Figure S1 – Additional sites phosphorylated by ERK2 on IRS2, CDC42EP1 and ETV3

a. Insulin receptor substrate 2 (GI: 124487073)

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   1 masaplpgpp asaggdgpnl nnnnnnnnhs vrkcgylrkq khghkrffvl rgpgtggdea
  61 saaggsppqp prleyyesek kwrskagapk rvialdccln inkradakhk ylialytkde
 121 yfavaaeneq eqegwyralt dlvsegrsge ggsgttggsc saslpgvlgg sagaagcddn
 181 yglvtpatav yrevwqvnlk pkglgqsknl tgvyrlclsa rtigfvklnc eqpsvtlqlm
 241 nirrcghsds fffievgrsa vtgpgelwmq addsvvaqni hetileamka lkelfefrpr
 301 sksqssgssa thpisvpgar rhhhlvnlpp sqtglvrrsr tdslaatppa akctscrvrt
 361 asegdggaag gagtaggrpm svagsplspg pvraplsrsh tlsagcggrp skvtlapagg
 421 alqhsrsmsm pvahsppaat spgslssssg hgsgsyplpp gshphlphpl hhpqgqrpss
 481 gsasasgsps dpgfmsldey gsspgdlraf sshrsntpes iaeTppardg sggelygyms
 541 mdrplshcgr pyrrvsqdqa gdldrglrkr tysltTparq rqvpqpssas ldeytlmrat
 601 fsgssgrlcp sfpasspkva ynpypedygd ieigshksss snlgaddgym pmTpgaalrs
 661 ggpnscksdd ympmSptsvs apkqilqprl aaalppsgaa vpappsgvgr tfpvnqqqyk
 721 asSpaesspe dsqymrmwcq sklsmenpdp kllpngdyln mspseagtag tppdfsaalr
 781 ggseglkgip ghcysslprs ykapcscsgd ndqyvlmssp vgrileeerl epqatpgagt
 841 fgaaggshtq phhsavpssm rpsaiggrpe gflgqrcrav rptrlsleql qtlpsmqeyp
 901 lptepkspge yinidfgeaq trlsppappl lasaassssl lsasspassl qsqtpqtssd
 961 srqrsplsdy mnldfsspkS pkpstrsgdt vgsmdgllsp easspypplp prpstspssl
1021 qqplppapgd lyrlppasaa tsqgptagss mssepgdngd ytemafgvaa tppqpivapp
1081 kpegarvaSp tsglkrlslm dqvsqveafl qvsqppdphr gakviradpq ggrrrhsset
1141 fsstttvtpv spsfahnskr hnsasvenvs lrkssegsst lgggdeppts pgqaqplvav
1201 ppvpqarpwn pgqpgaligc pggssspmrr etsvgfqngl nyiaidvrge qgslaqsqpq
1261 pgdknswsrt rslggllgtv ggsgasgvcg gpgtgalpsa styasidfls hhlkeatvvk
1321 e
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b. Ets variant gene 3 (PE1, METS) (GI: 134031941)

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   1 mkagcsivek pegggqyqfp dwaykaesSp gsrqiqlwhf ilellqkeef rhviawqqge
  61 ygefvikdpd evarlwgrrk ckpqmnydkl sralryyynk rilhktkqkr ftykfnfnk
 121 vmpnypfini rssqvvpqSa ppvptassrf hfppldshSp tqdvqpqrfs asslsasqpe
 181 Sqvttdrkve psdledqsas dwhrqmdfmp srnalgggav ghqkrkpdil lplftrpamy
 241 pdphSpfaiS pvpqrqqvln vpispalslt ptmfsyspsp glspftsssc fsfnpeemkh
 301 ylhsqacsvf nyhlsprtfp rypglmvppl qcqmhpeeps qfsiklqppp aqrknrerve
 361 sreeavrqsv paSapvpsri kvepatekdp dslrqstqgk eeqtqevdsi rsrtieegkq
 421 tqfahpSptw psvsistpsd eplegtedse drsarepgvp ekkedalmpp klrlkrrwnd
 481 dpearelnkt gkflwngagp qglattataa ada
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c. CDC42 effector protein 1 (GI: 21312428)

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   1 mpqpqqqtqa ptmslqklSp vqwvssshqk rrltadmisp plqdfrhtmh vqrqqdvfqd
  61 tsflsnhqqr sgnthrsprs flarklqqvr rvqvpprrma spaapspapp piSpiiknai
 121 slpqlnqaty dslvmqklsf dstpasstdg hsgyglesgf ctisrlprve khsnrdrdrd
 181 pdhsqdreqs sfpsepTpnp elrrsdslls frfdldlgps llsellgvms lseapaaetp
 241 vptanppapa anpaptakpp ahaittldav tslpasavts lpapavassp srghfpngvt
 301 svlgpaaeak pspvgegpqv psnmafdrhq aswqasrasw gasrasrhyt emdarrelag
 361 vlpqvhgswe slnedwsapp asvrapvpts vqvnafefad aeeddevkv
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Recombinant proteins were phosphorylated by ERK2 in *in vitro* kinase reactions, digested with trypsin or chymotrypsin, phosphorylated peptides enriched by IMAC and identified by HPLC-MS/MS.

Underline indicates peptides observed in phospho-mapping experiments and phosphorylated residues are highlighted. IRS2 and CDC42EP1 were analyzed with tryptic digest; ETV3 was analyzed with trypsin and with chymotrypsin. Phosphorylation sites detected on IRS2 are: T524, T576, T653, S675, S723, S980, S1089. Phosphorylation sites on ETV3 are: S29, S139, S159, S181, S245, S250, S373, S427. Phosphorylation sites on CDC42EP1 are: S19, S113, T197. None of these sites were detected in mock kinase reactions.