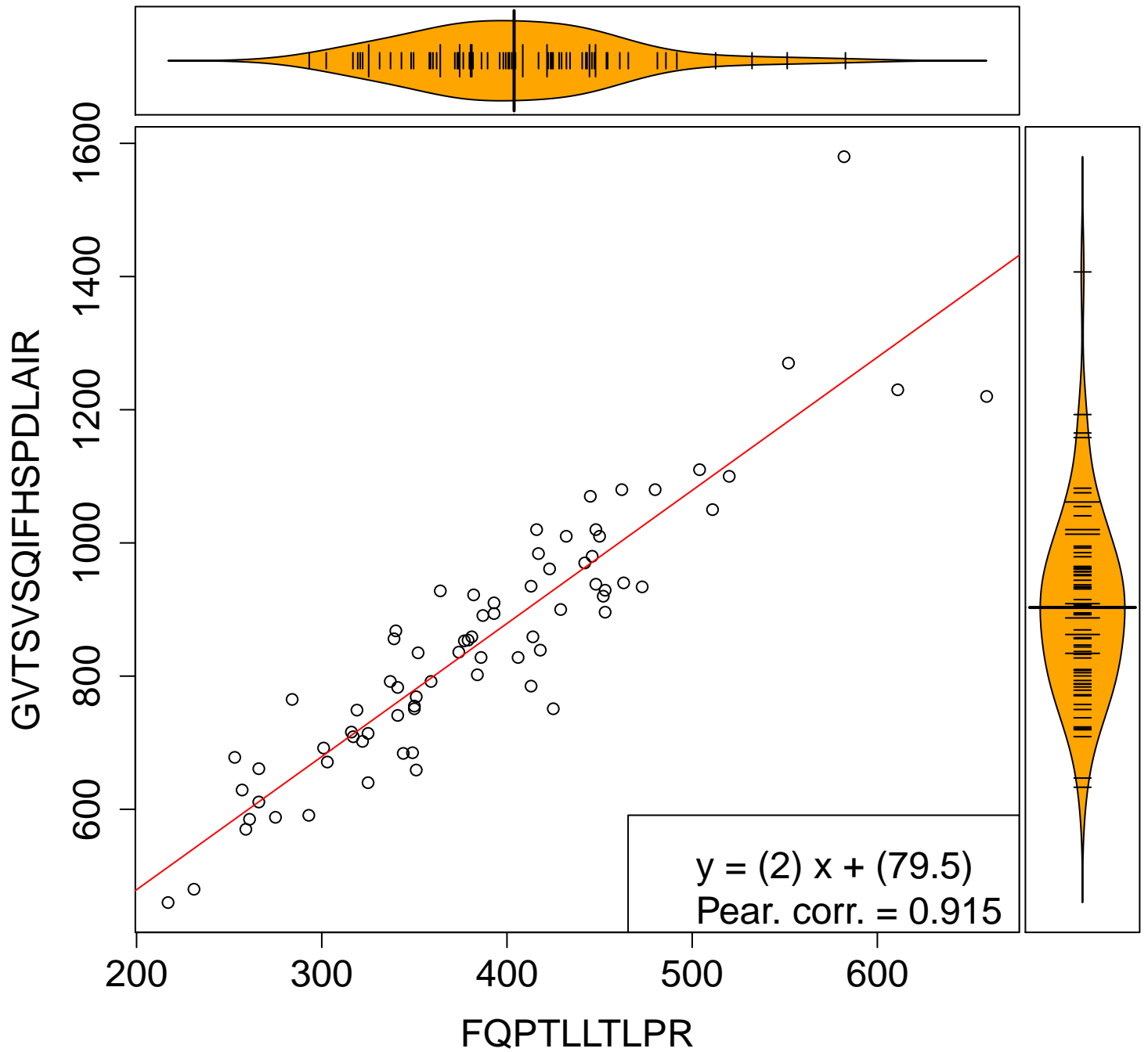
Coagulation factor XIII B chain



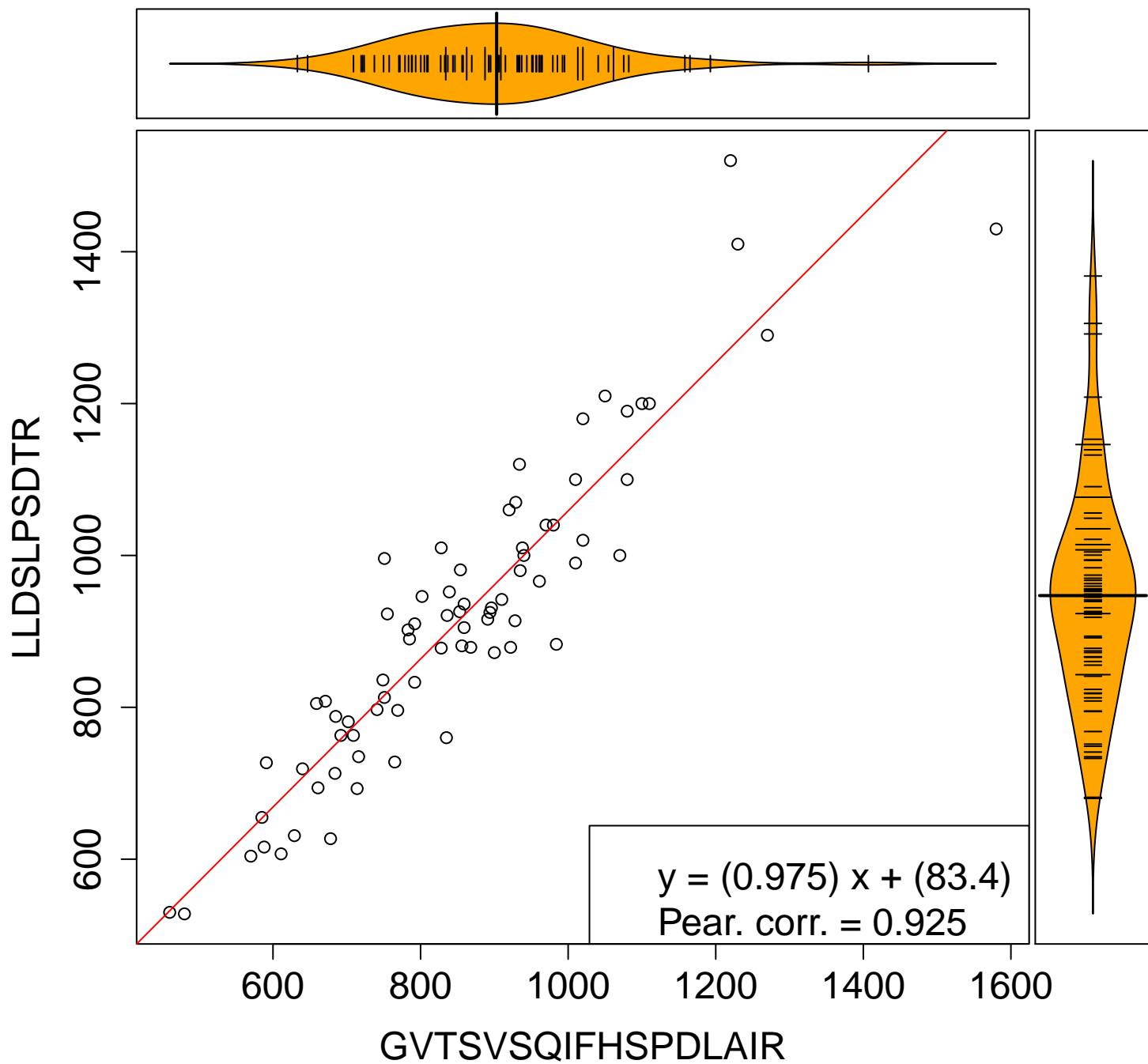
Coagulation factor XIII B chain



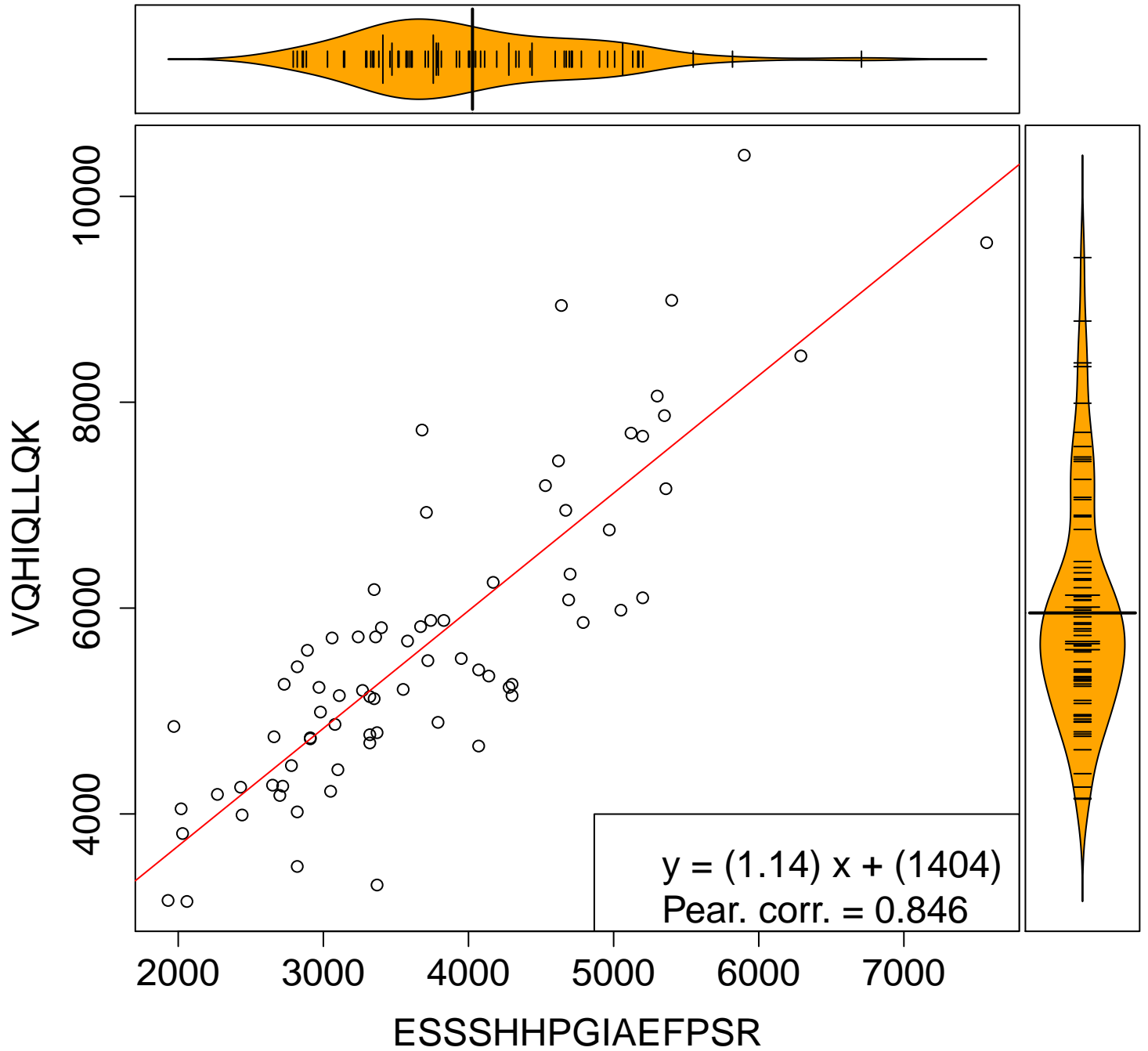
Plasma protease C1 inhibitor



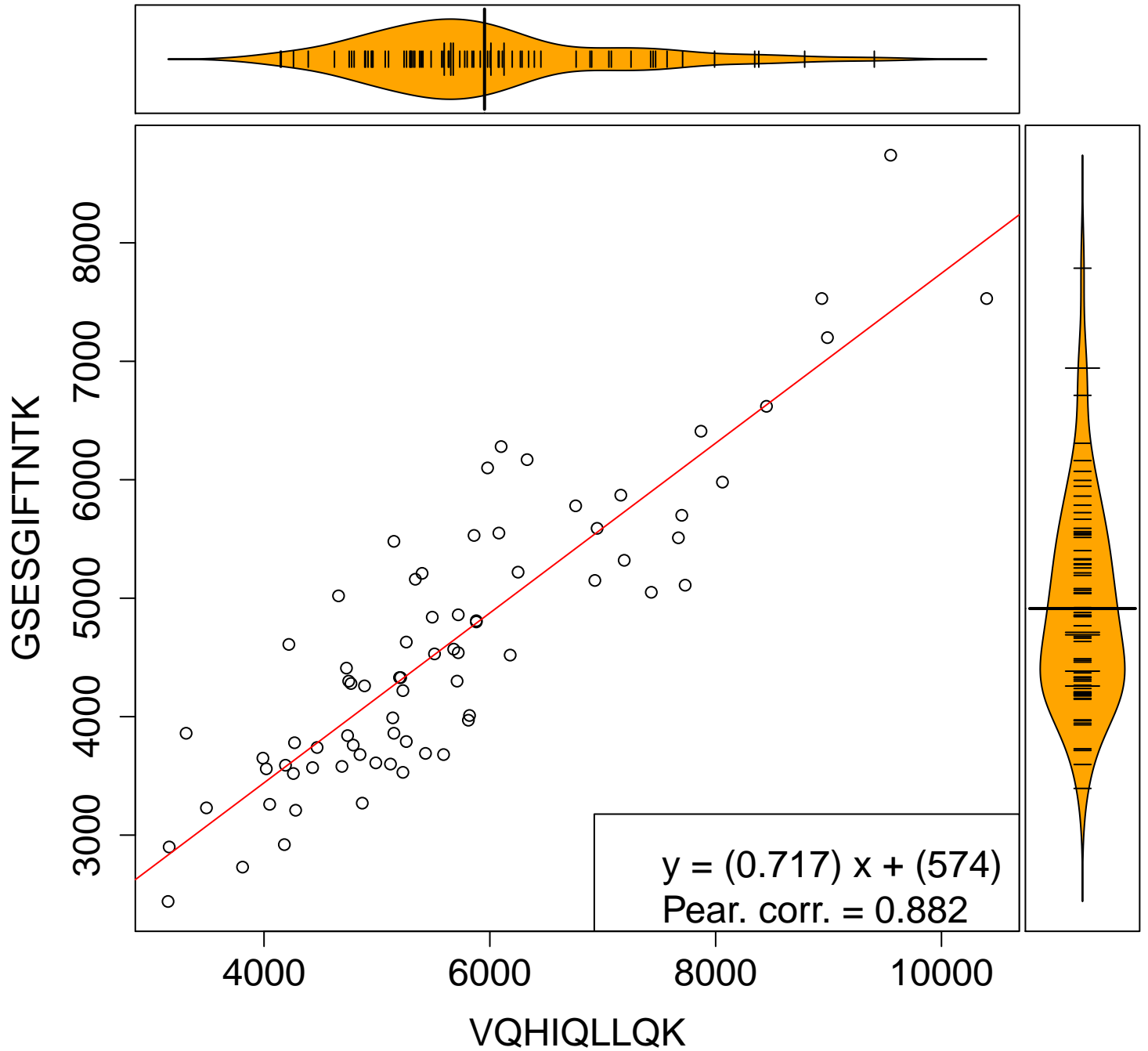
Plasma protease C1 inhibitor



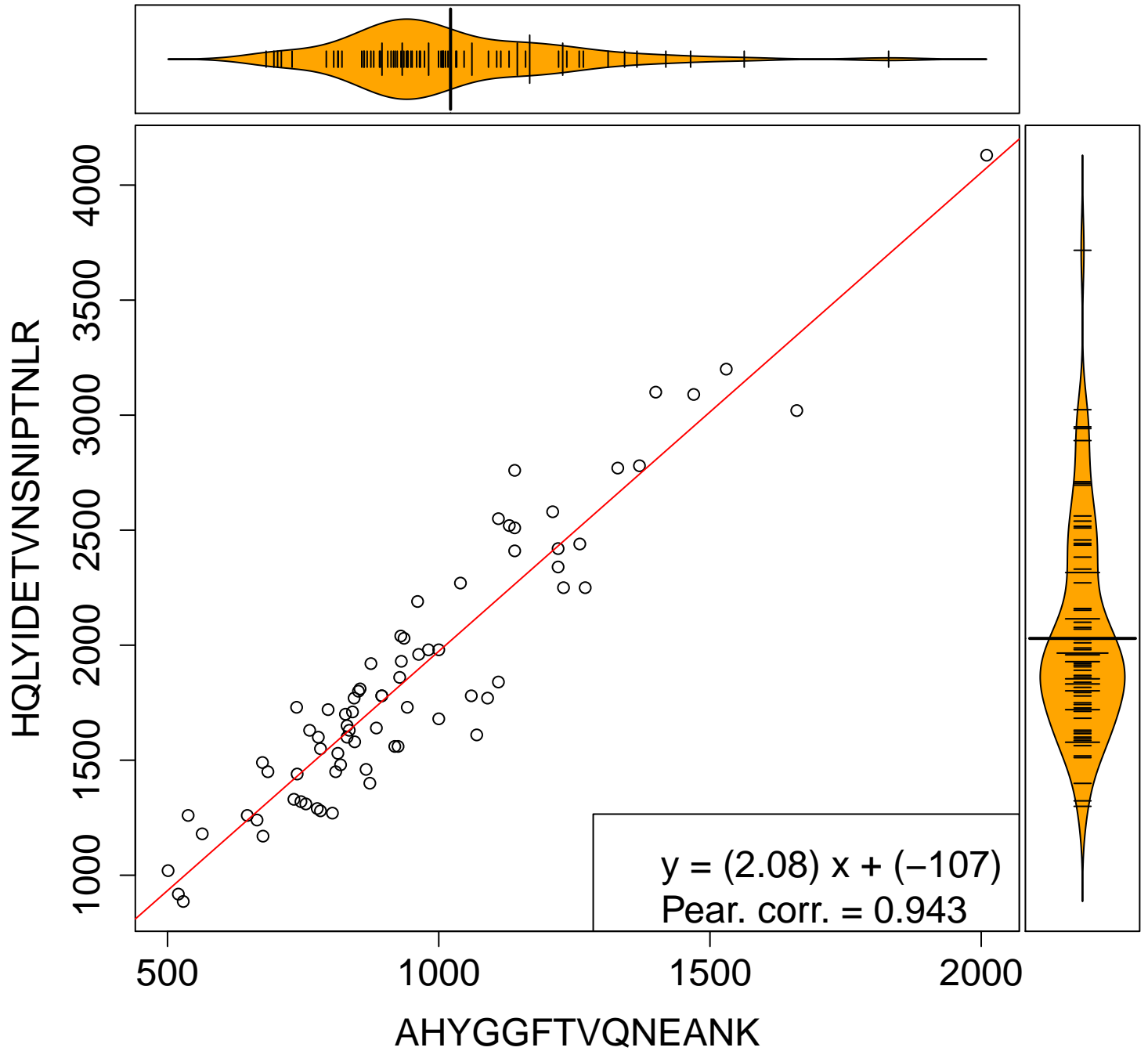
Fibrinogen alpha chain



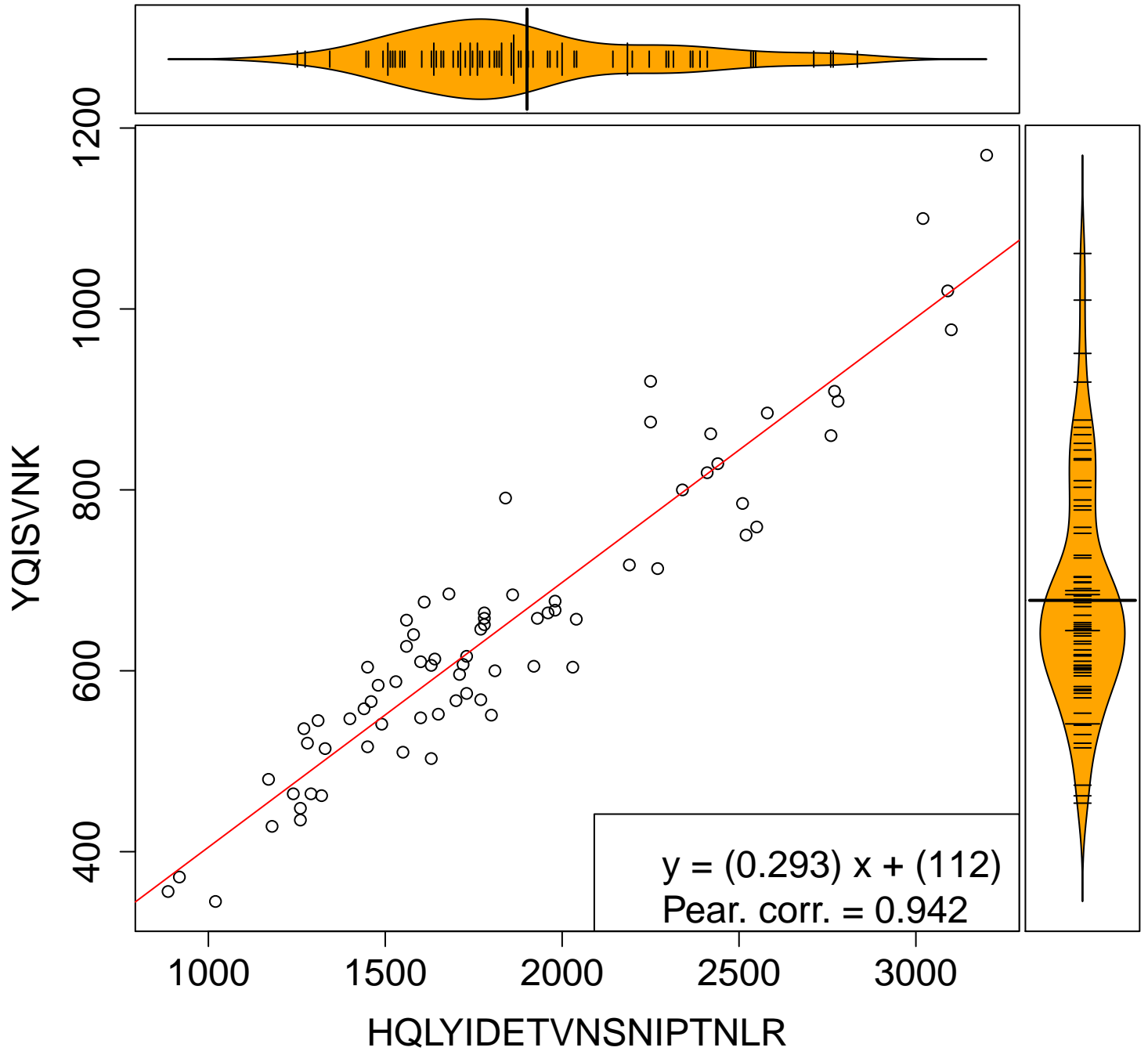
Fibrinogen alpha chain



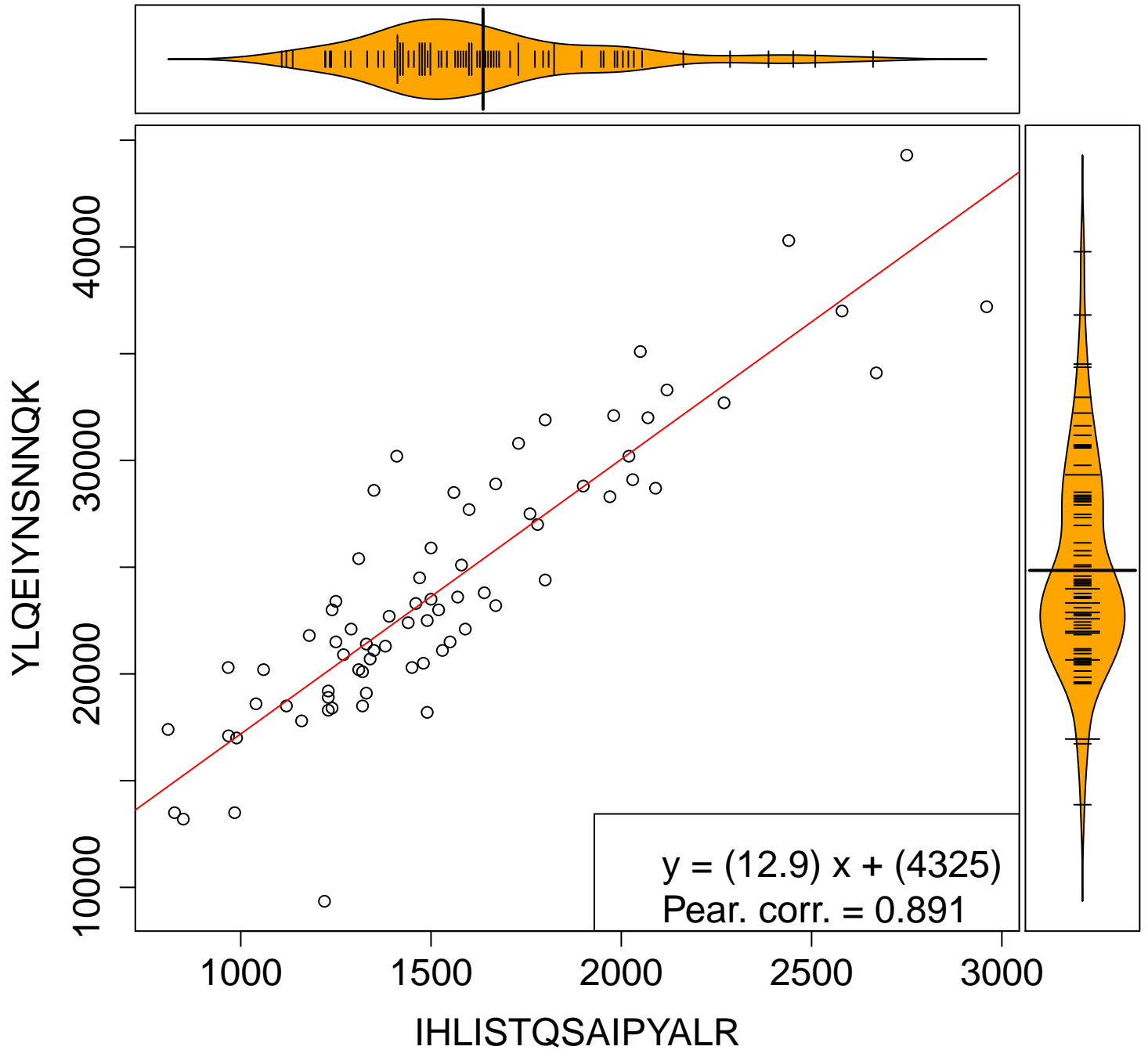
Fibrinogen beta chain



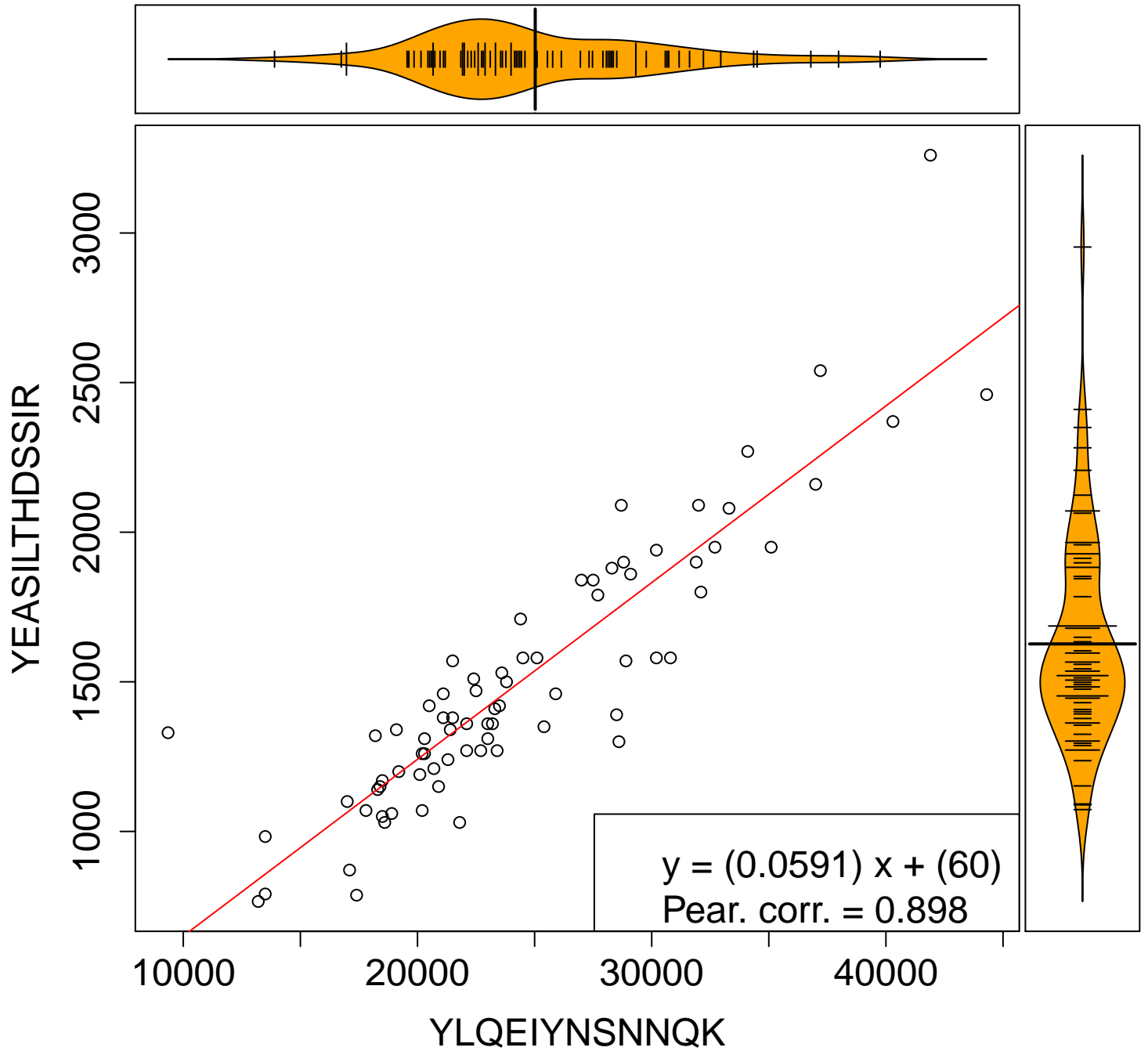
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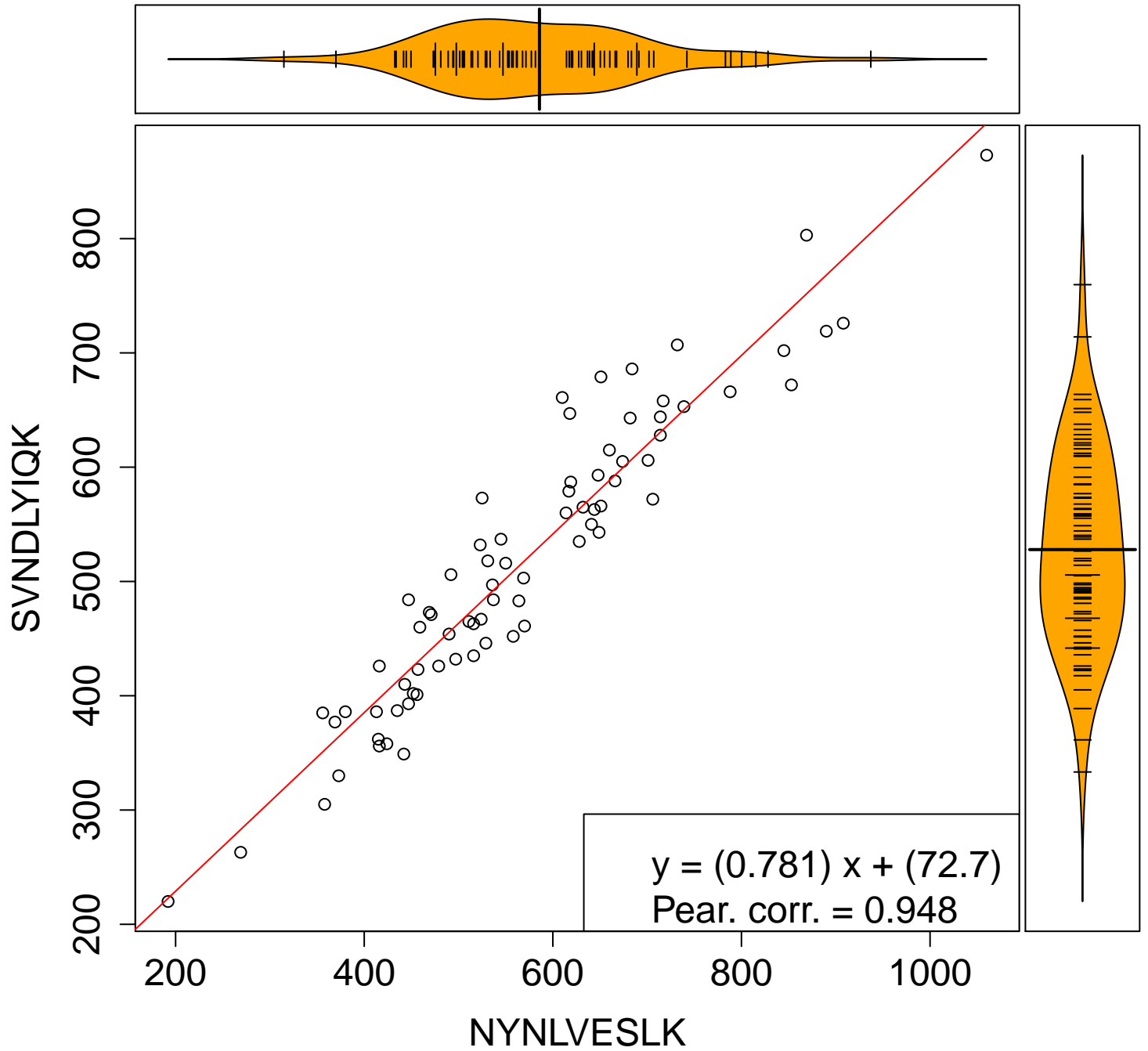
Fibrinogen gamma chain



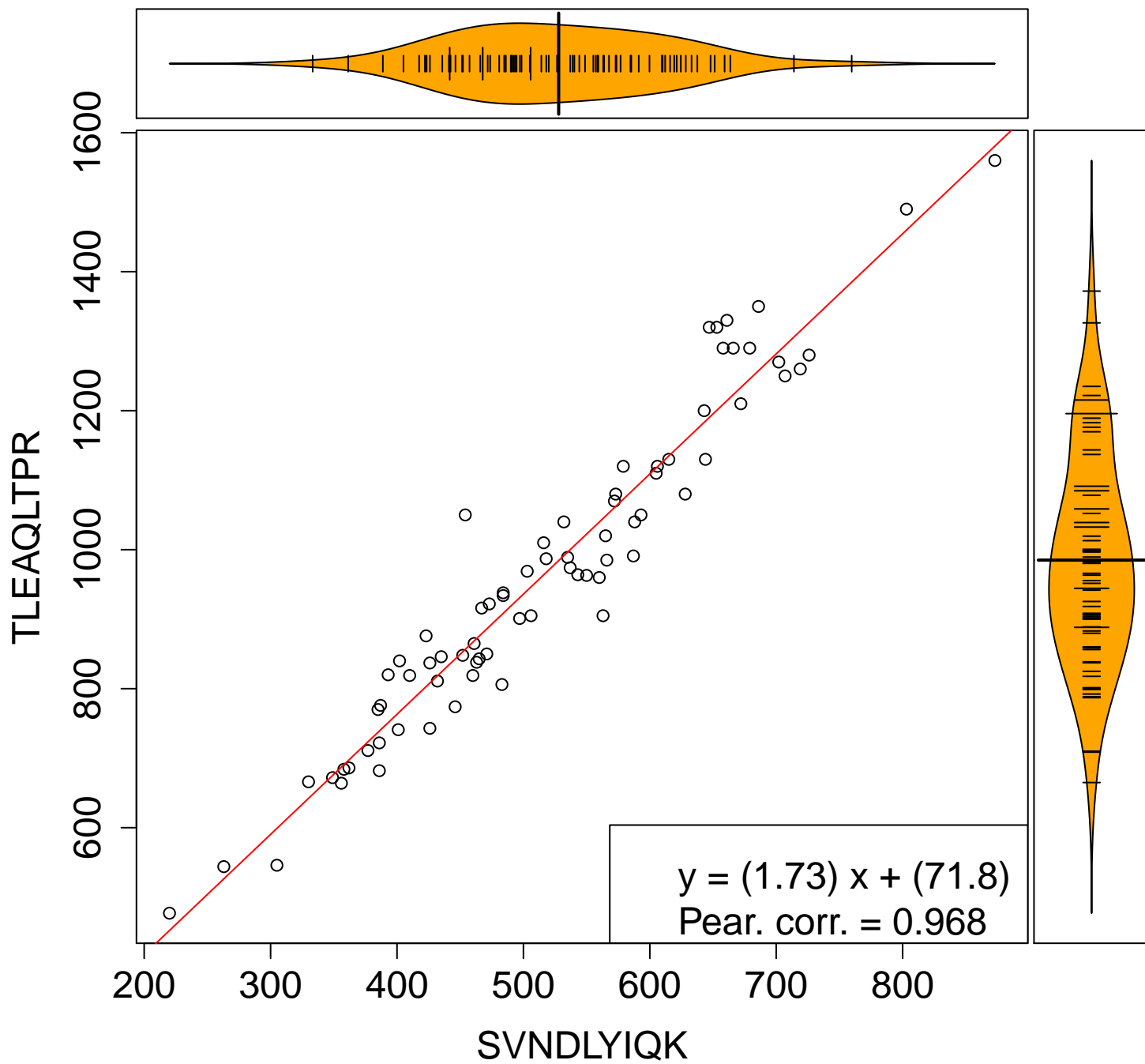
Fibrinogen gamma chain



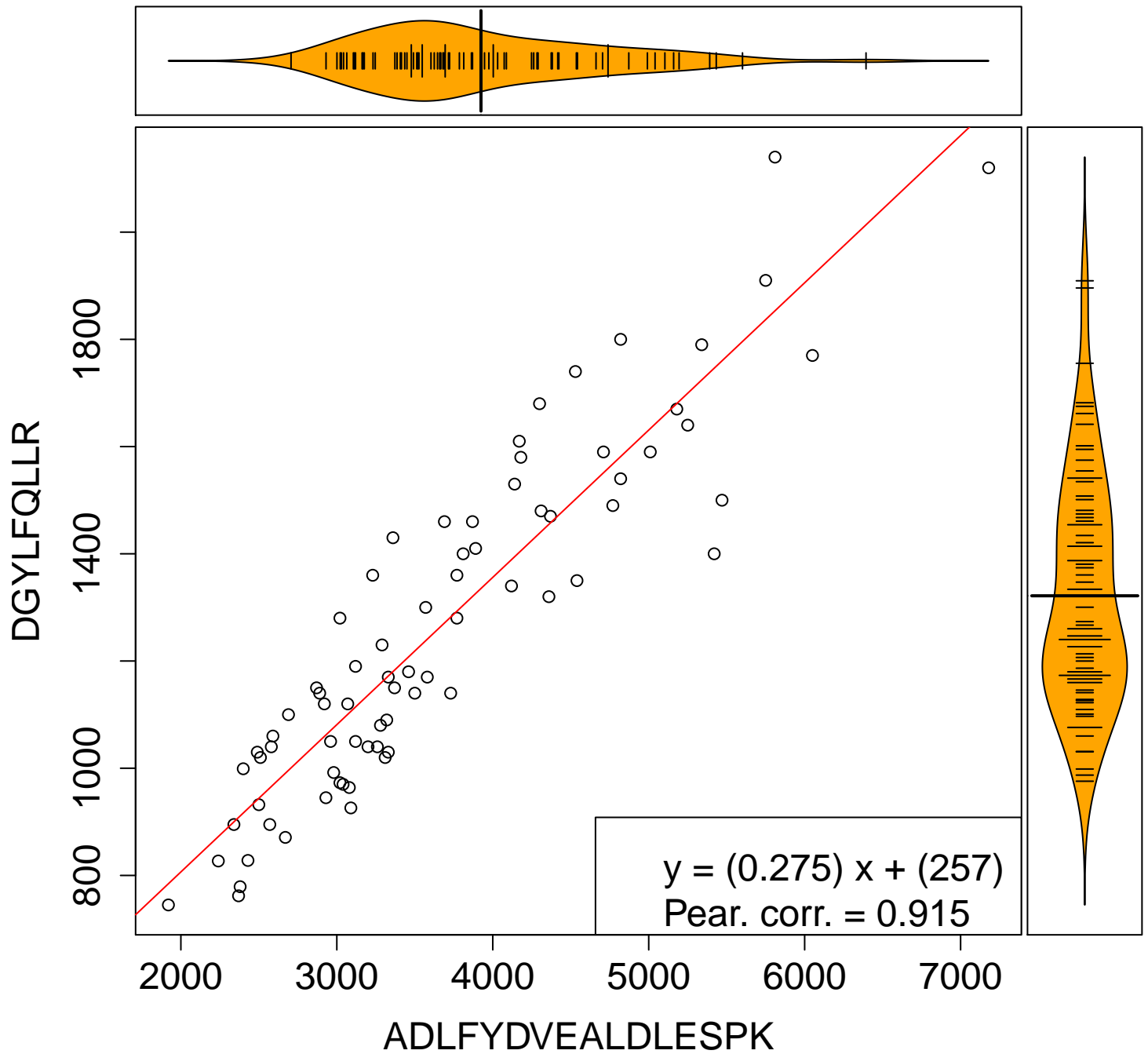
Heparin cofactor 2



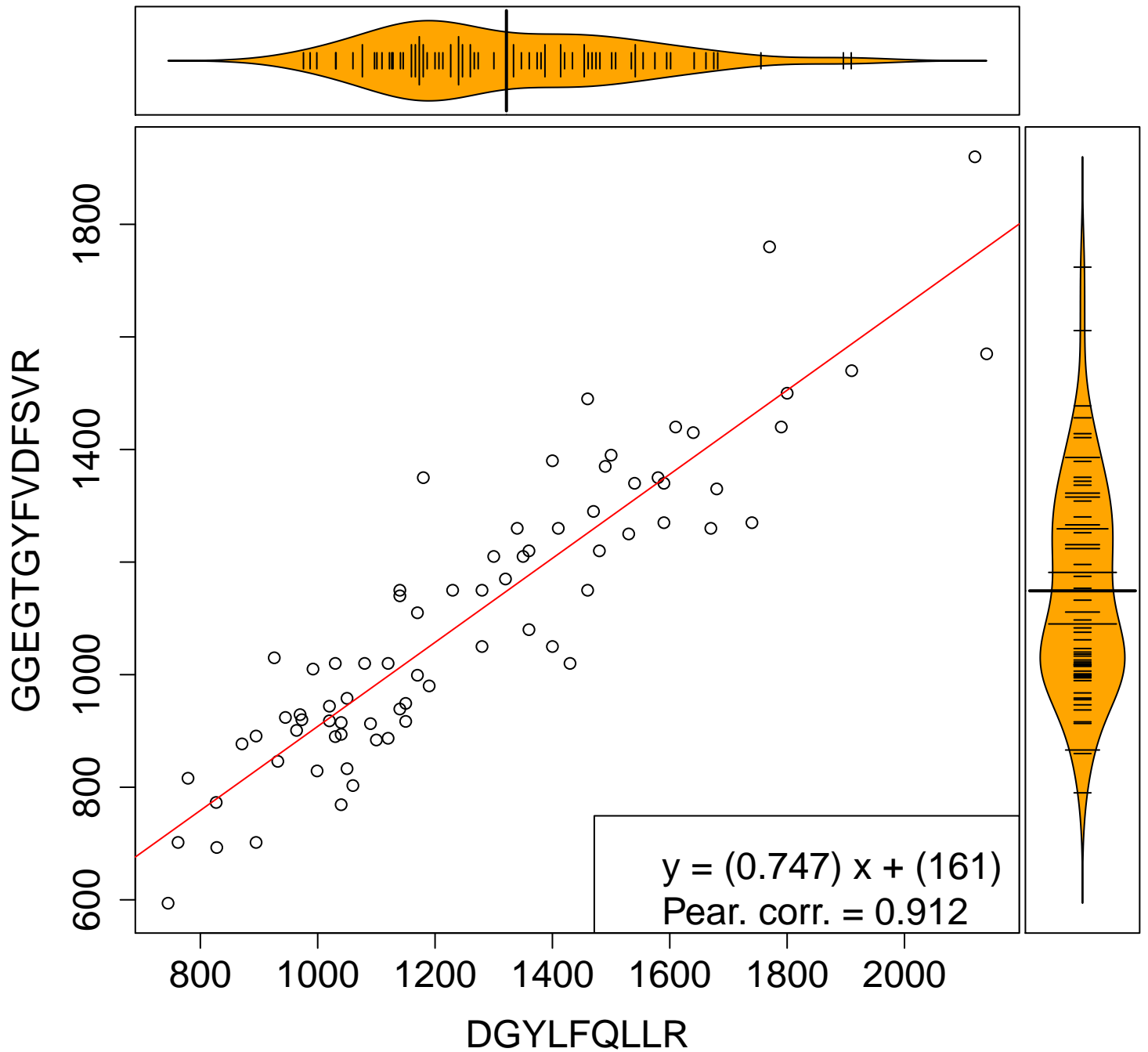
Heparin cofactor 2



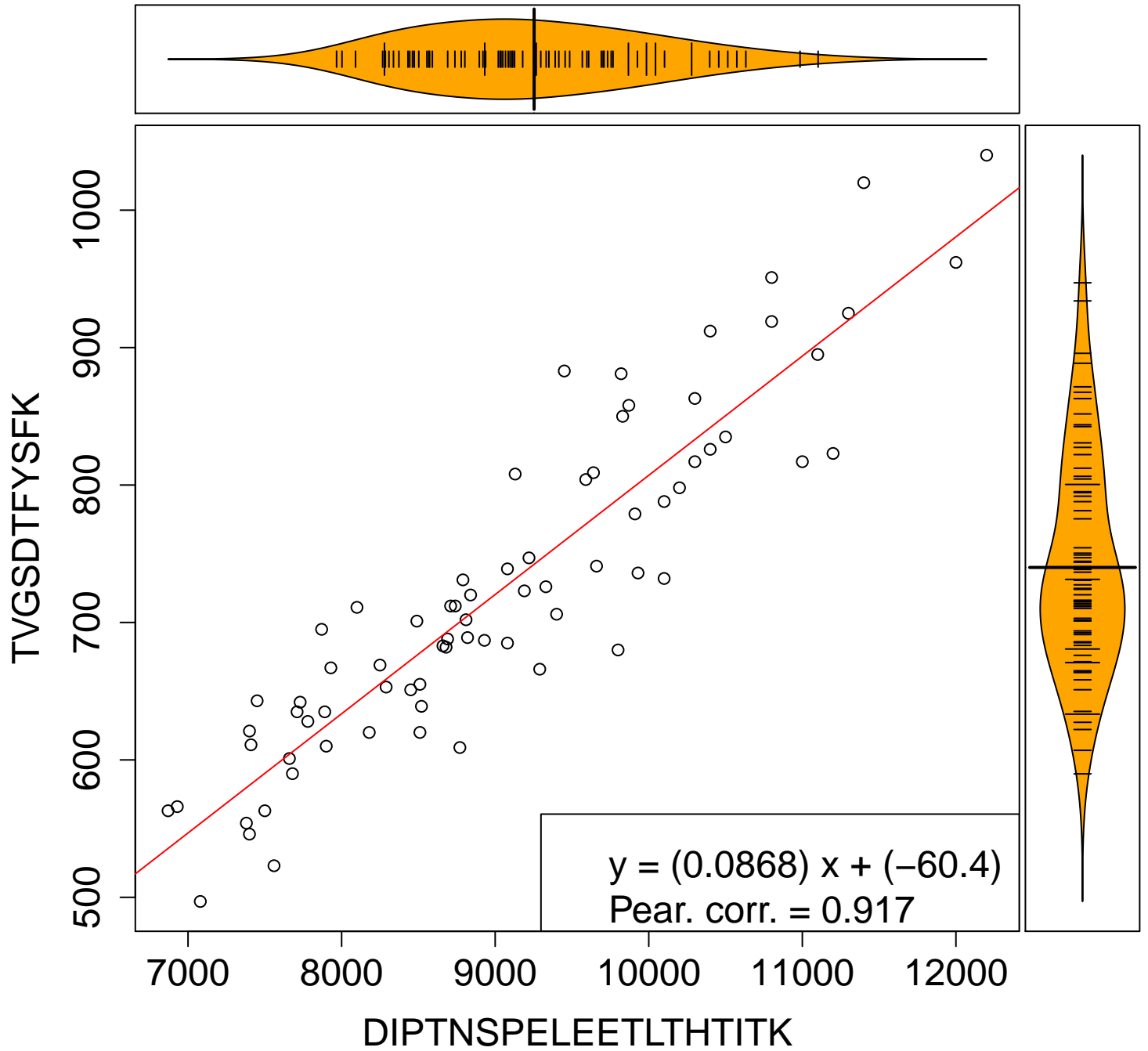
Histidine-rich glycoprotein



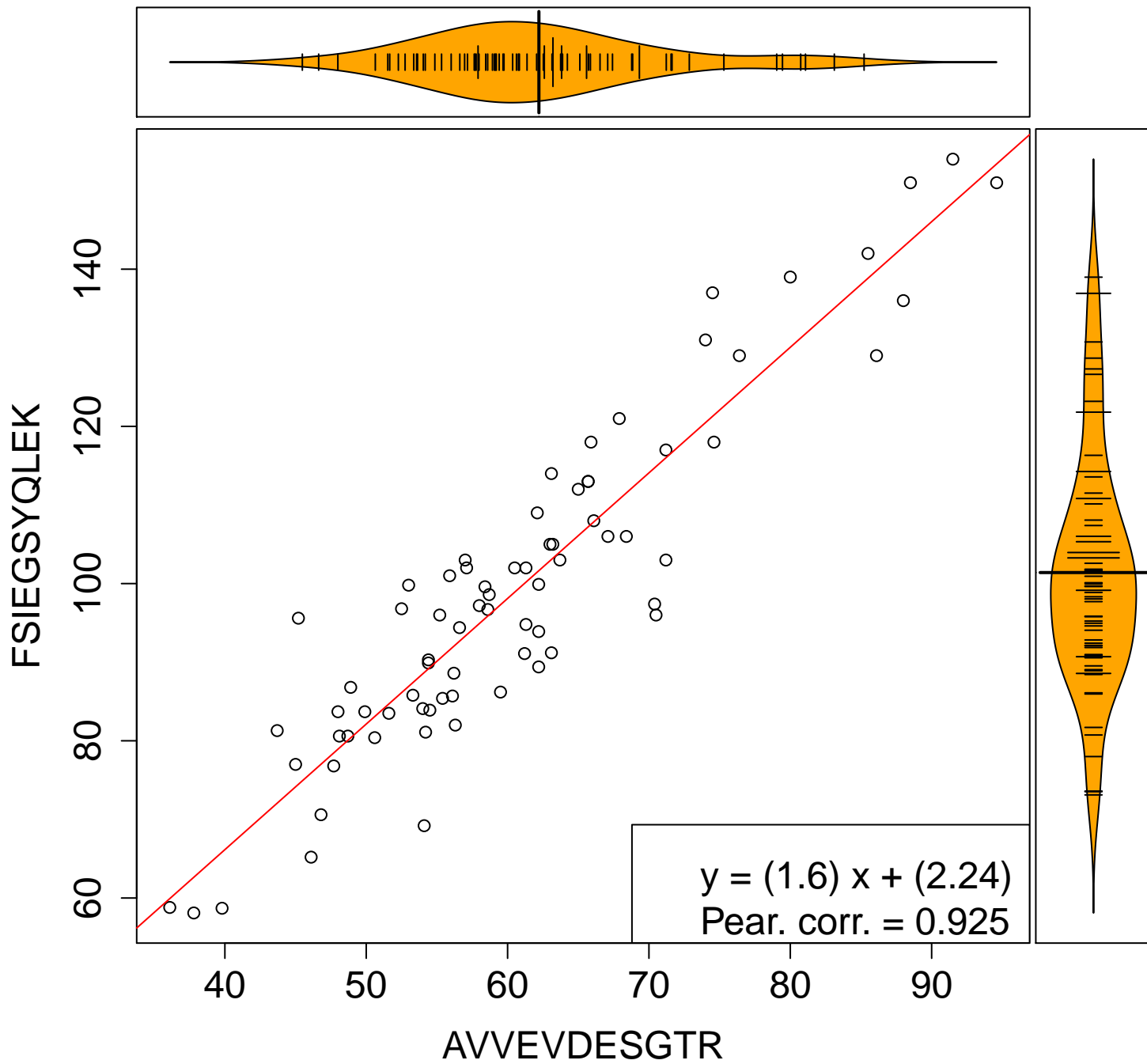
Histidine-rich glycoprotein



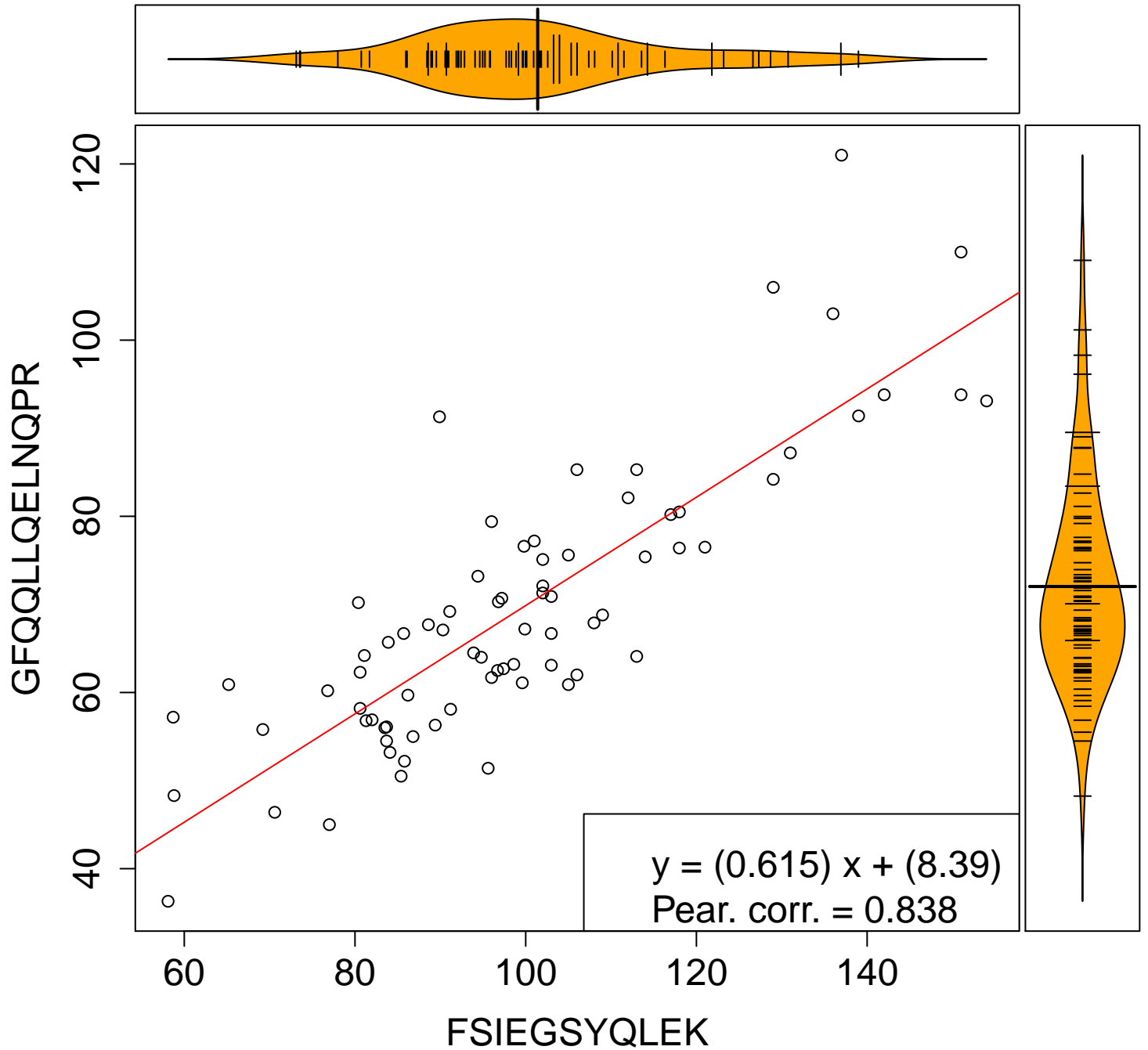
Kininogen-1



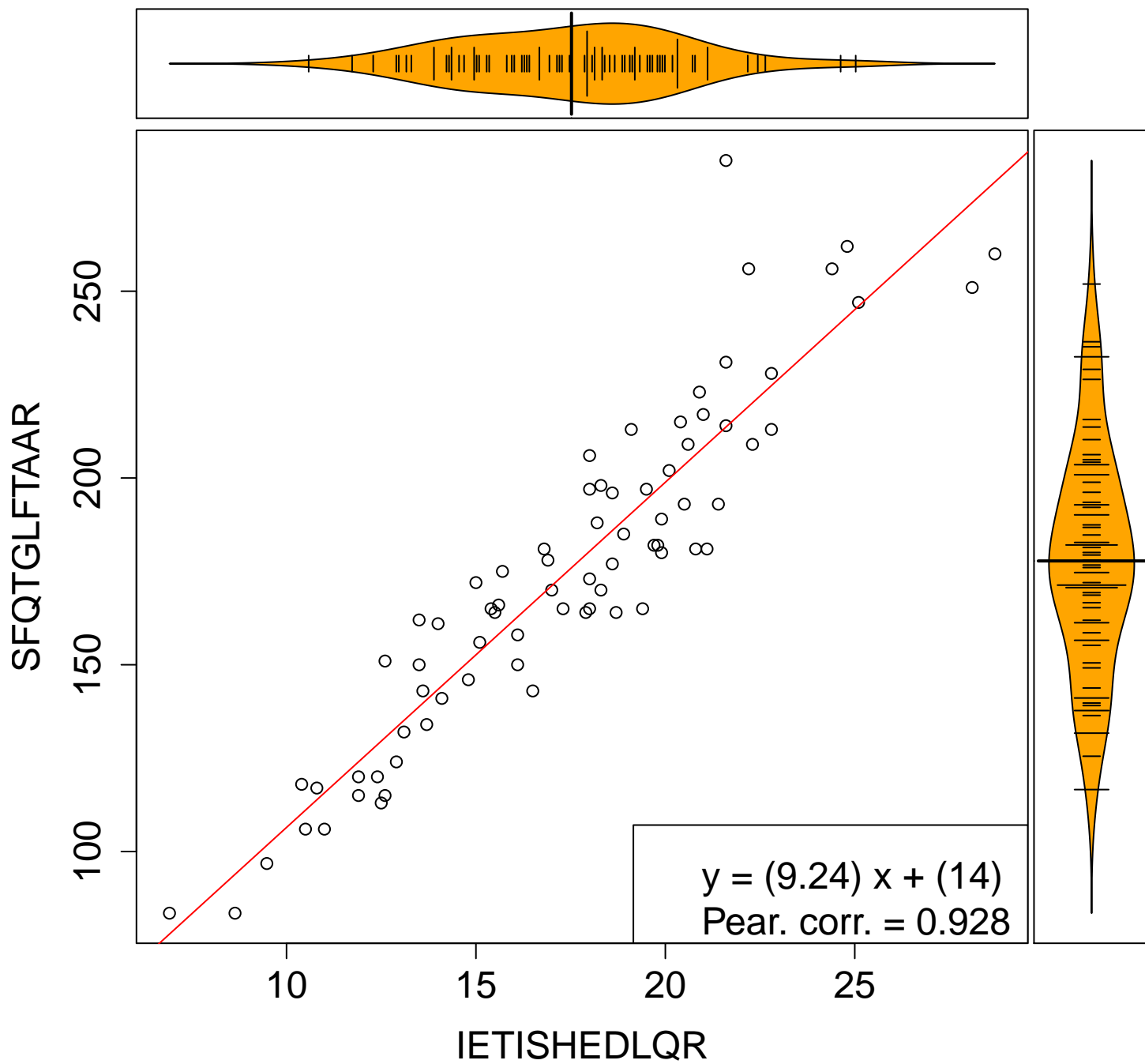
Plasma serine protease inhibitor



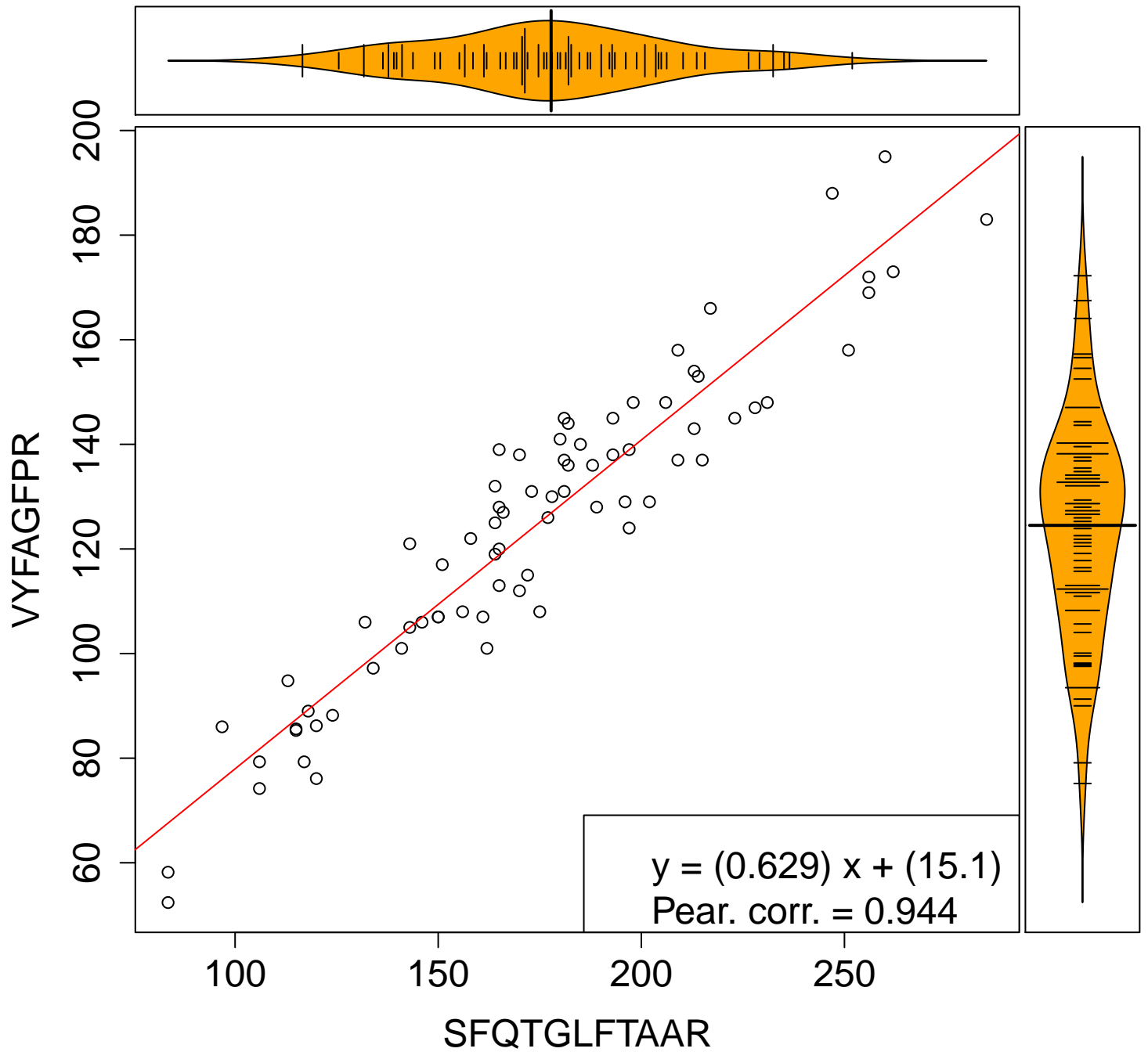
Plasma serine protease inhibitor



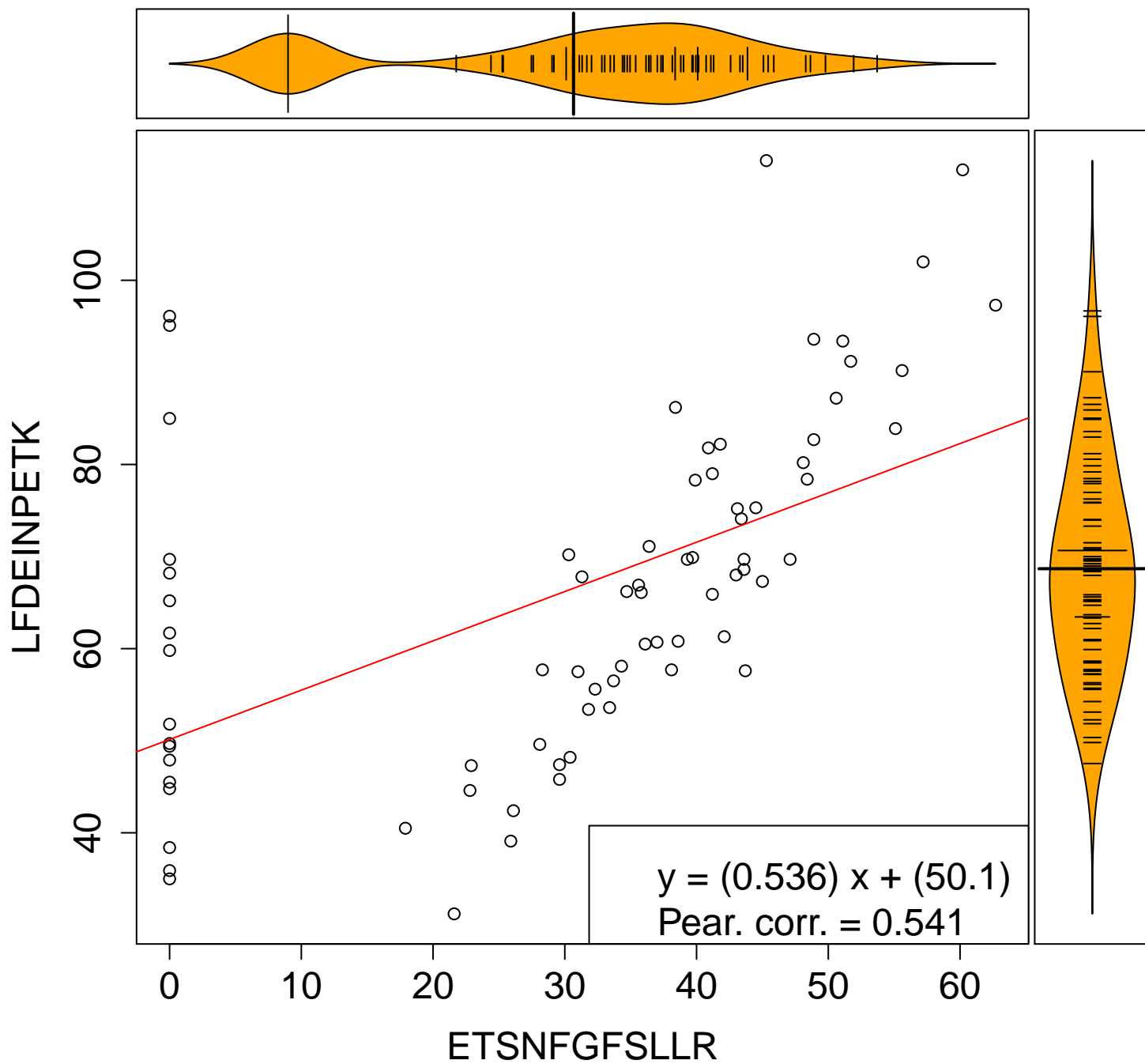
Vitamin K-dependent protein S



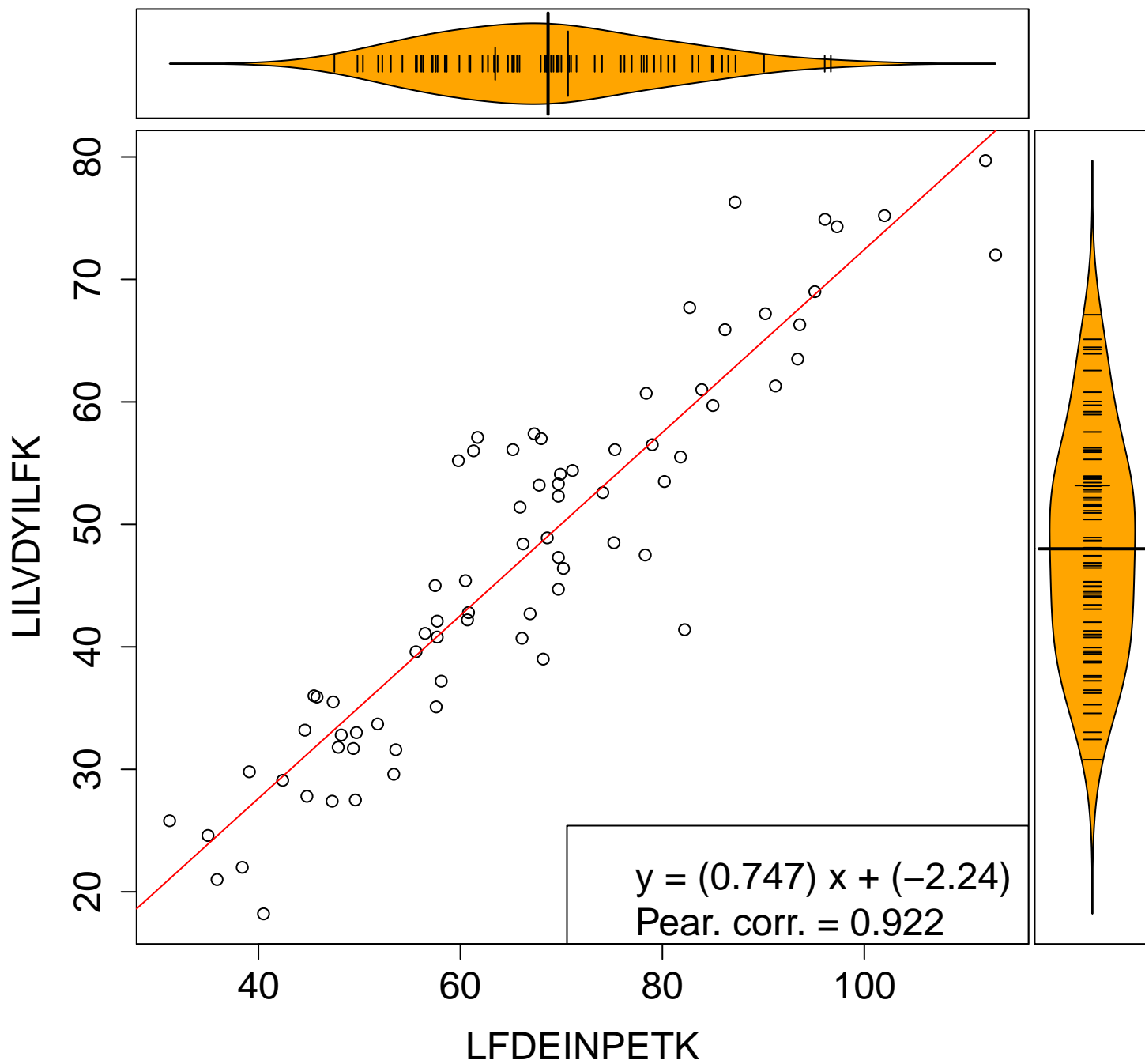
Vitamin K-dependent protein S



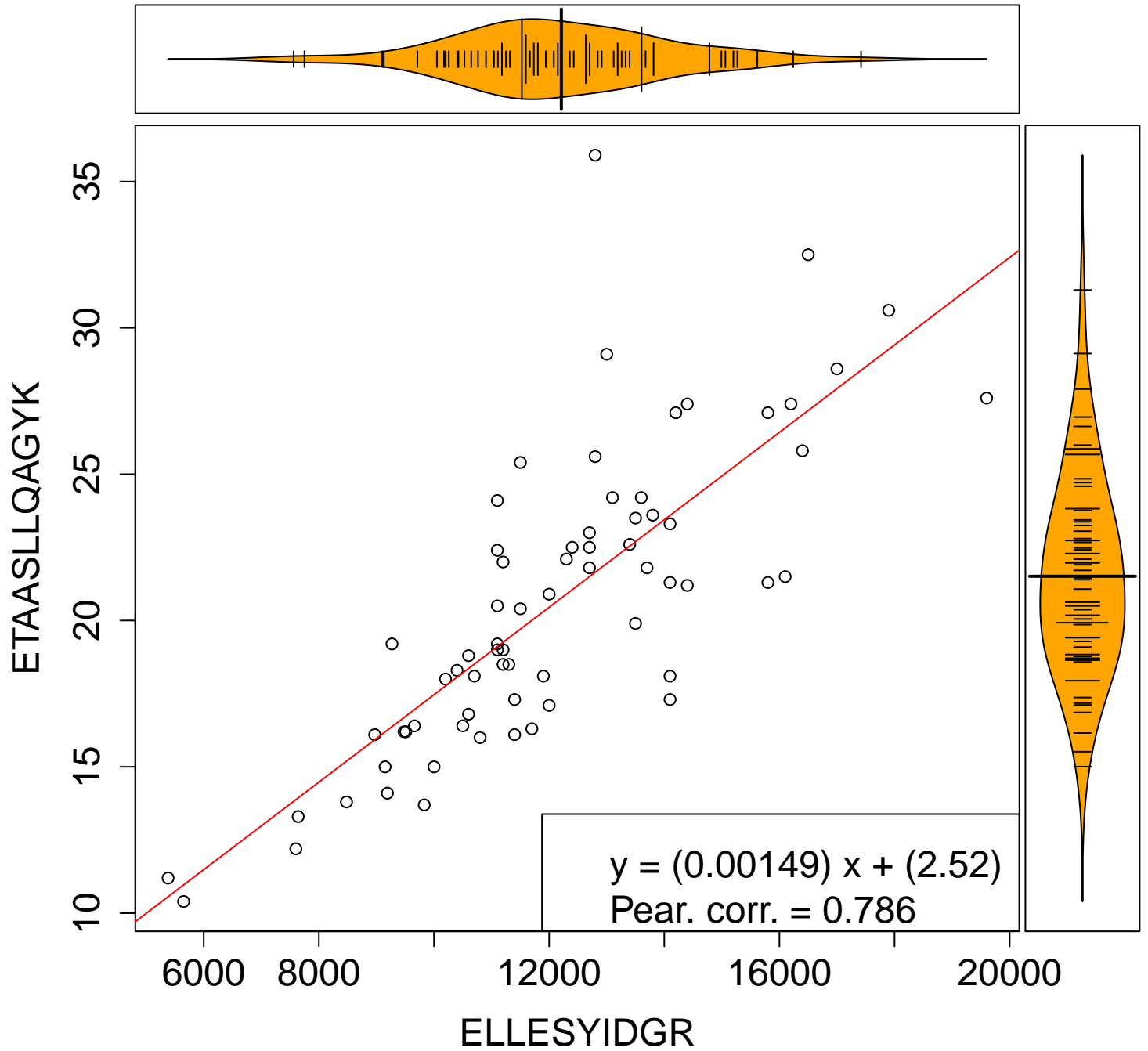
Protein Z-dependent protease inhibitor



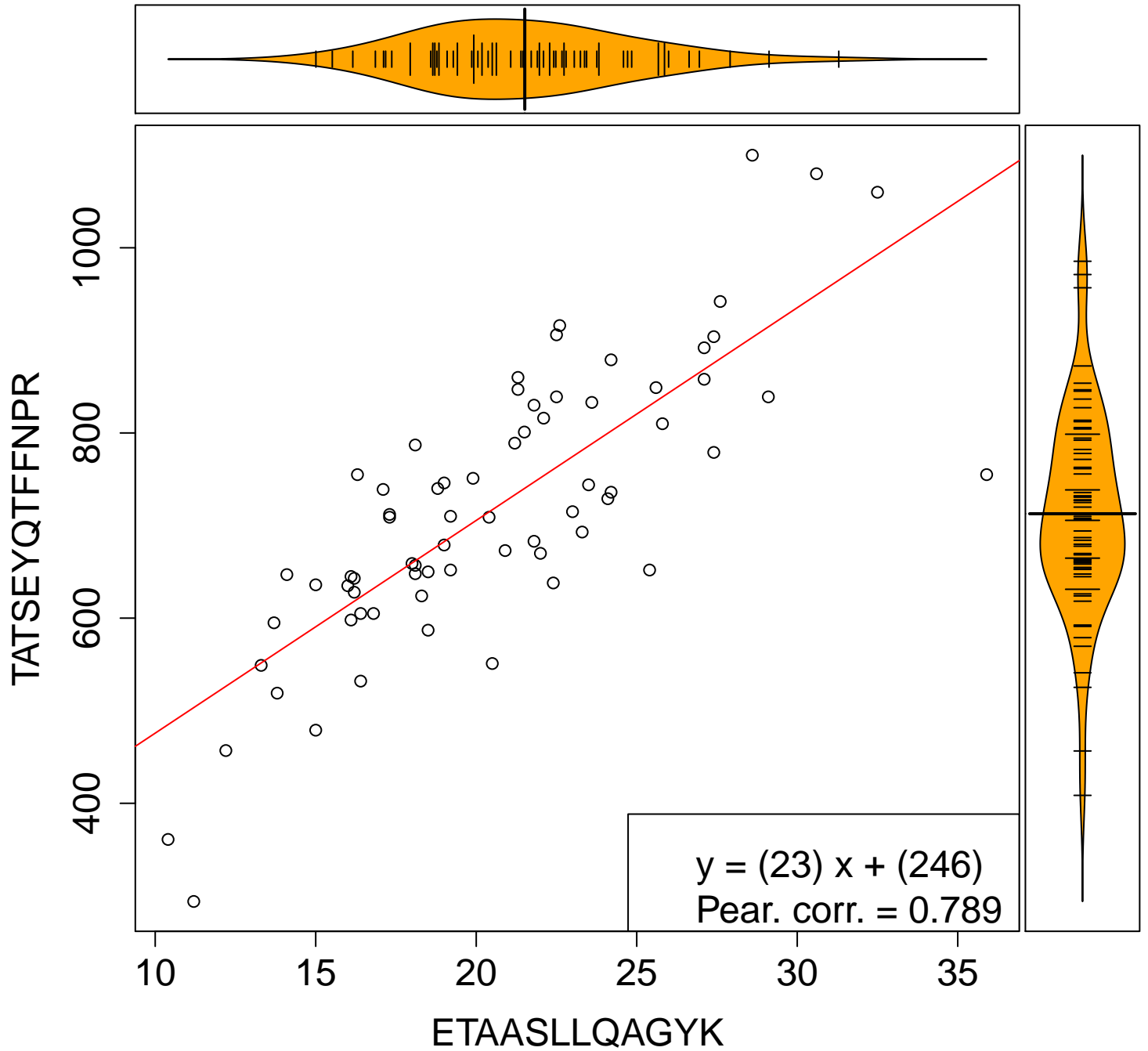
Protein Z-dependent protease inhibitor



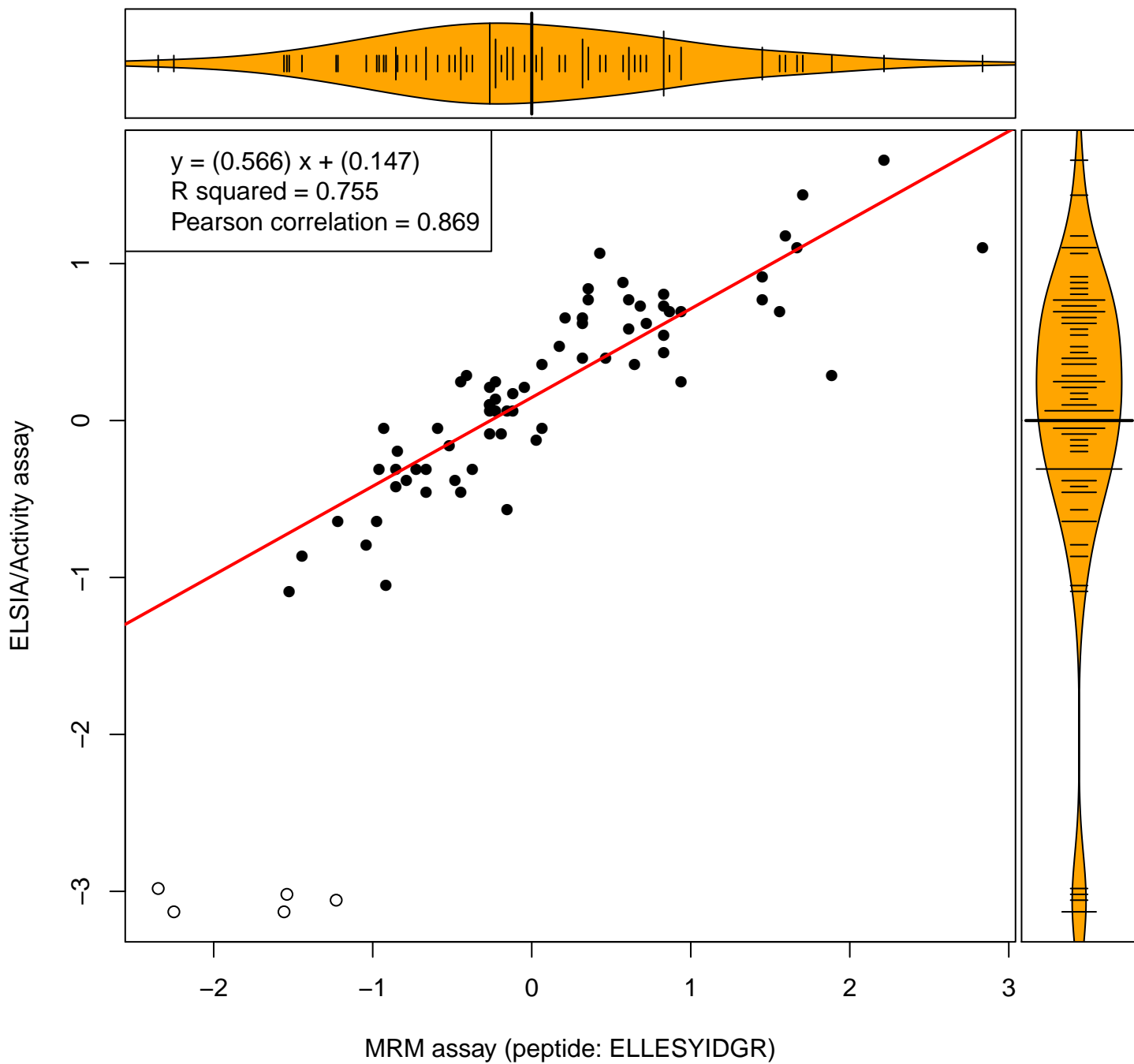
Prothrombin



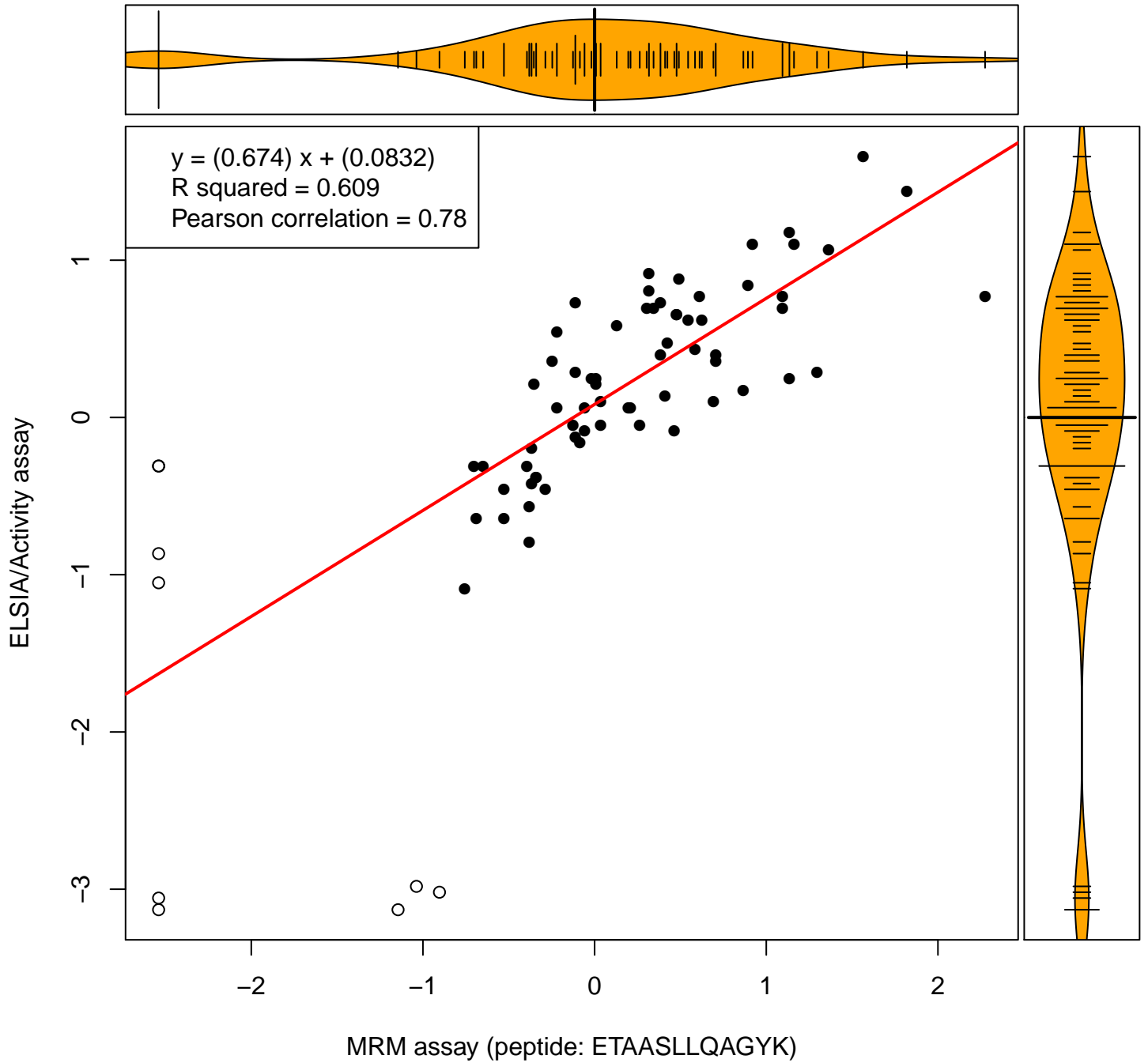
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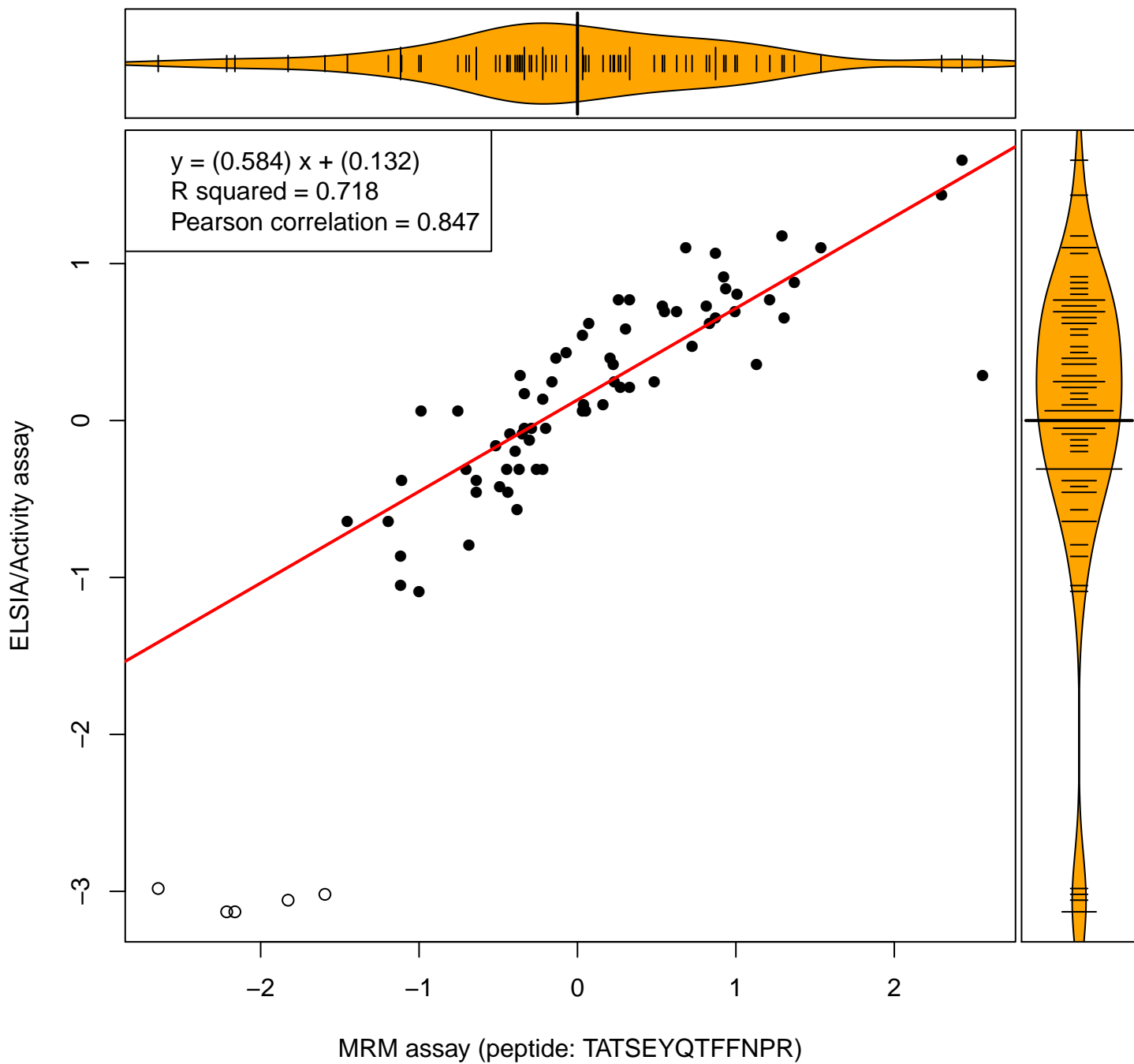
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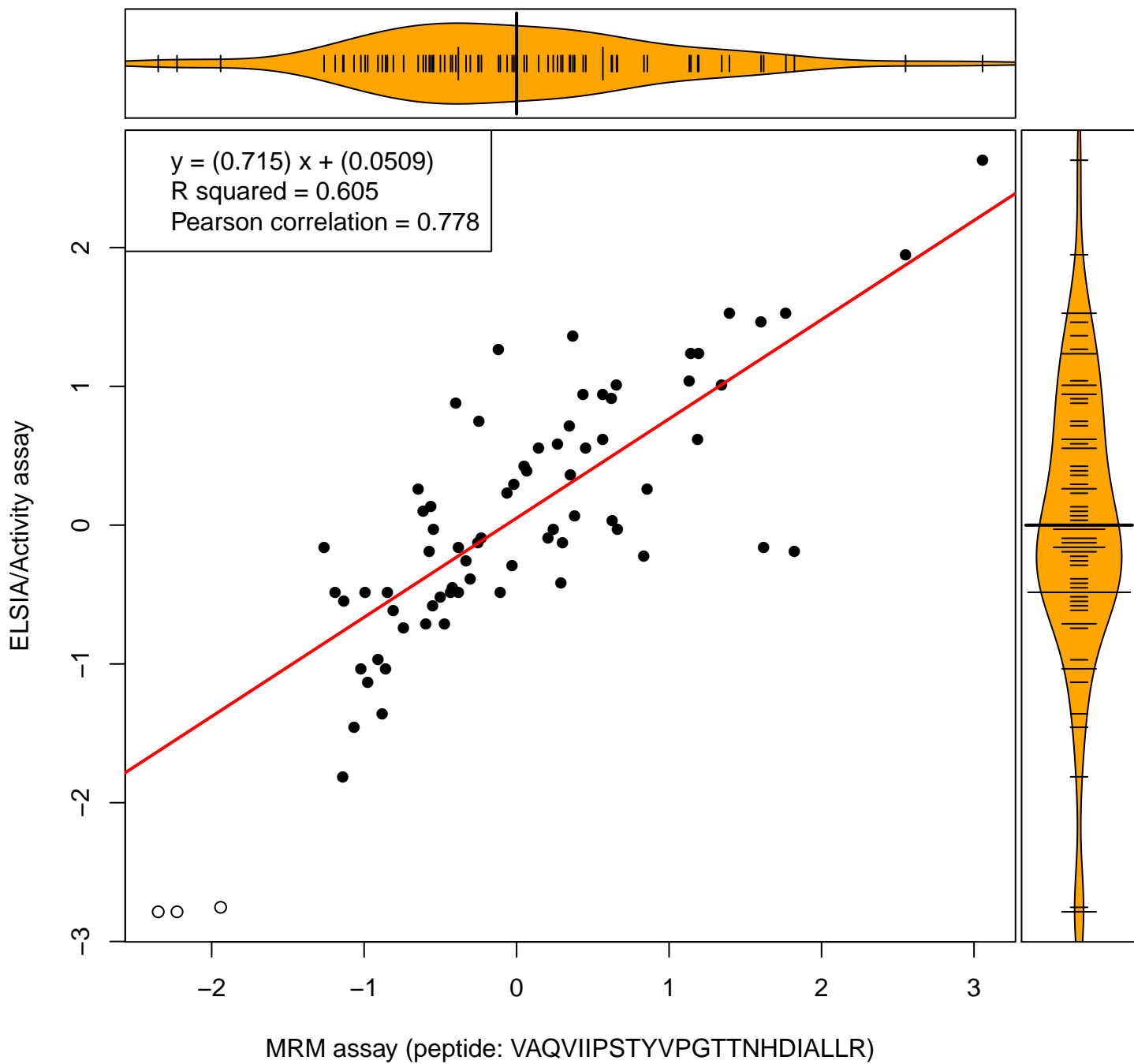
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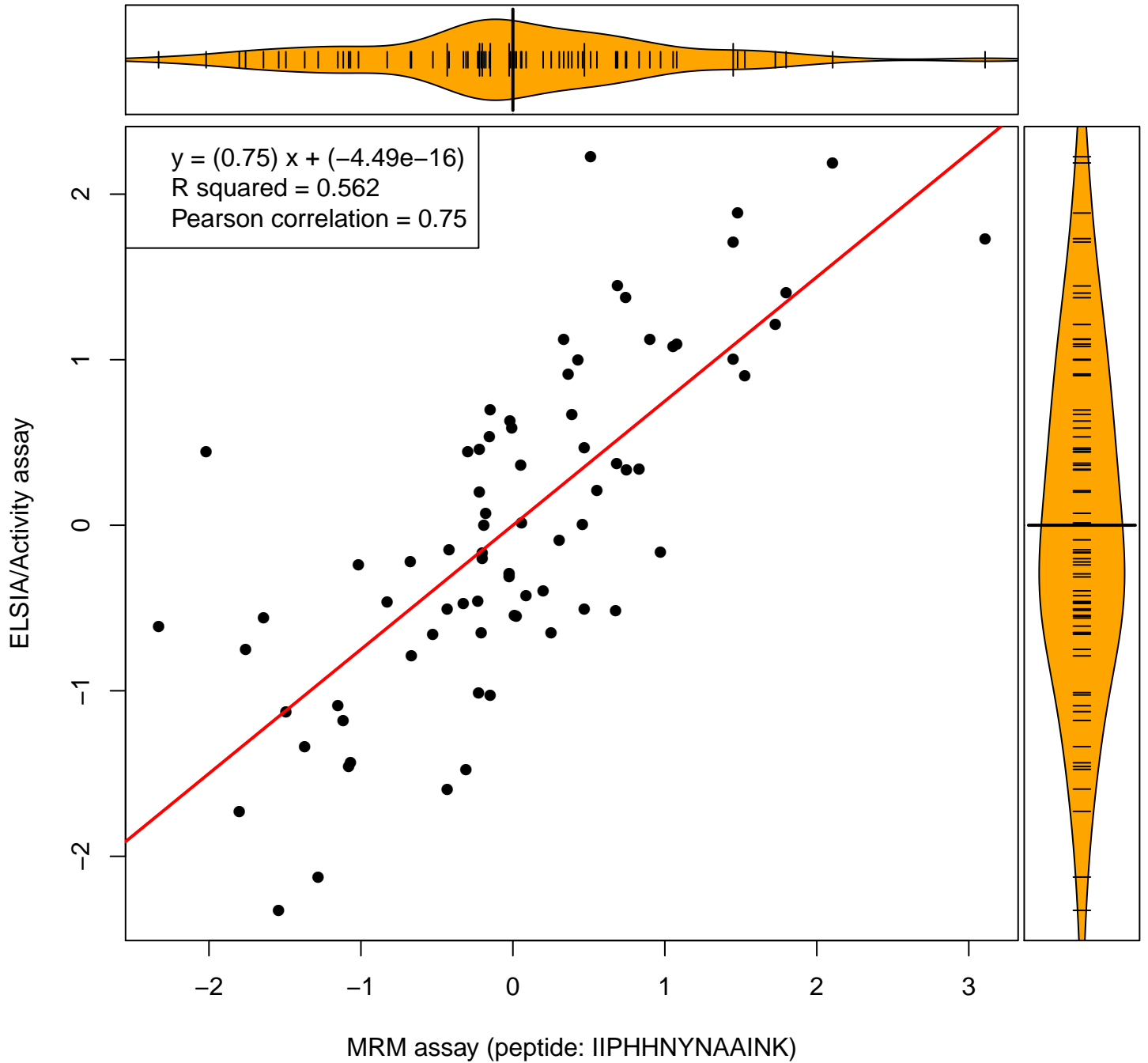
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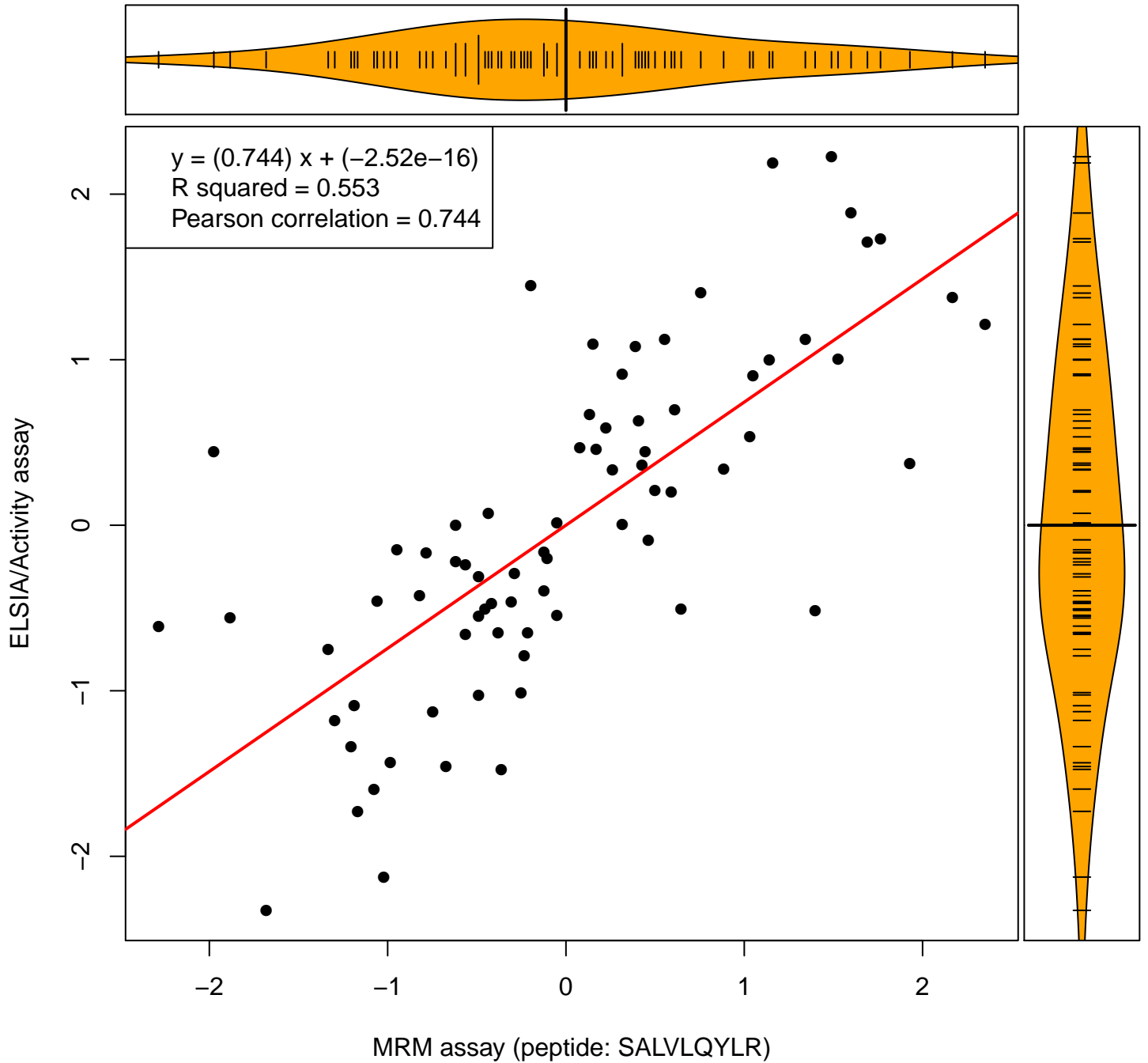
Coagulation factor VII, P08709



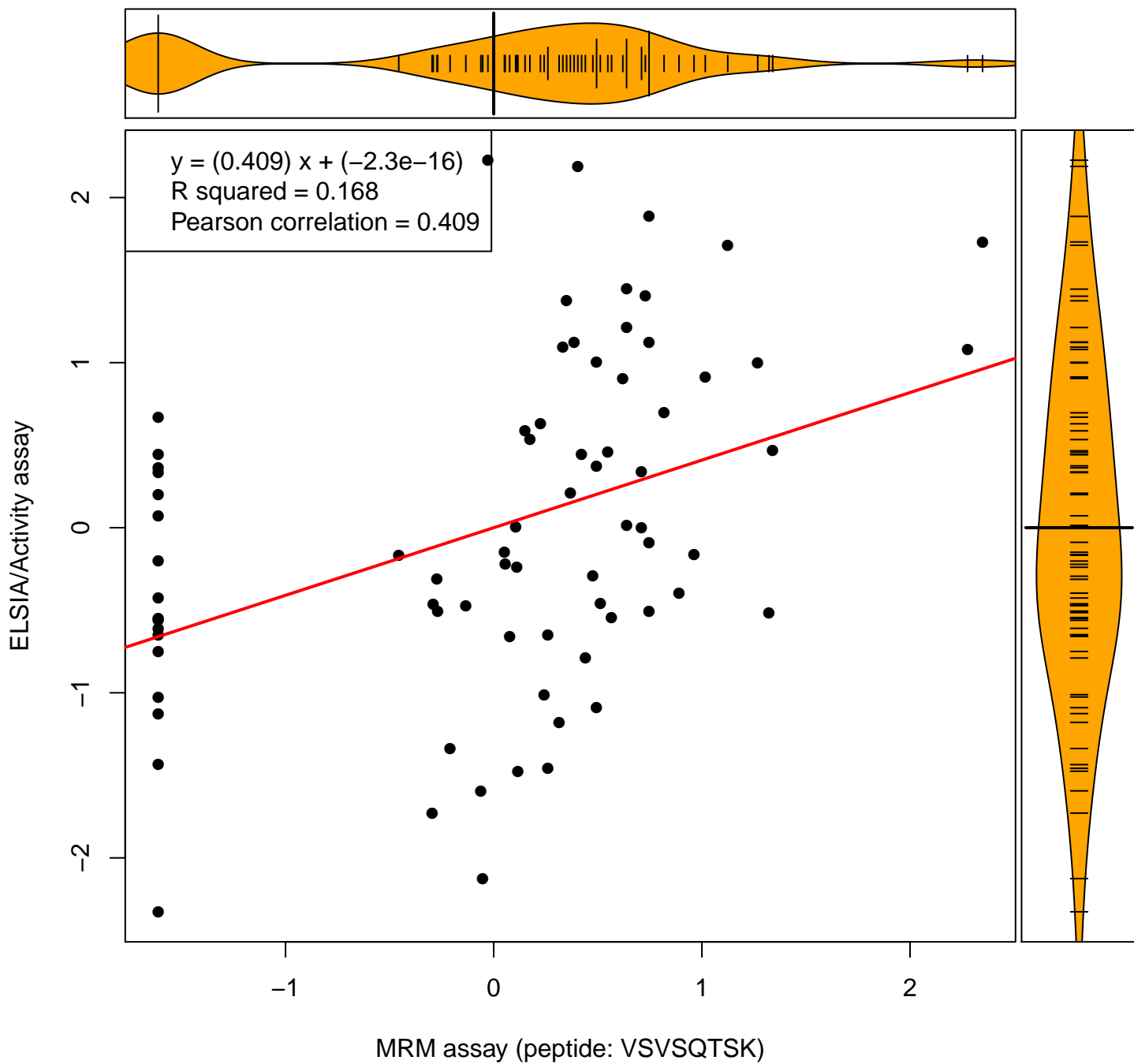
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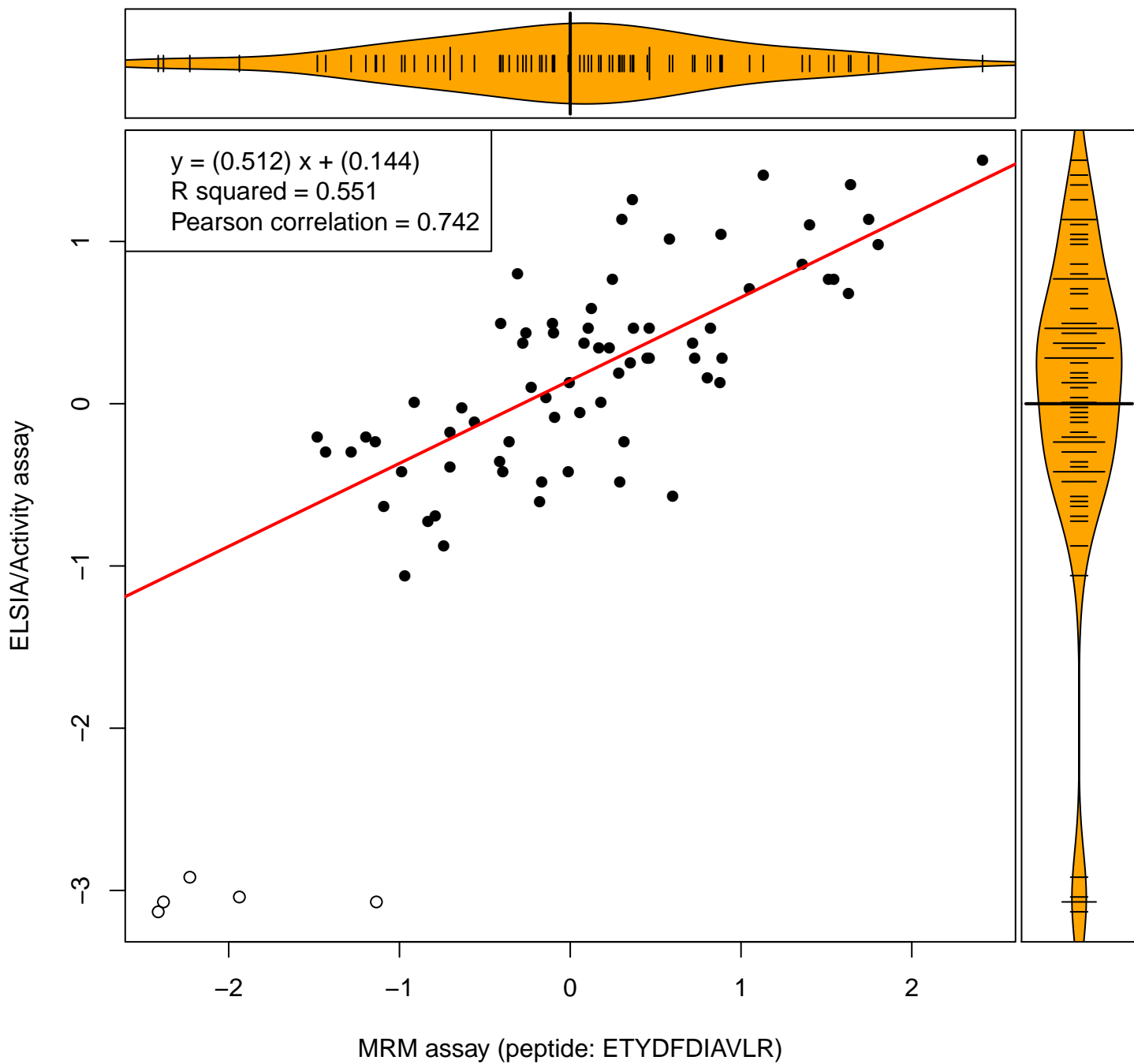
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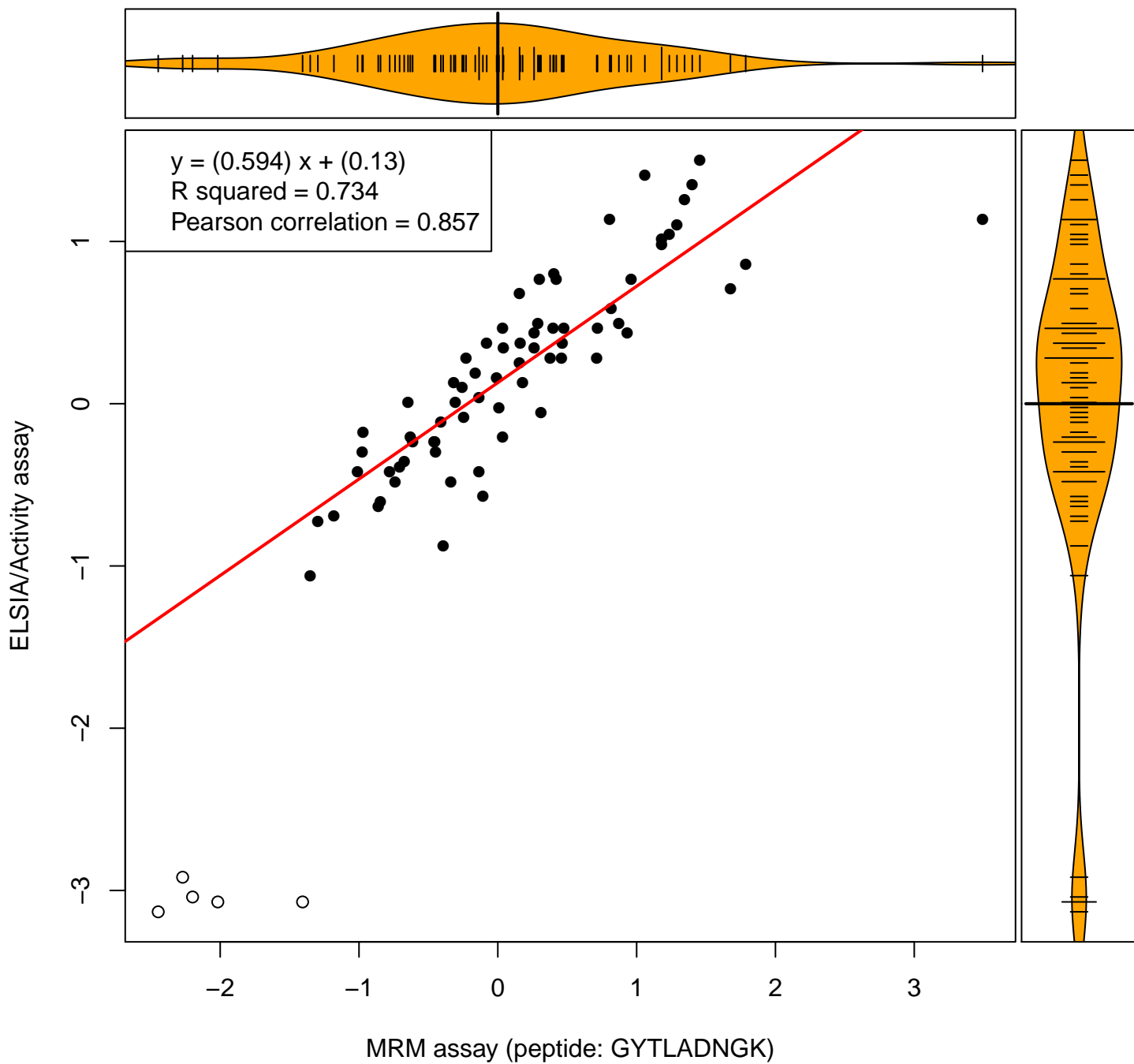
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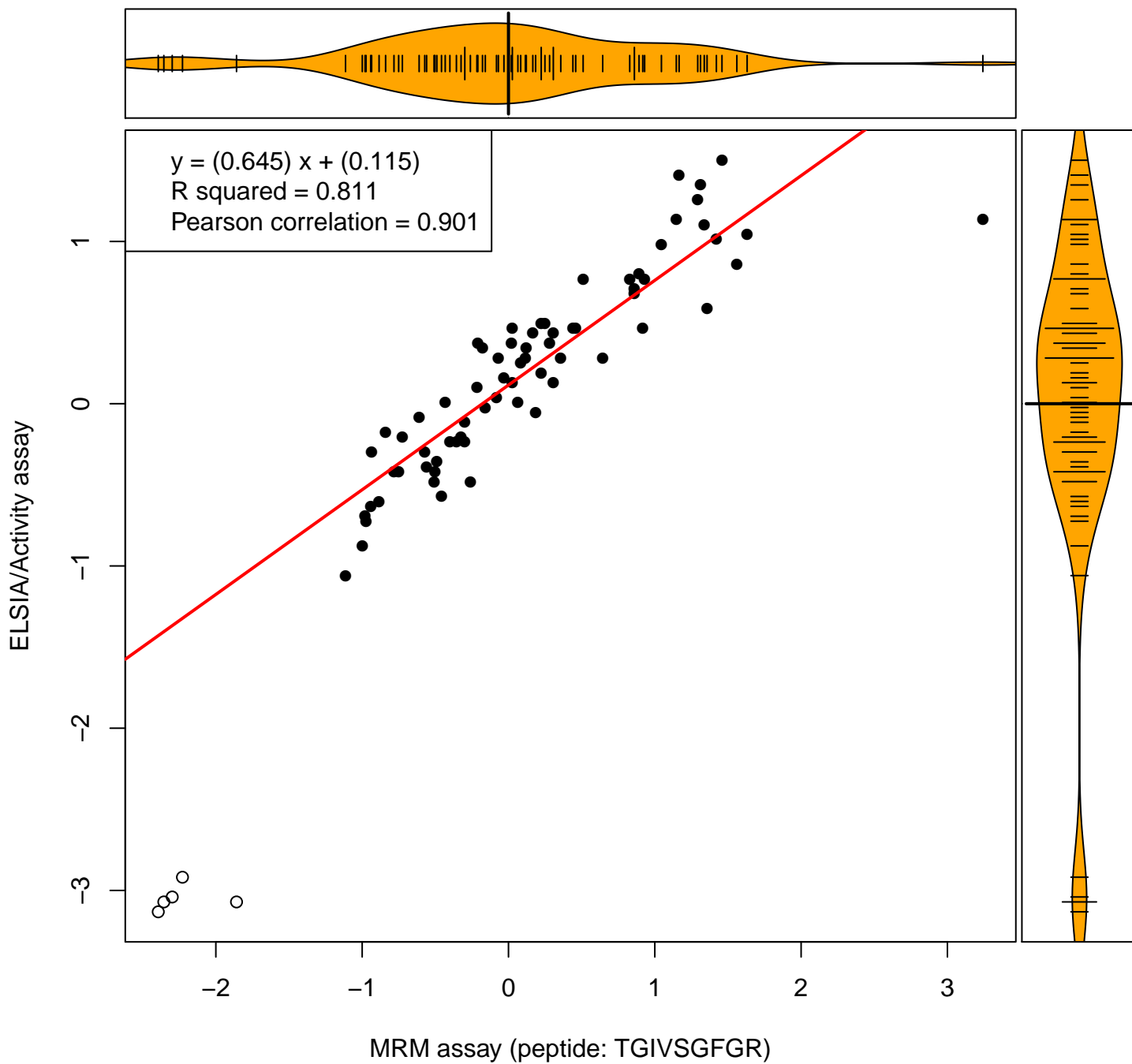
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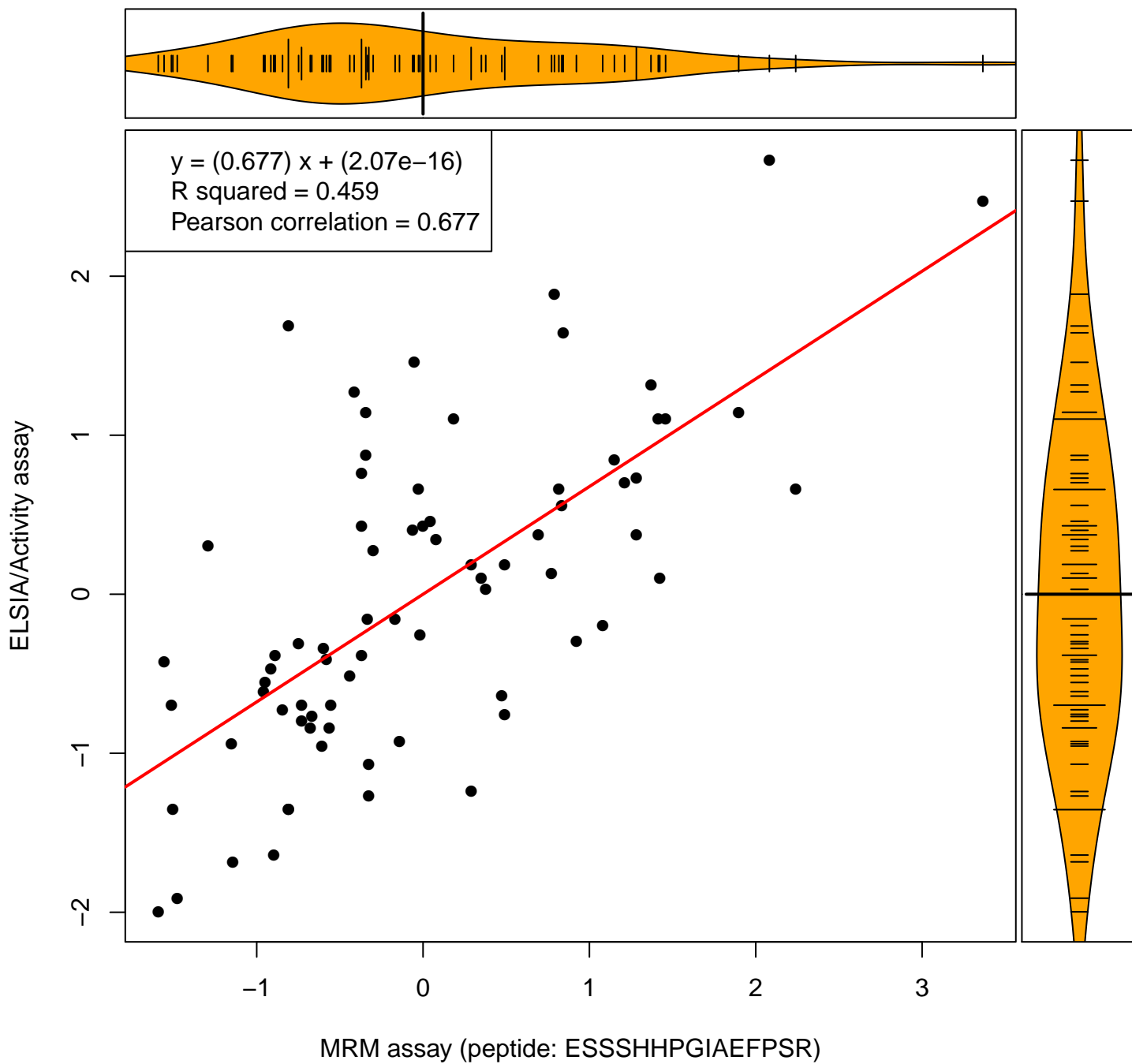
Coagulation factor X, P00742



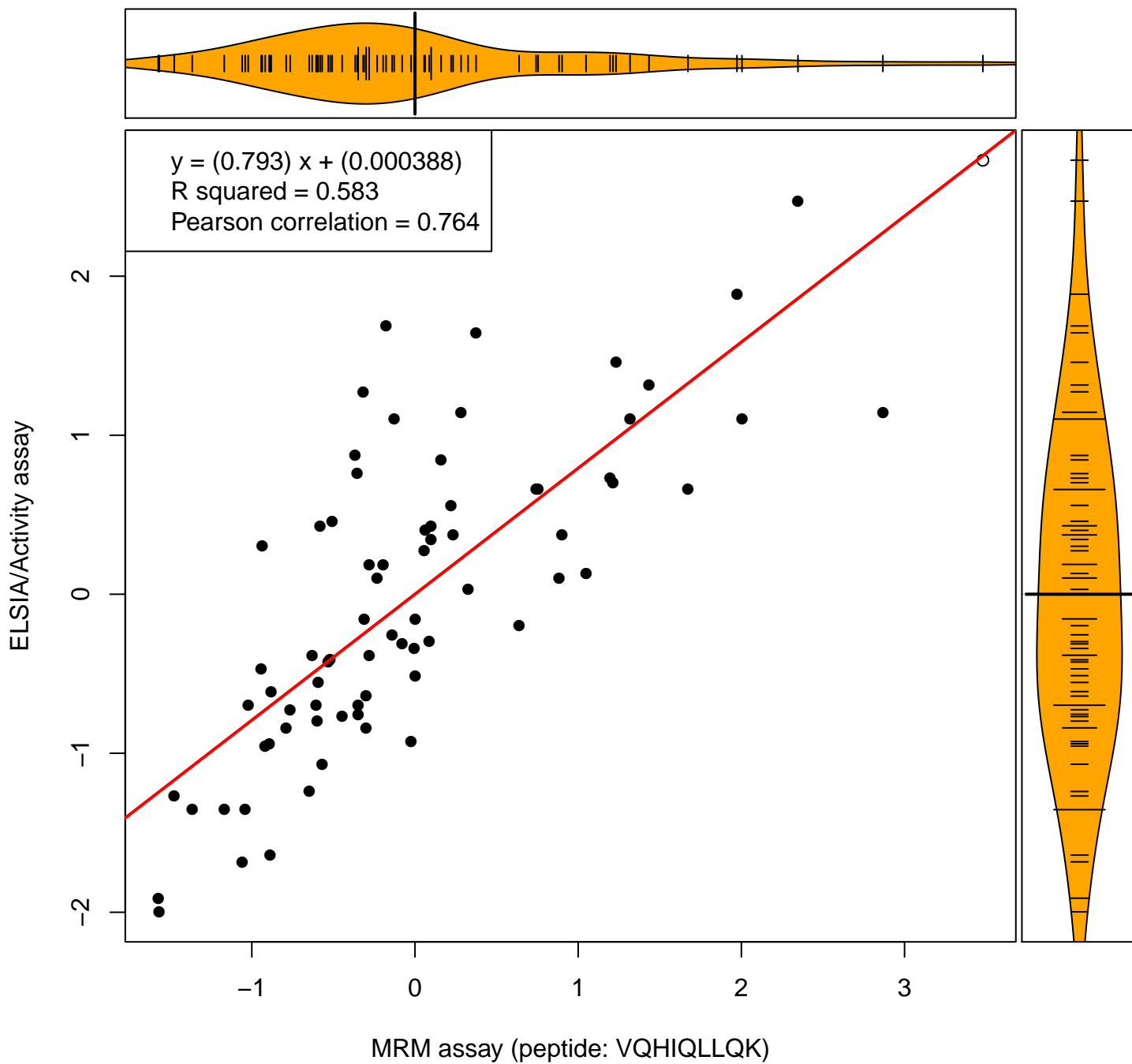
Coagulation factor X, P00742



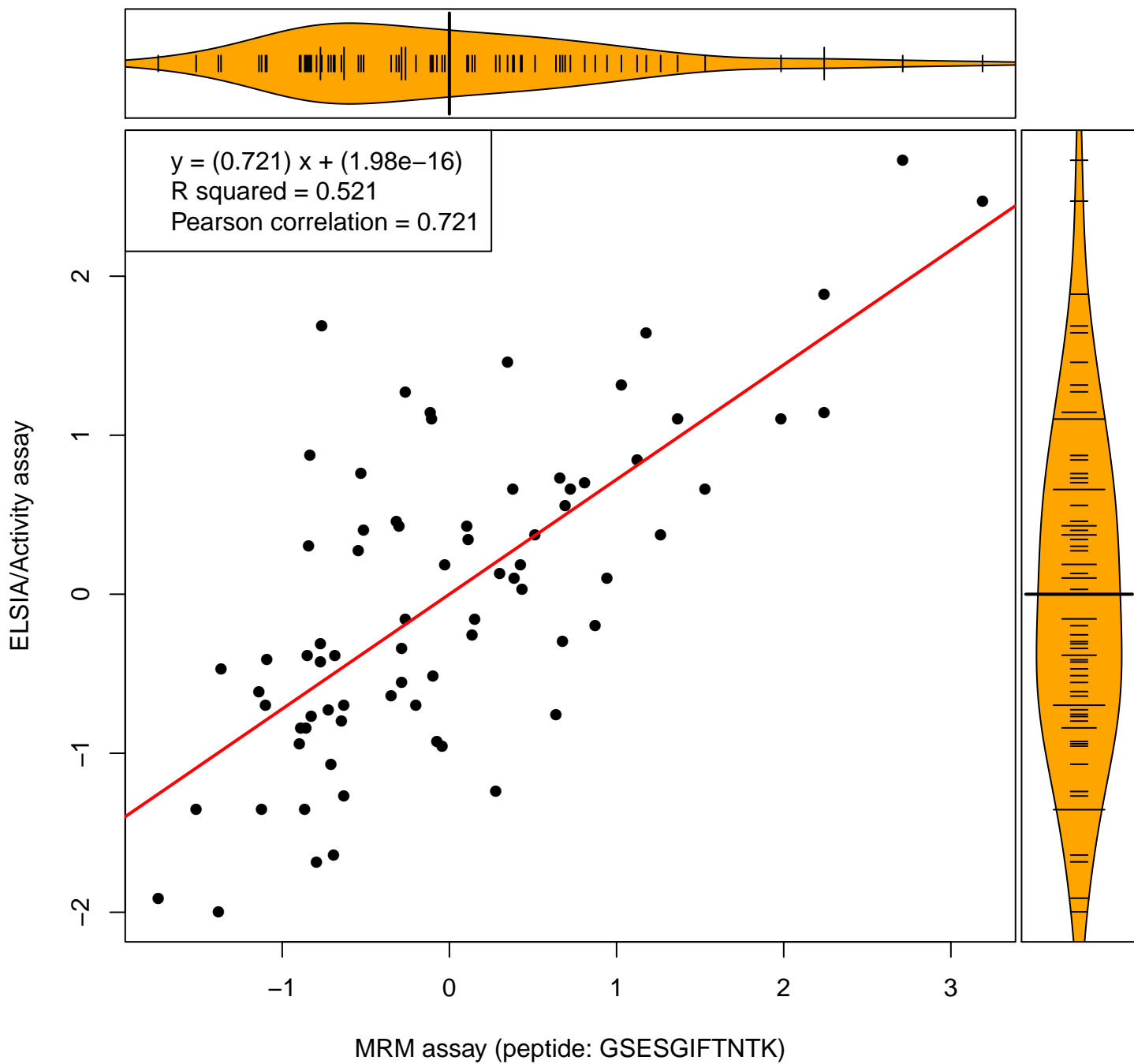
Fibrinogen alpha chain, P02671



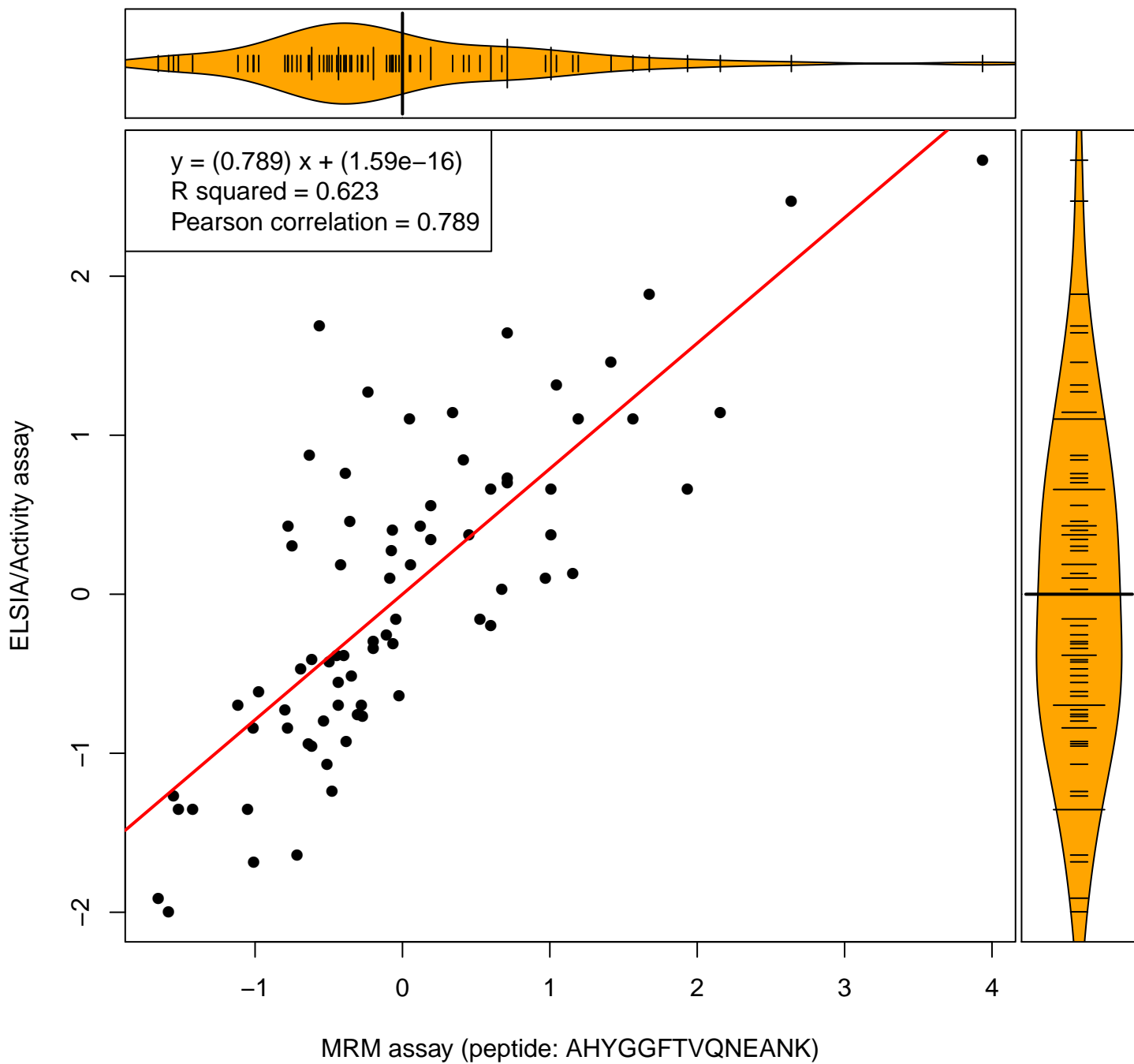
Fibrinogen alpha chain, P02671



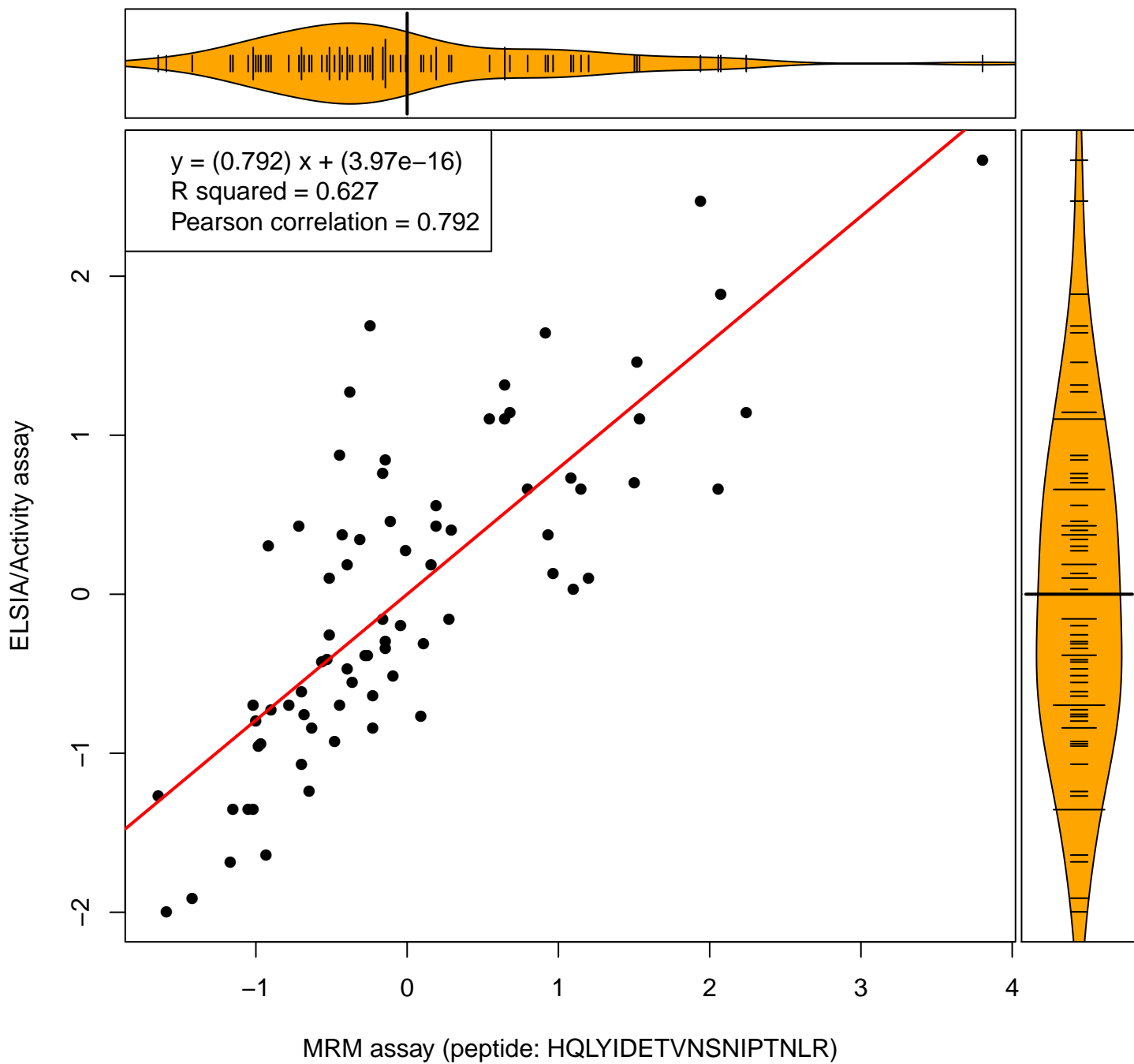
Fibrinogen alpha chain, P02671



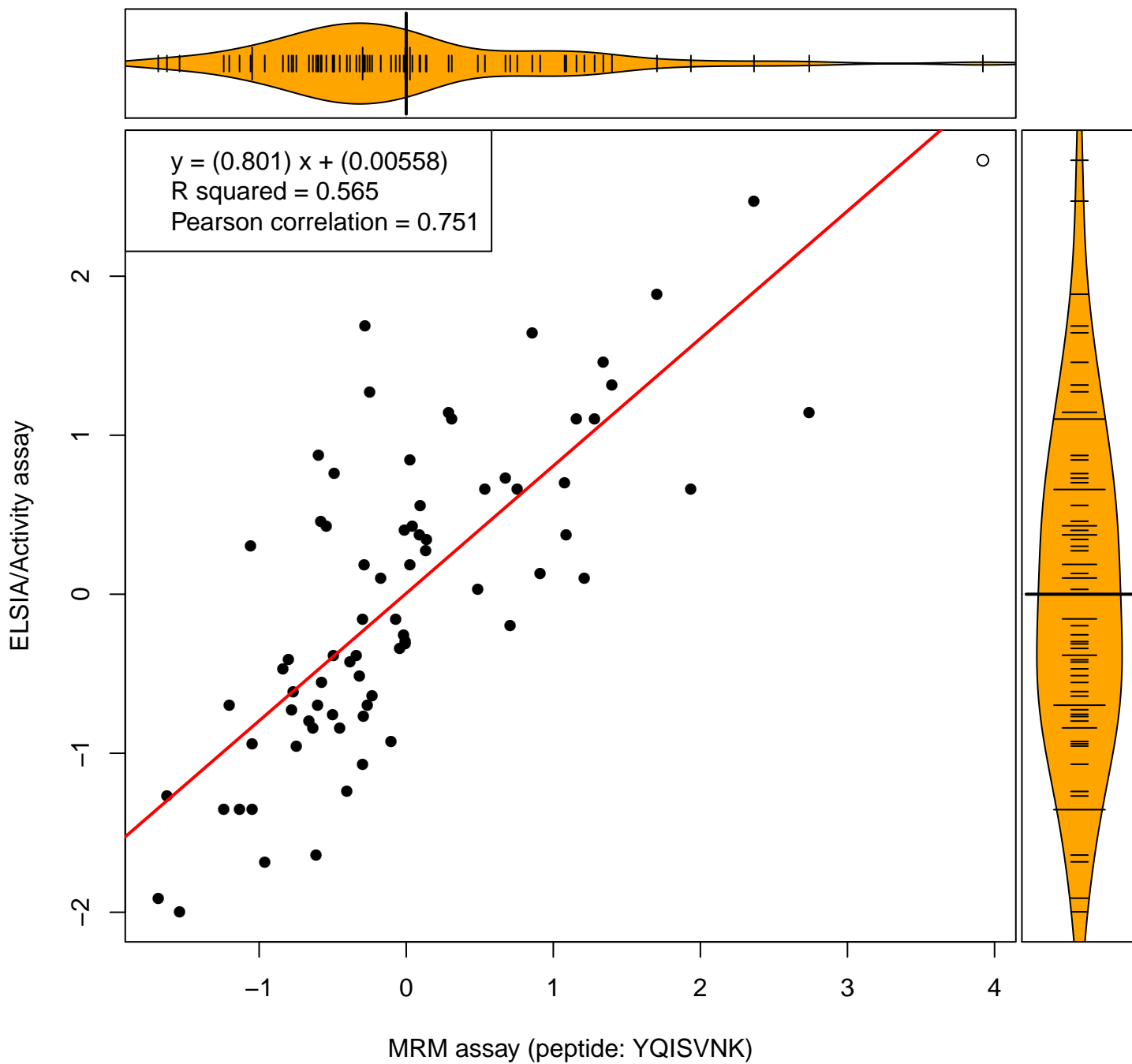
Fibrinogen beta chain, P02675



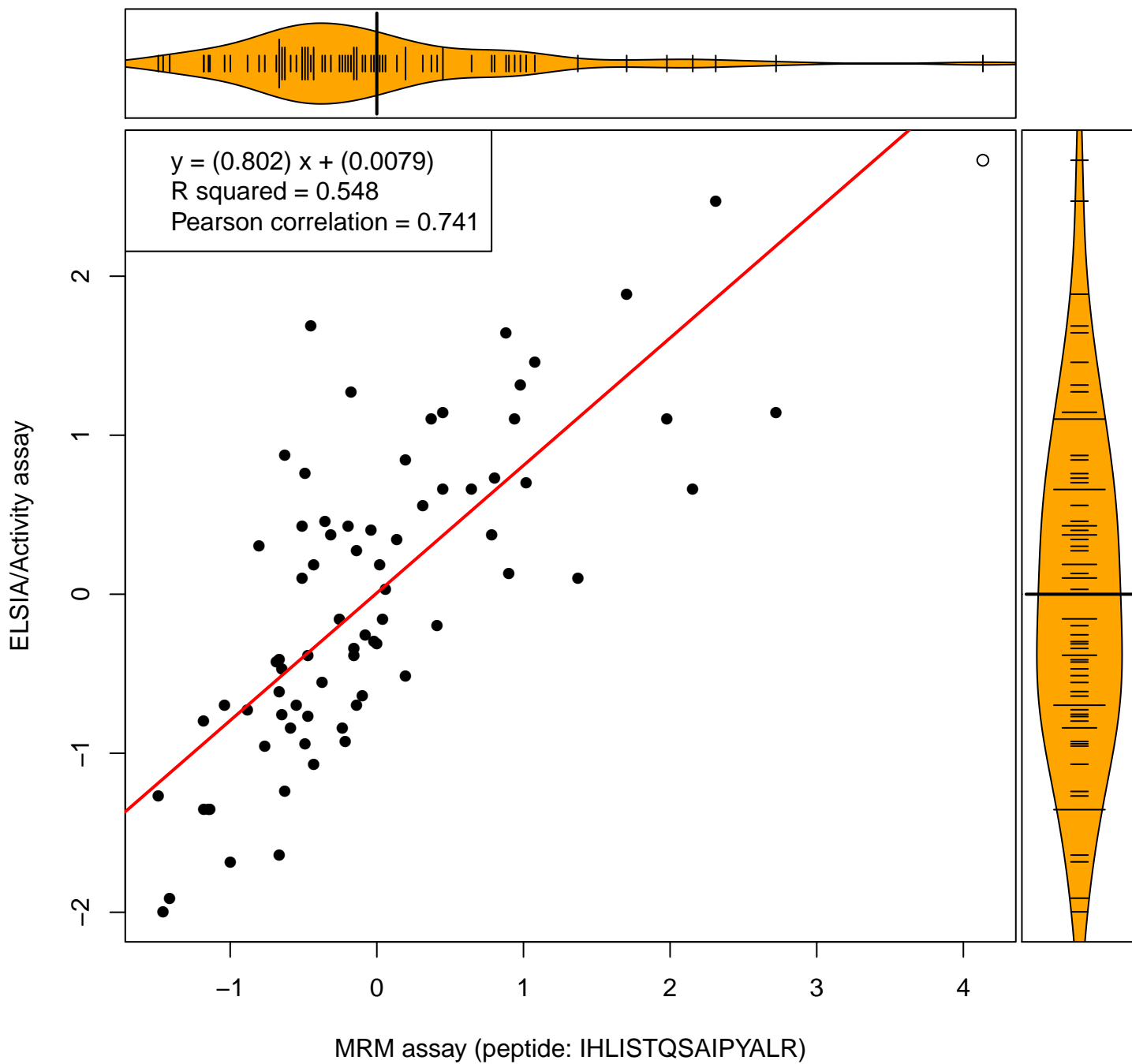
Fibrinogen beta chain, P02675



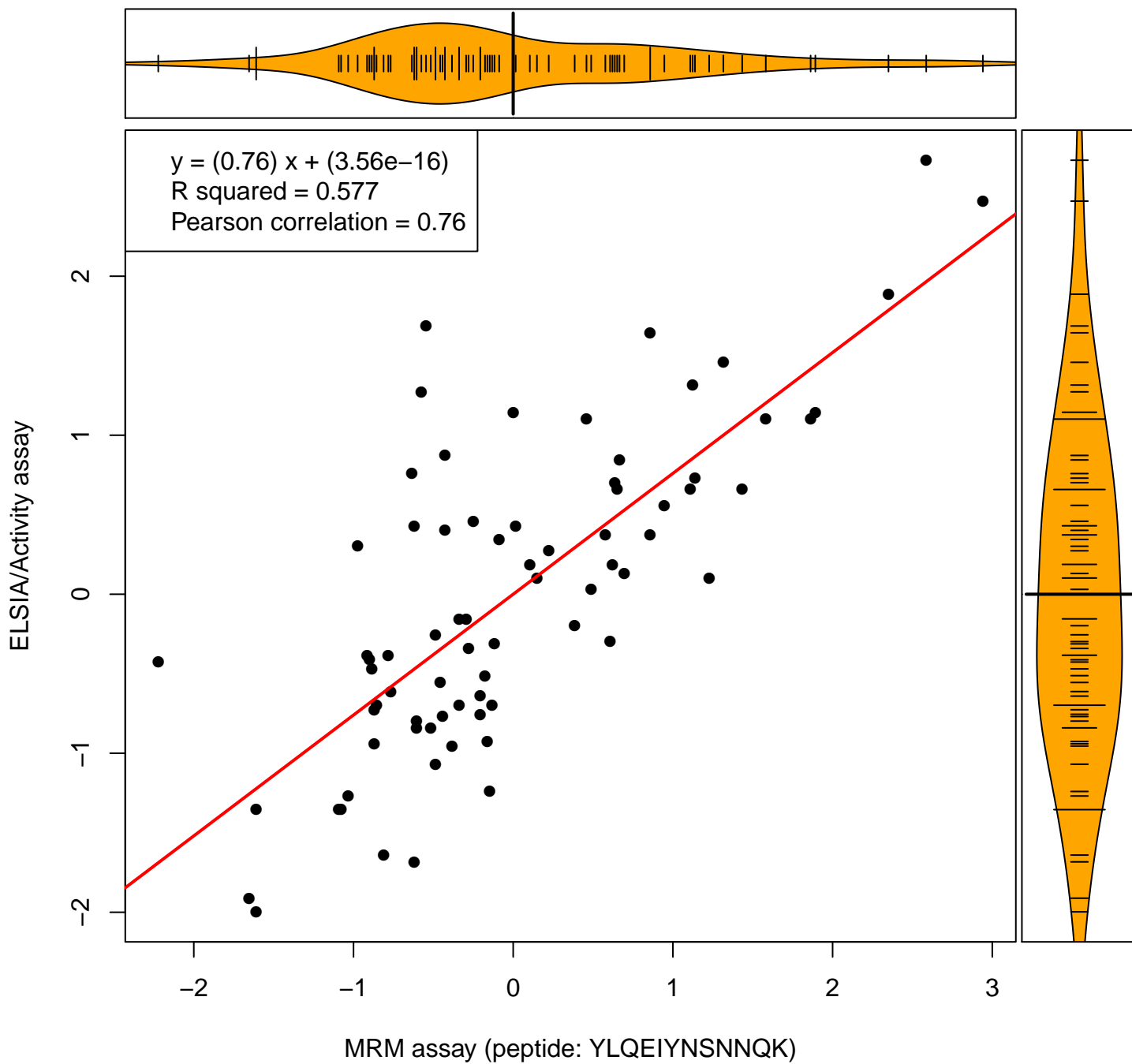
Fibrinogen beta chain, P02675



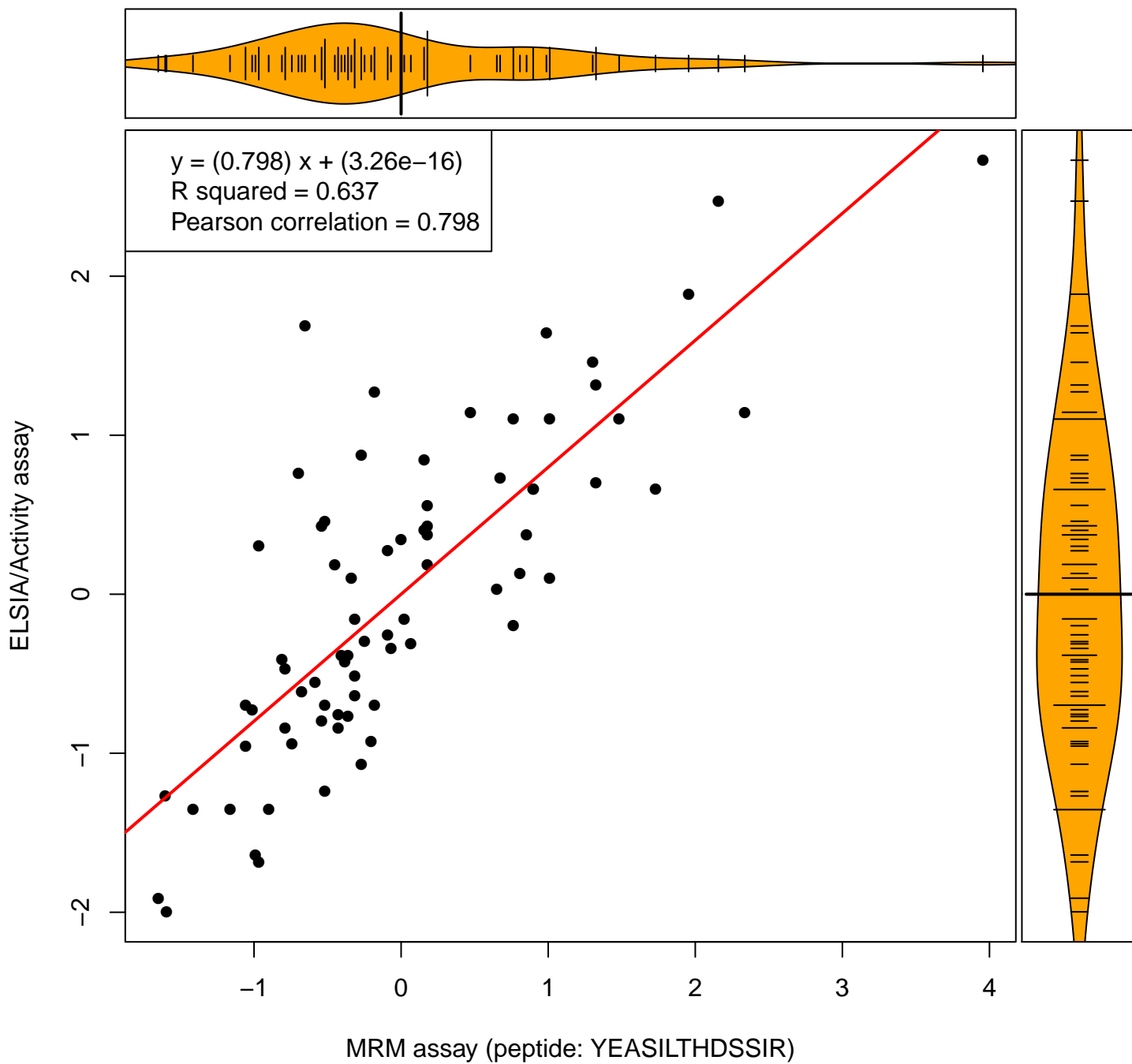
Fibrinogen gamma chain, P02679



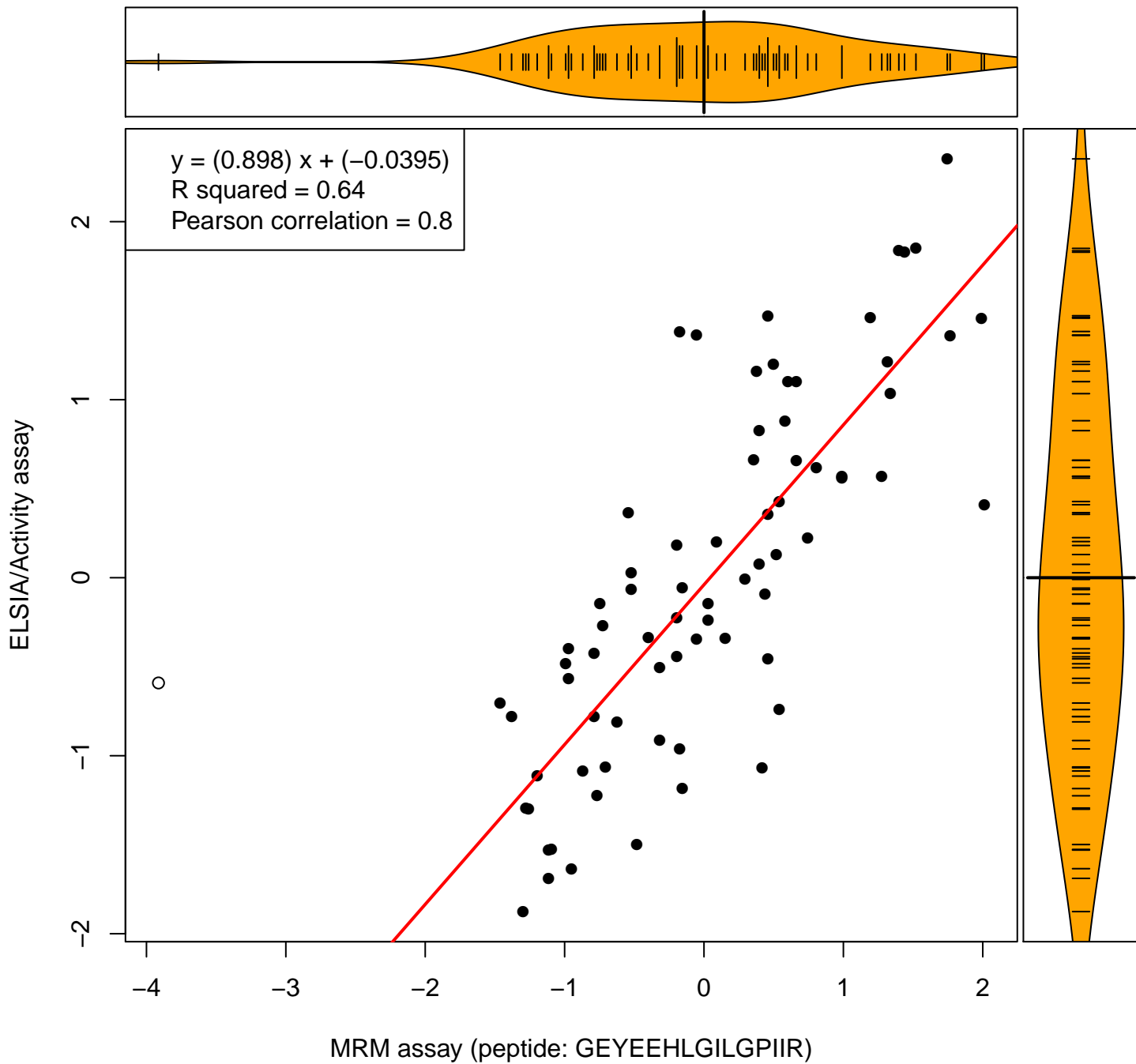
Fibrinogen gamma chain, P02679



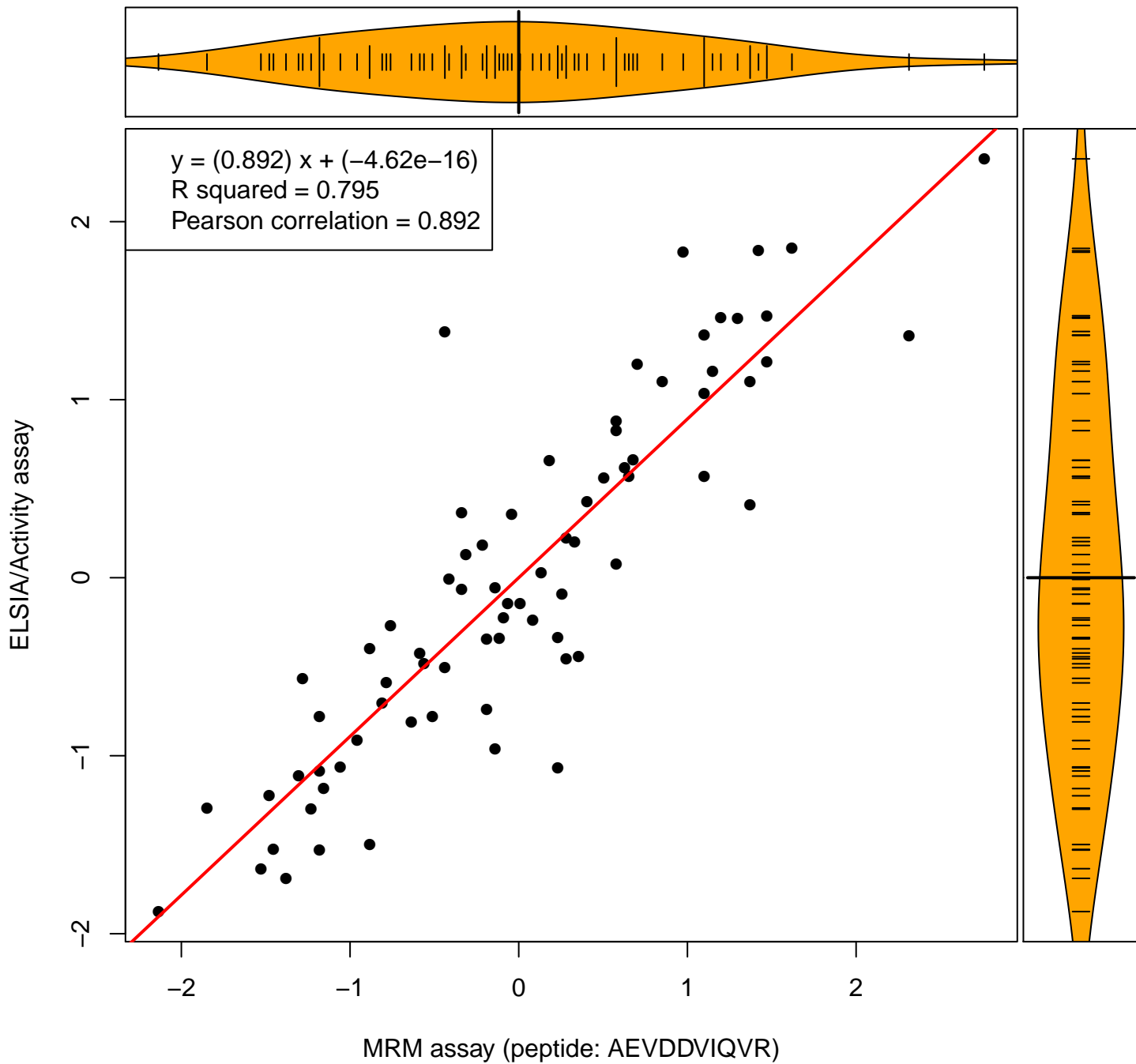
Fibrinogen gamma chain, P02679



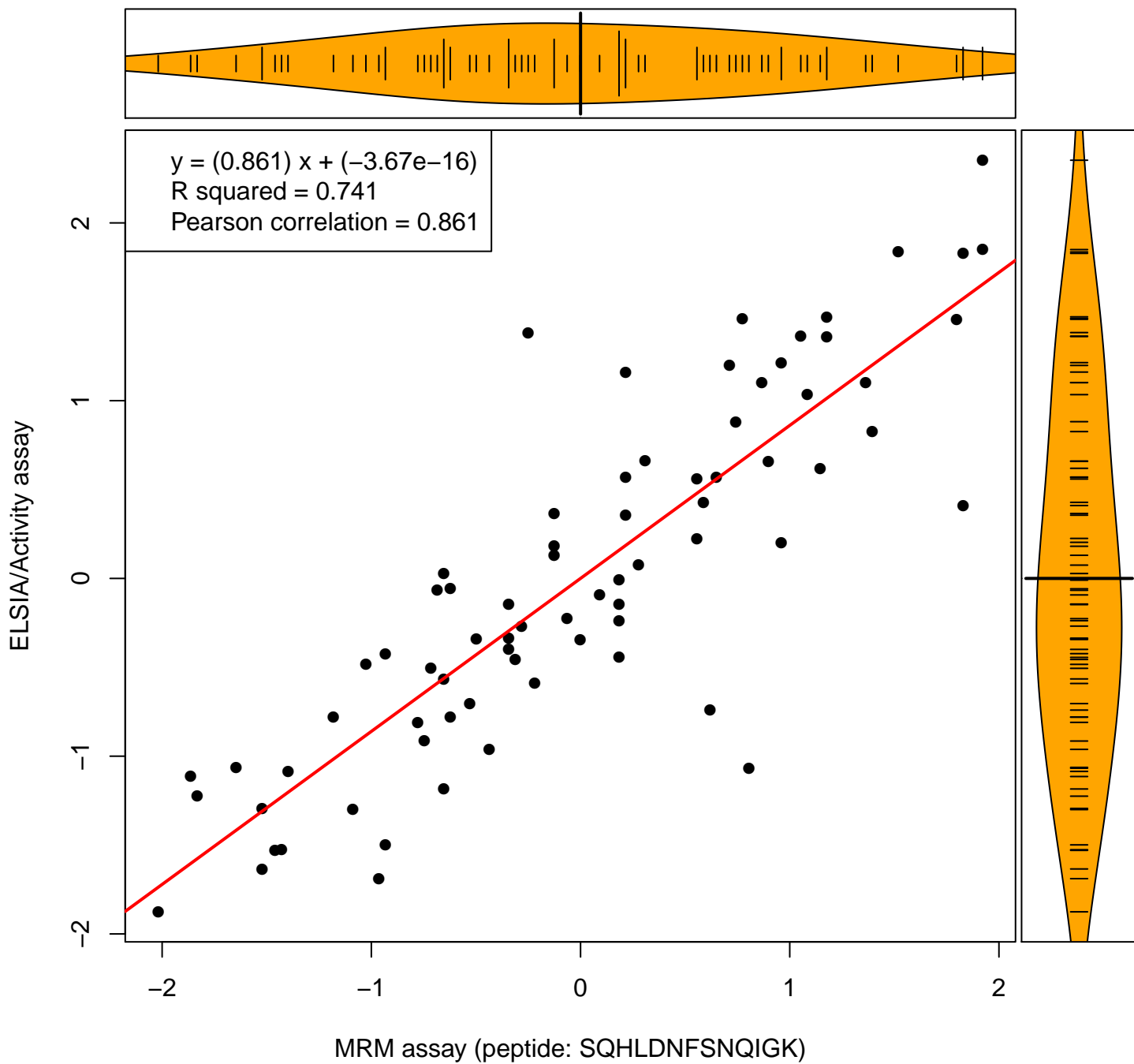
Coagulation factor V, P12259



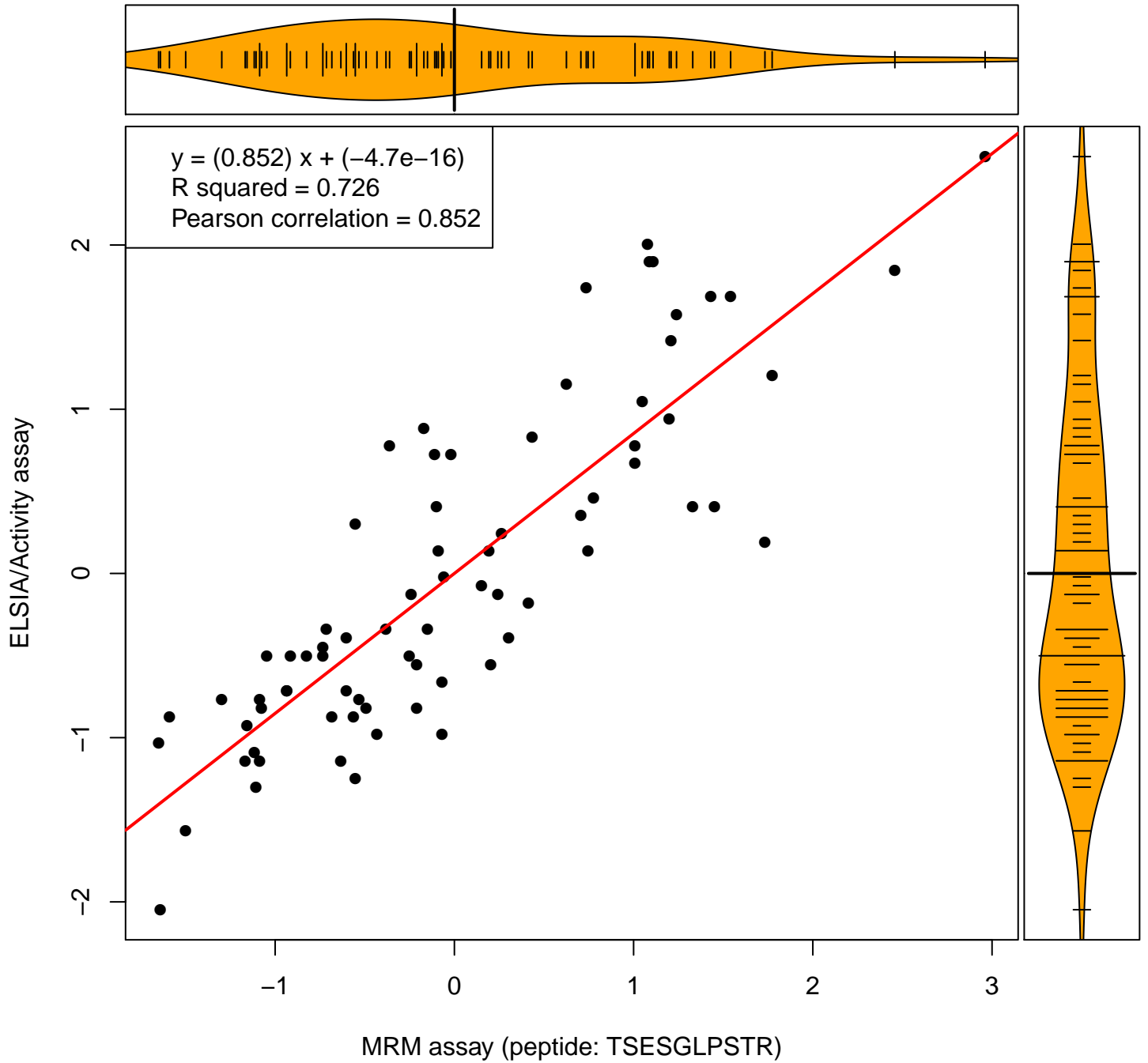
Coagulation factor V, P12259



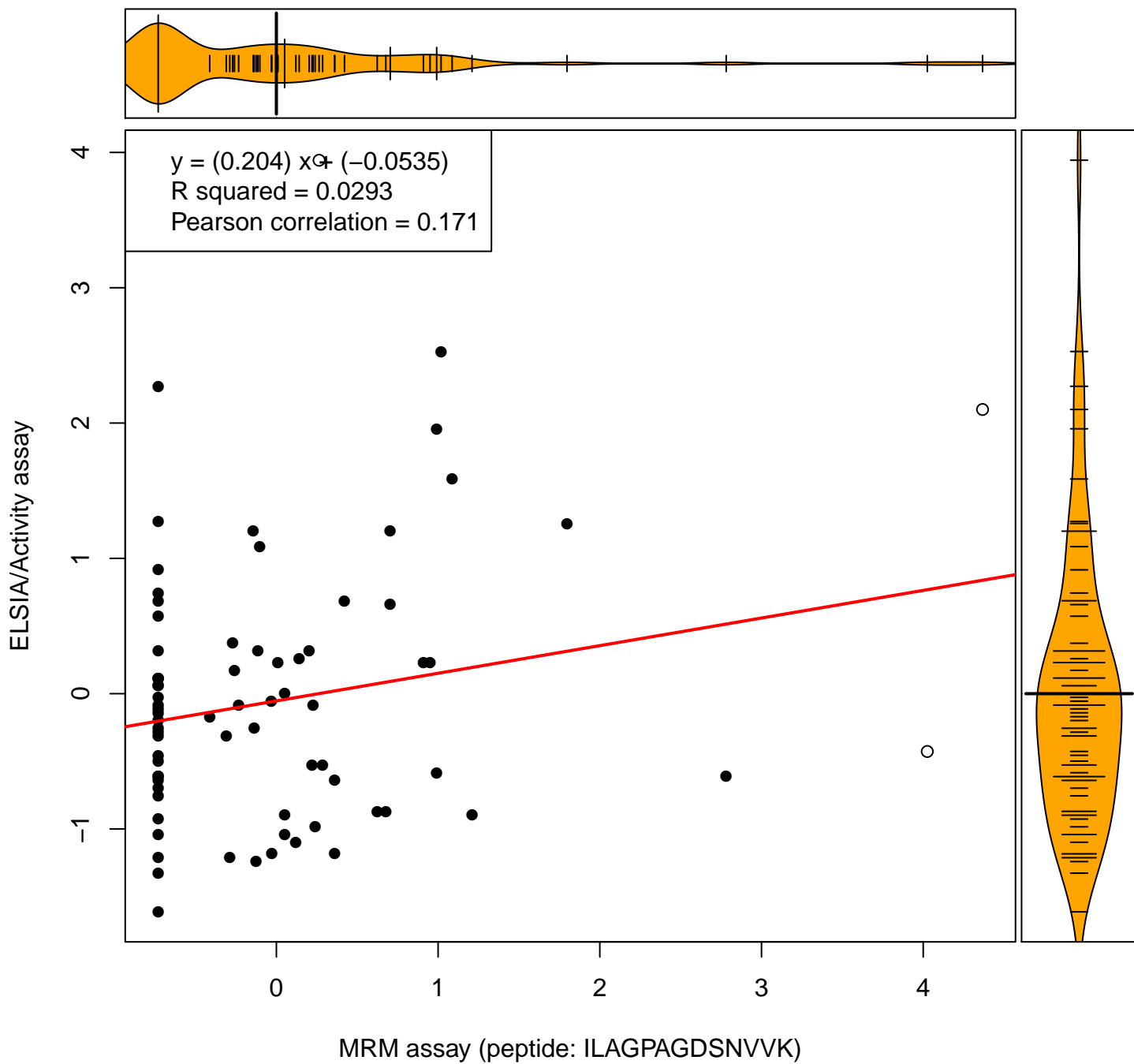
Coagulation factor V, P12259



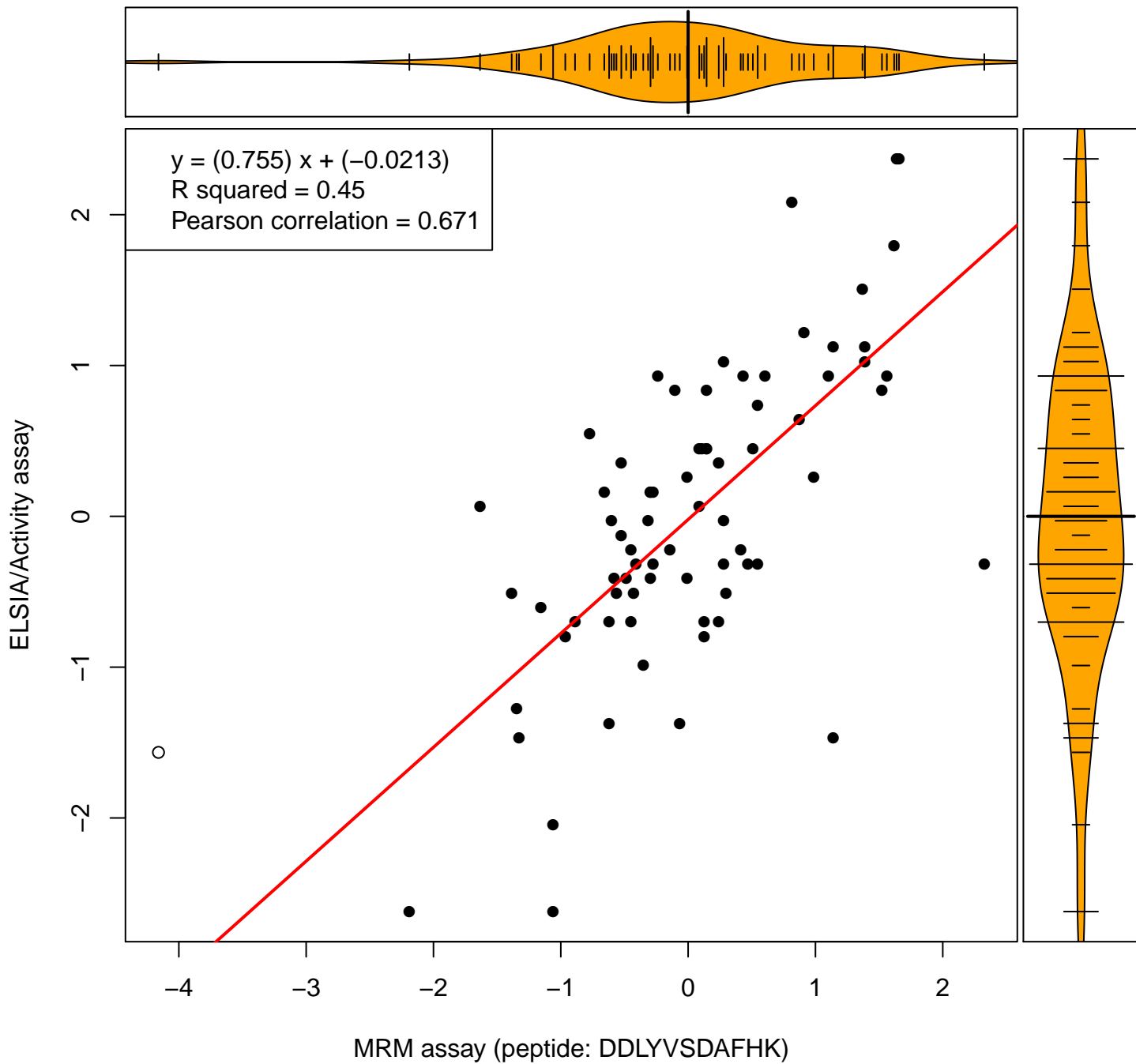
Coagulation factor XI, P03951



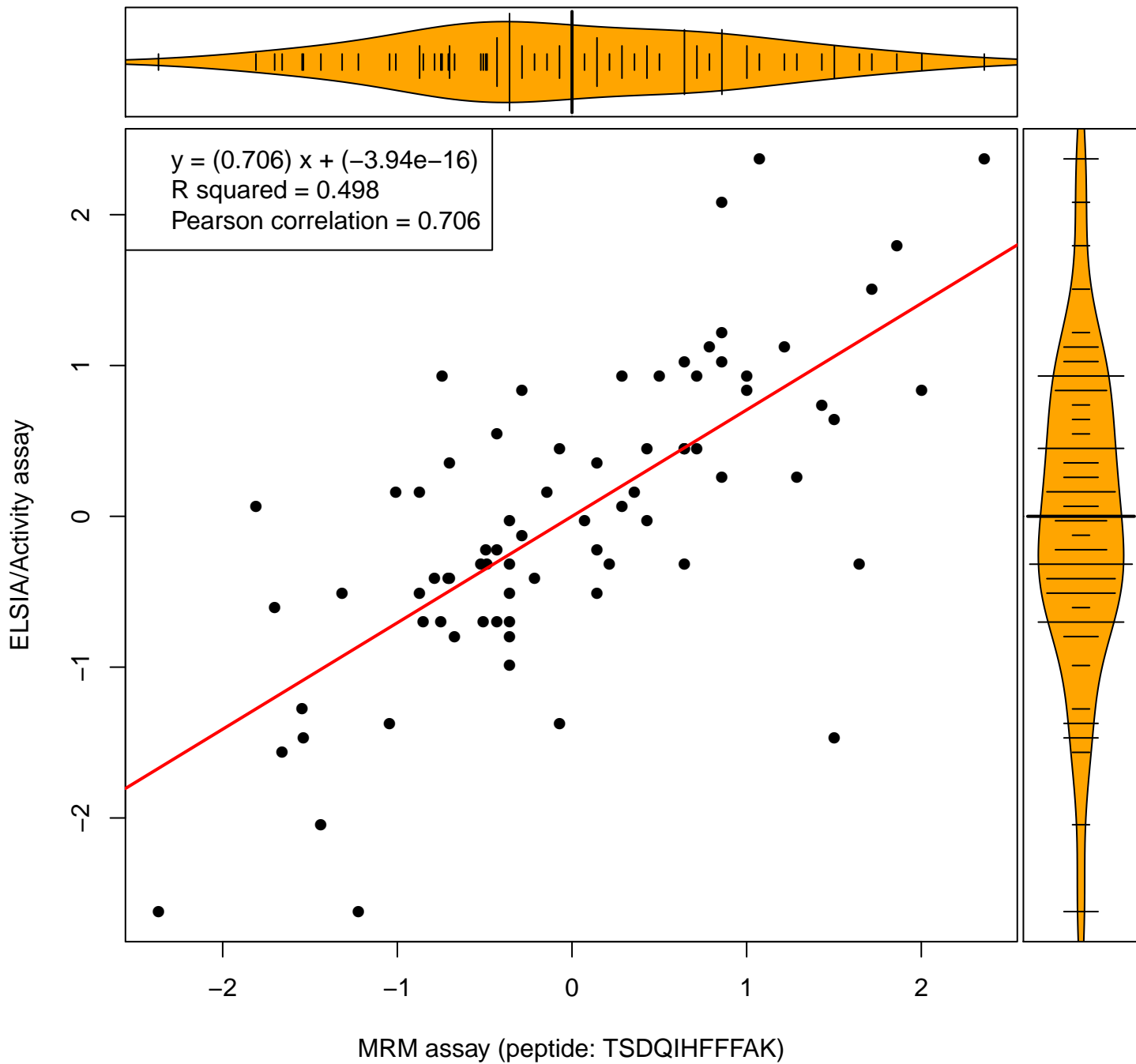
von Willebrand Factor, P04275



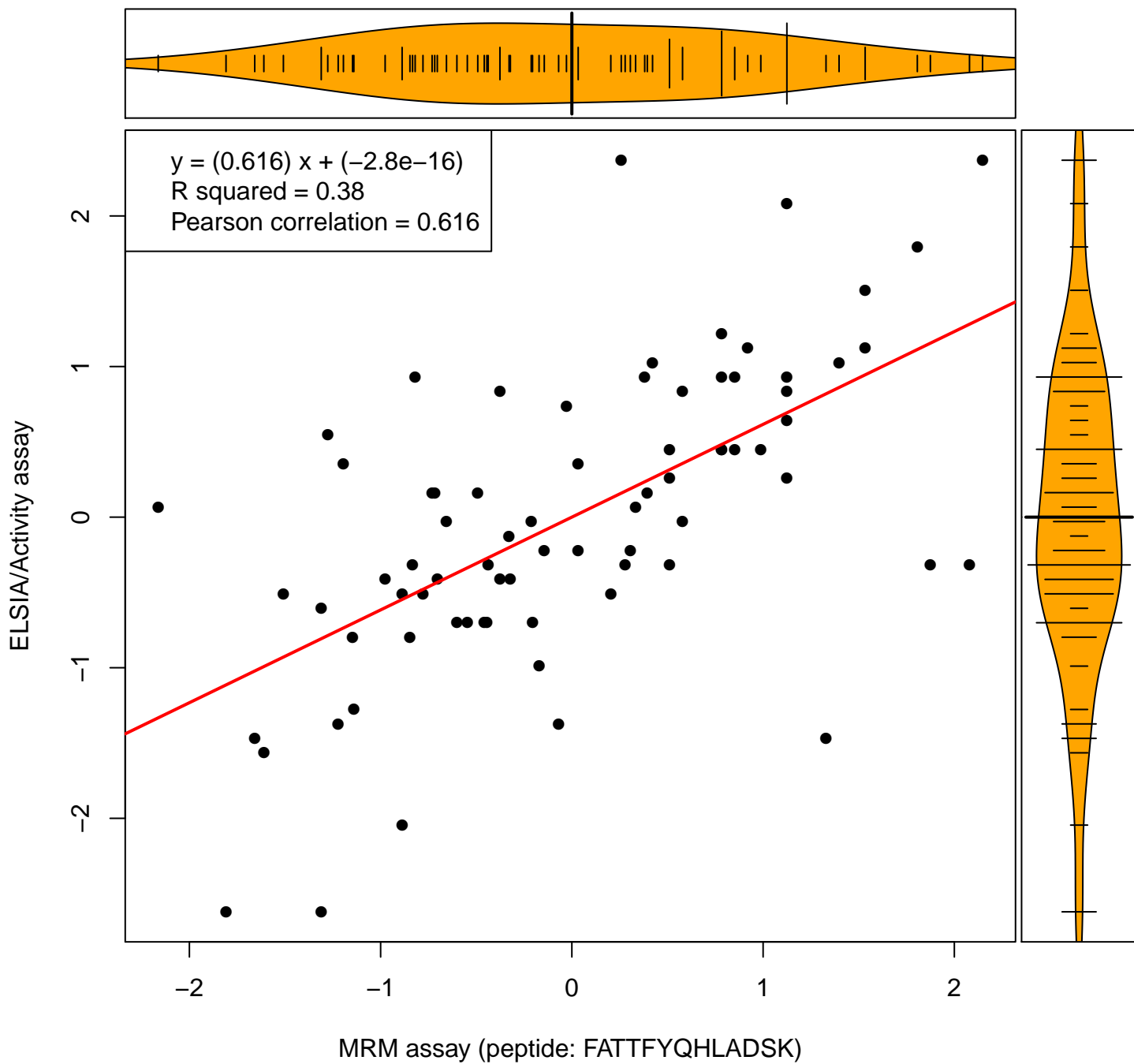
Antithrombin-III, P01008



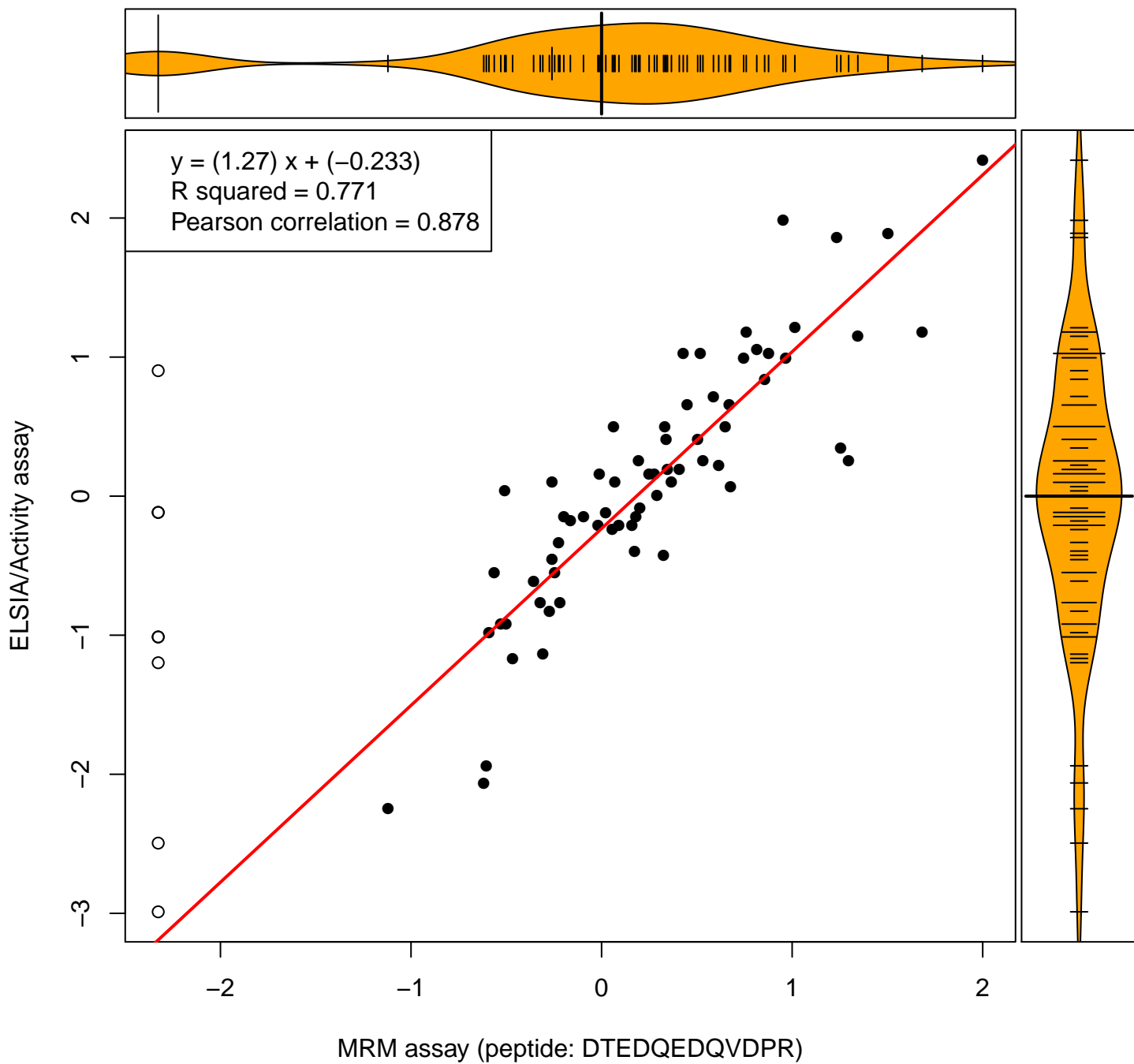
Antithrombin-III, P01008



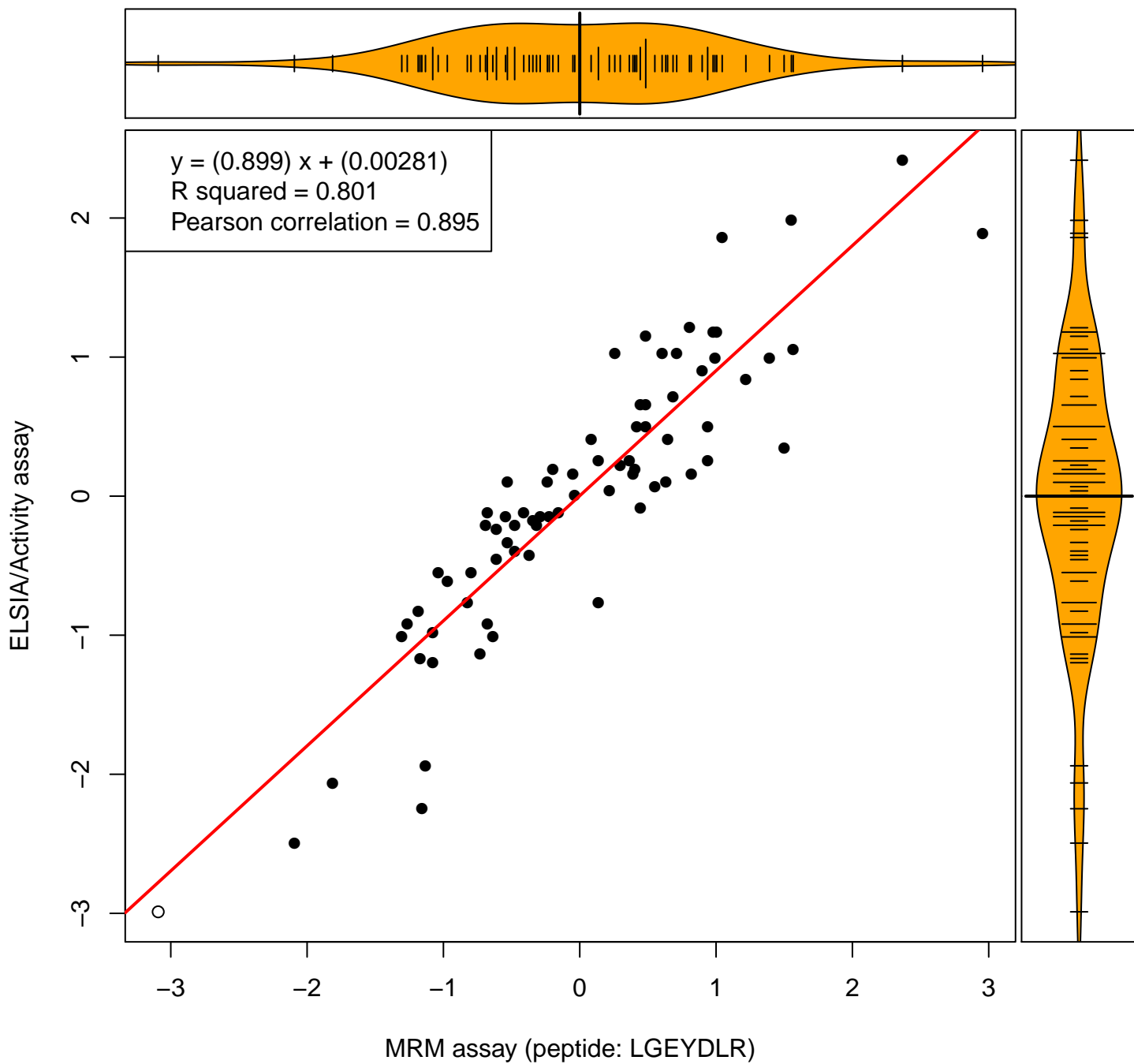
Antithrombin-III, P01008



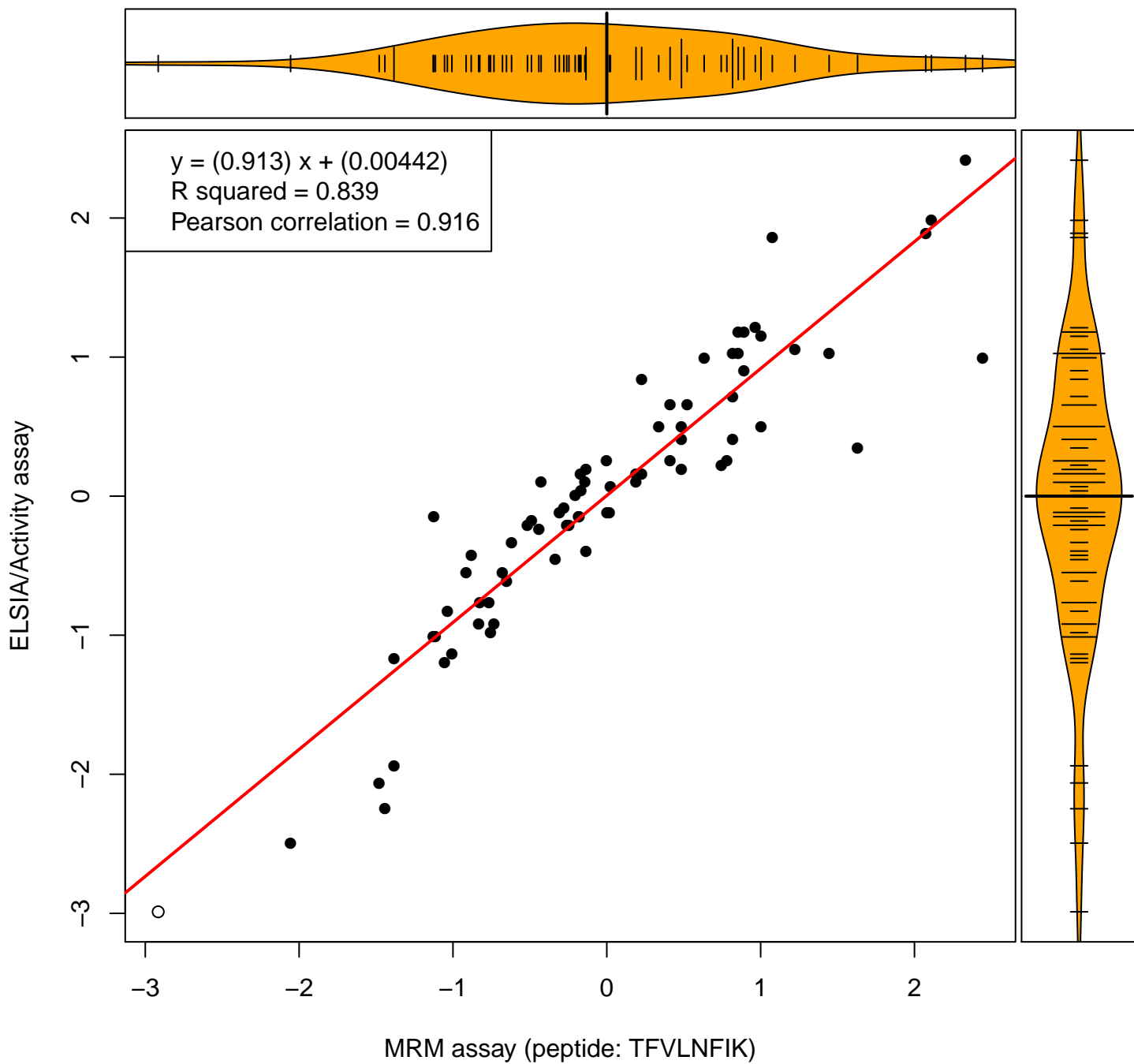
Vitamin K-dependent protein C, P04070



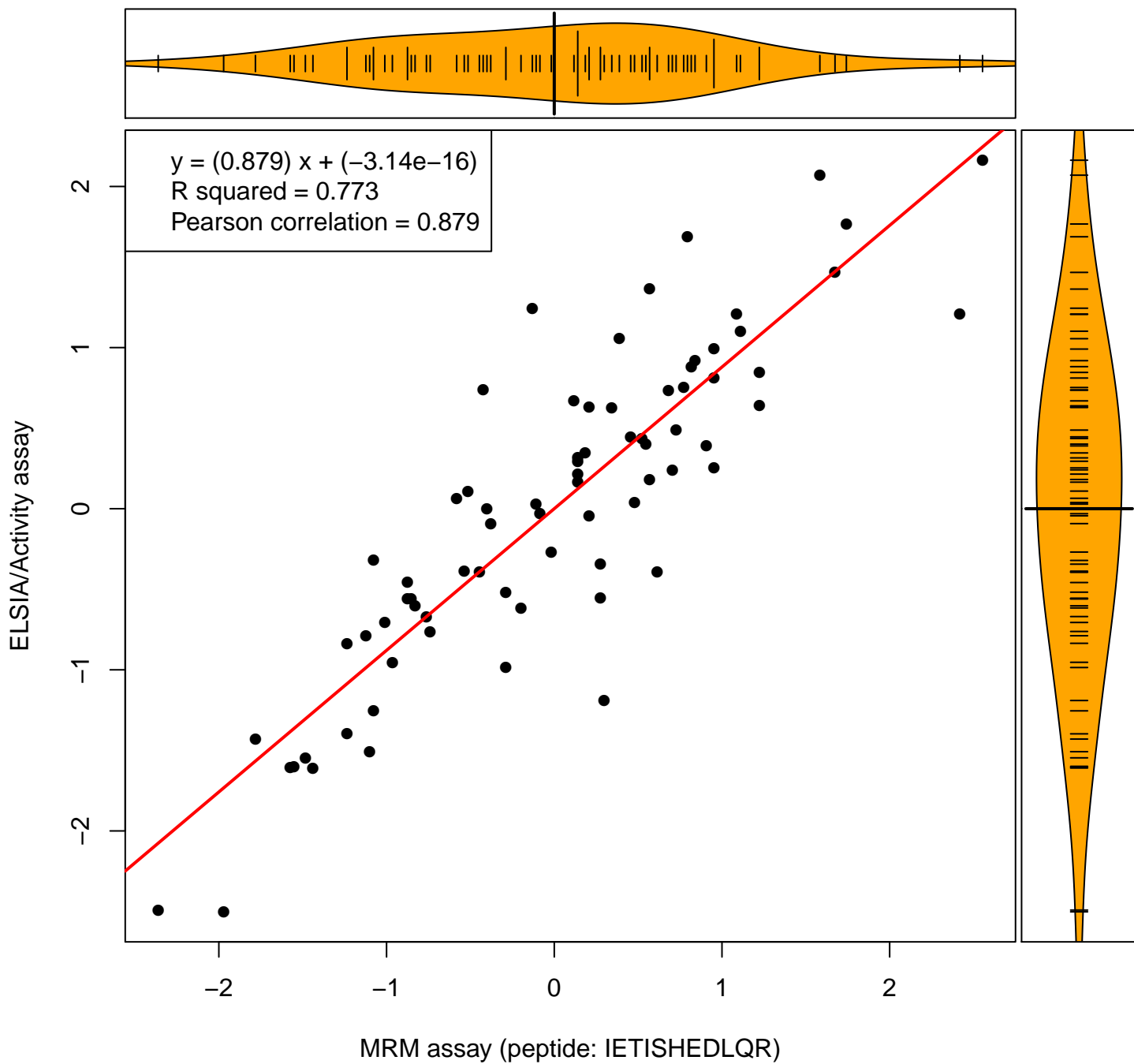
Vitamin K-dependent protein C, P04070



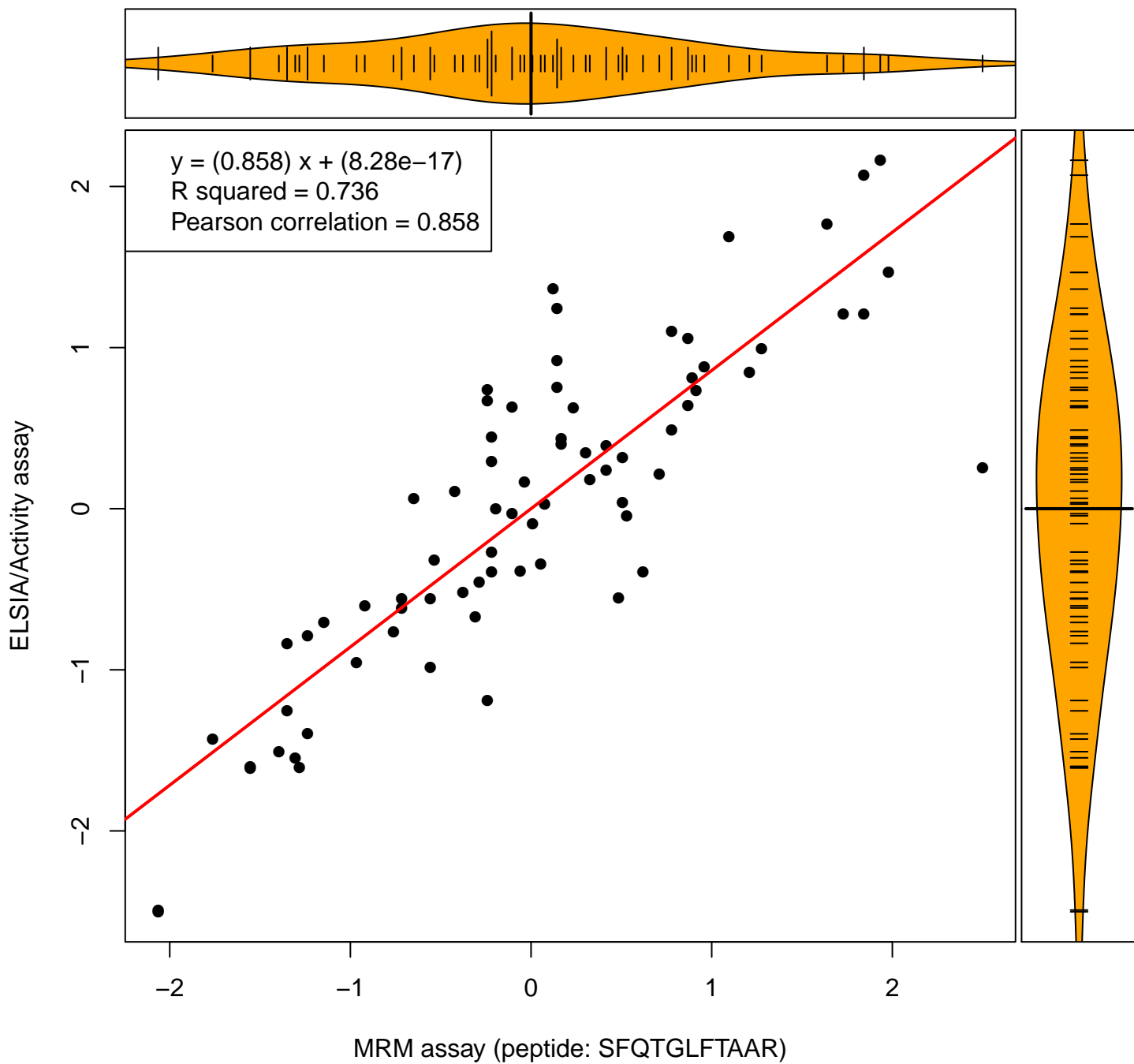
Vitamin K-dependent protein C, P04070



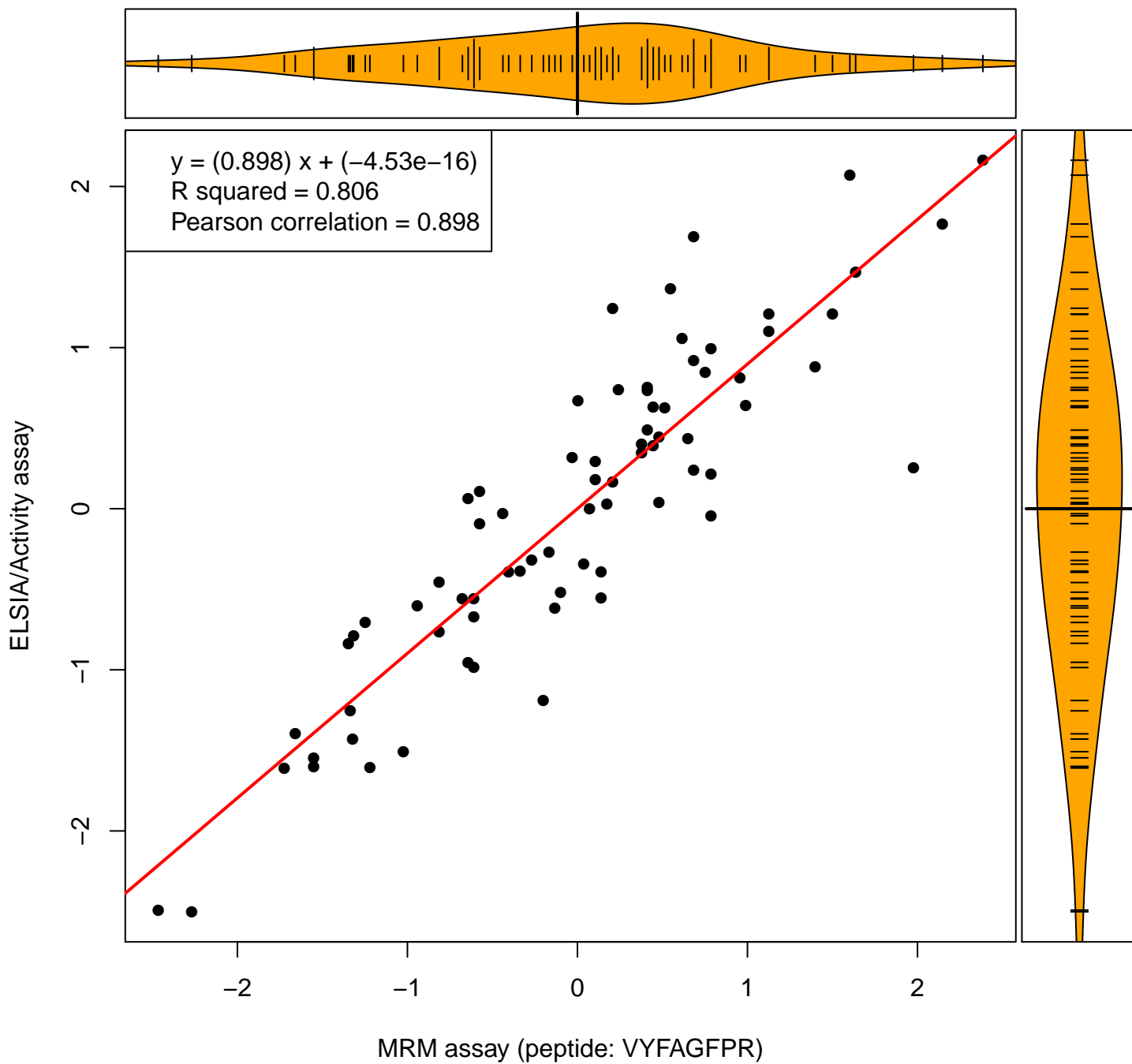
Vitamin K-dependent protein S, P07225



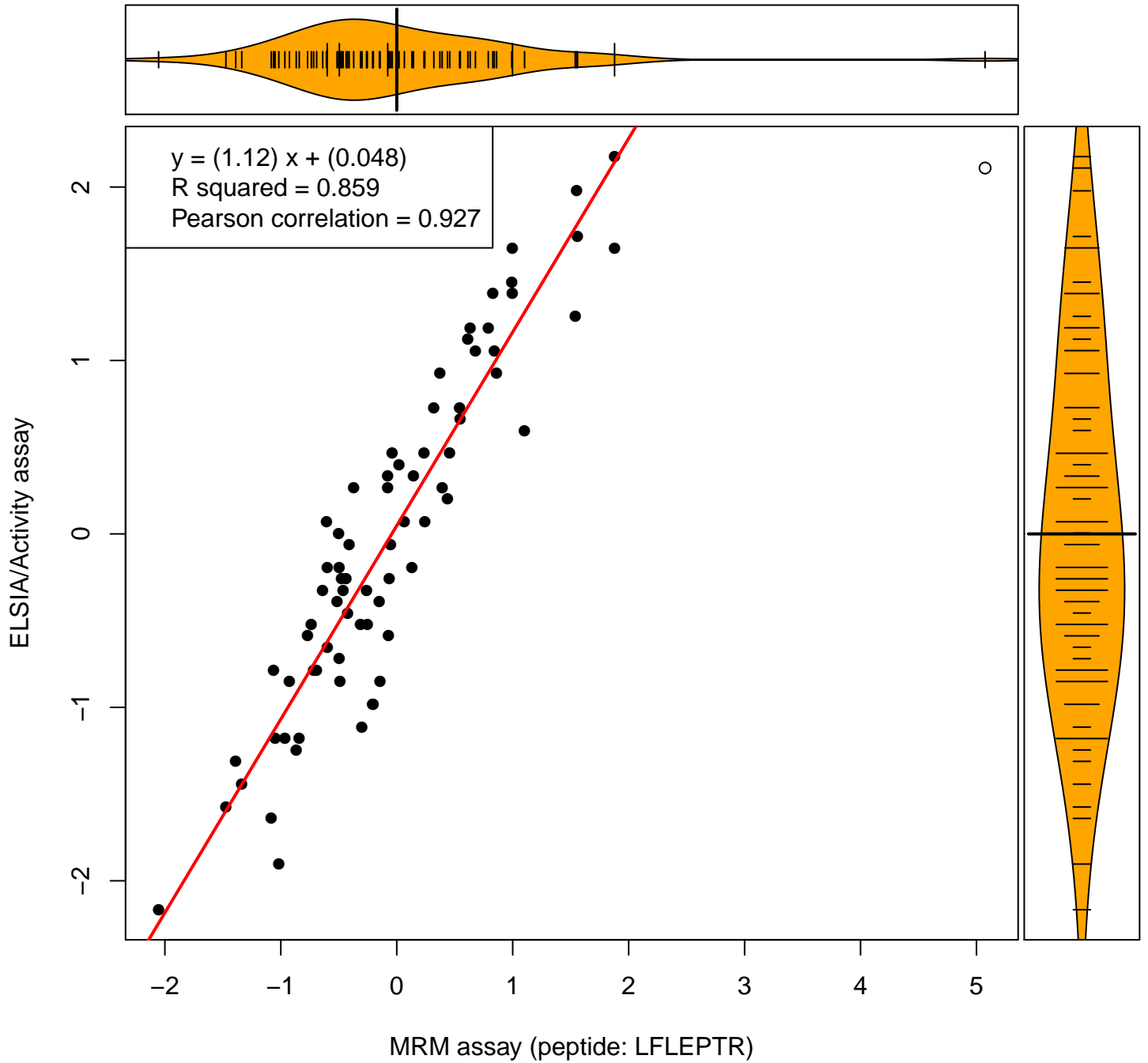
Vitamin K-dependent protein S, P07225



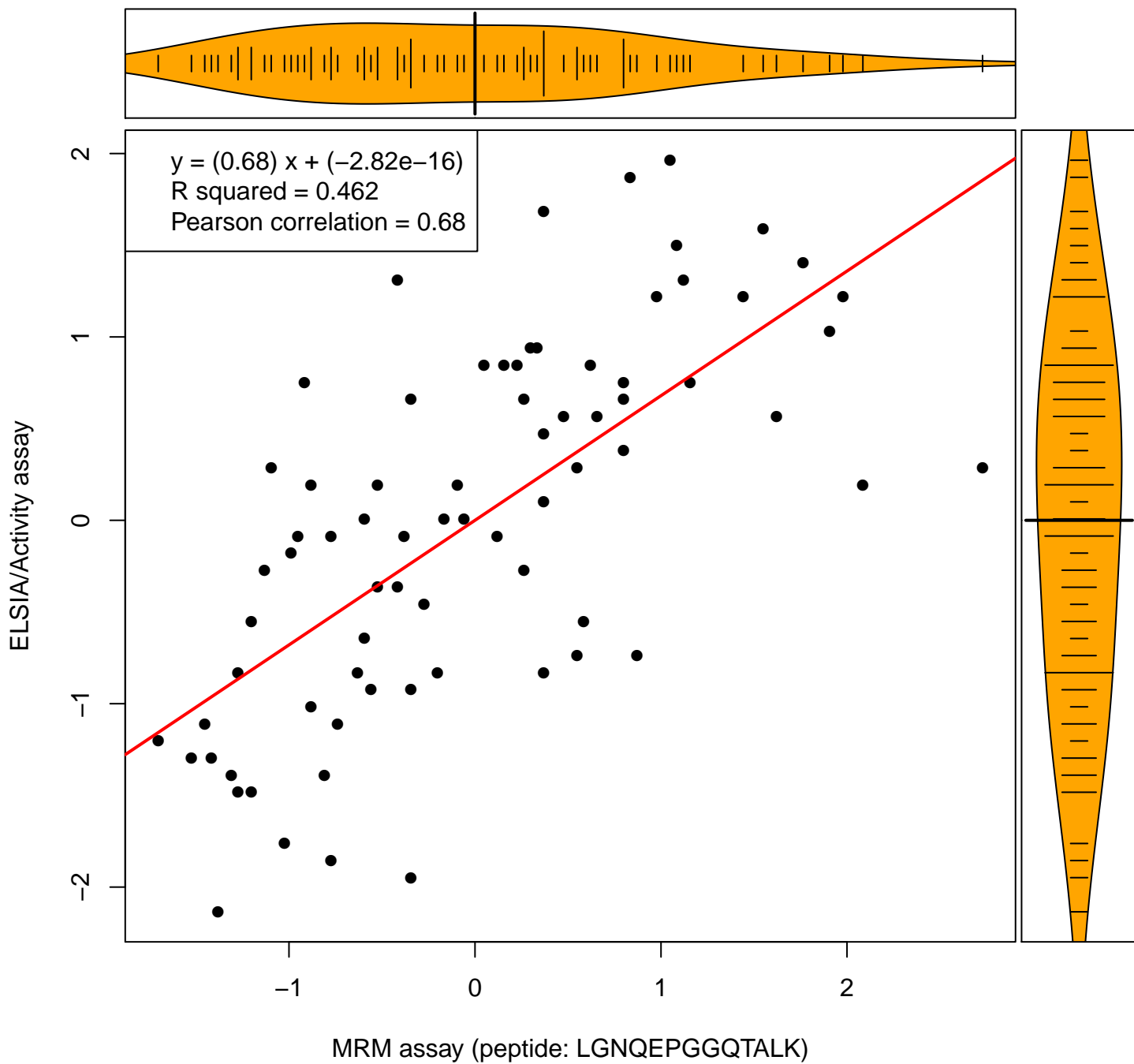
Vitamin K-dependent protein S, P07225



Plasminogen, P00747



Alpha-2-antiplasmin, P08697



Alpha-2-antiplasmin, P08697

