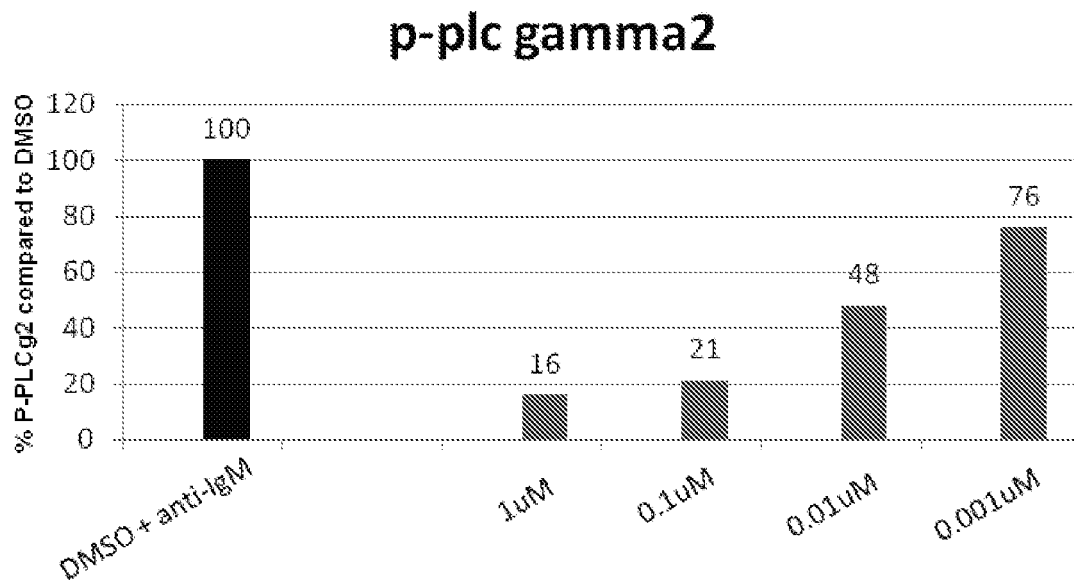


Dose-Response with Compound I-2 in Ramos cells



Washout with 1 μM Compound I-2 in Ramos cells

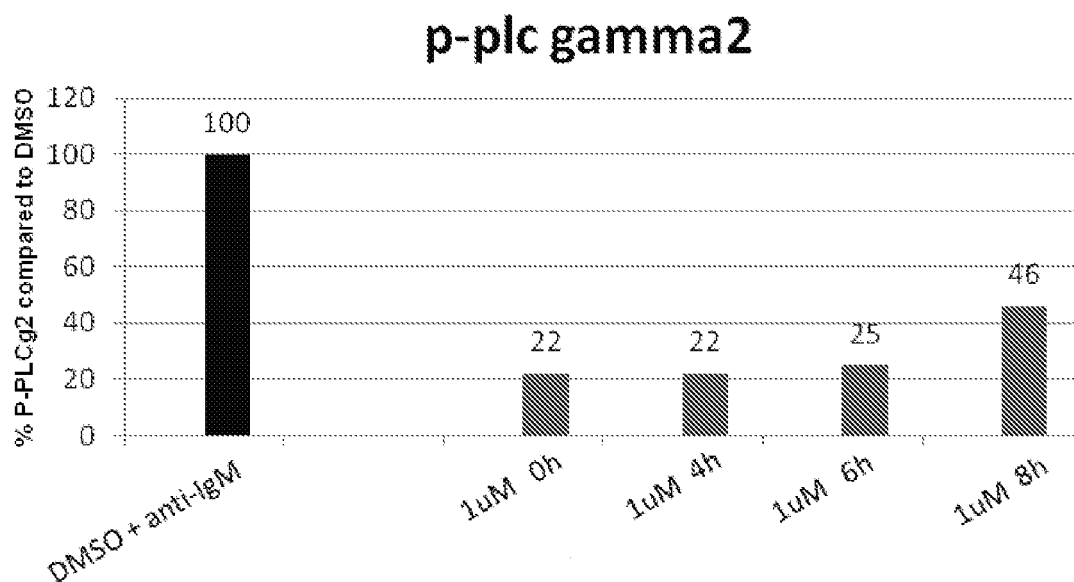
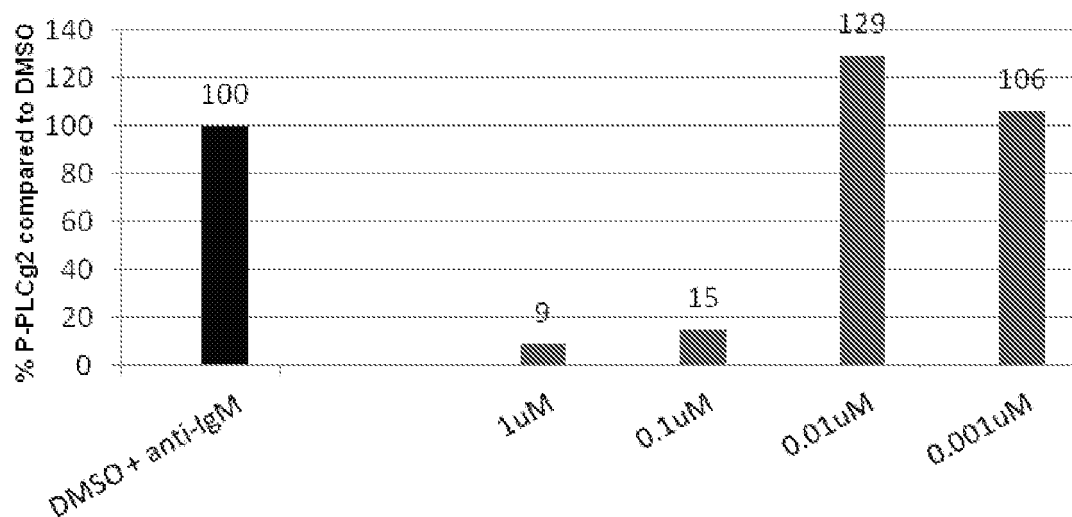
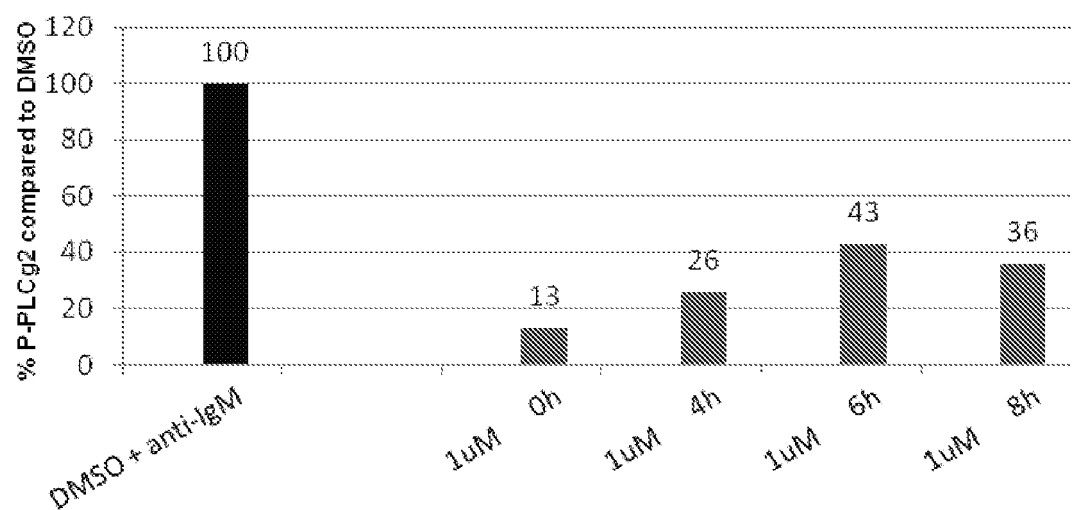
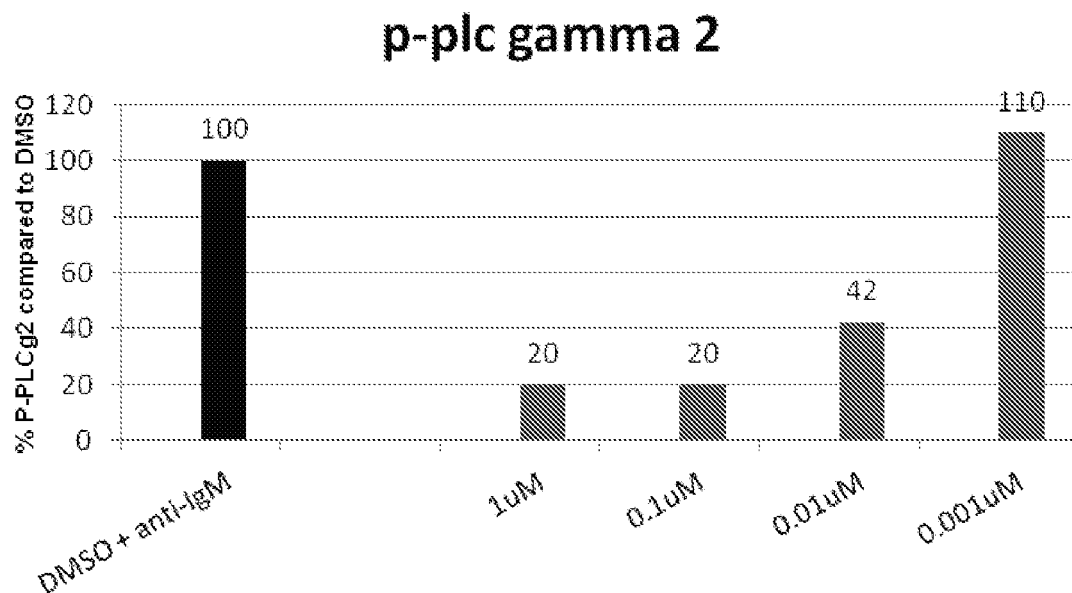


Figure 1

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Dose-Response with Compound I-4 in Ramos cells**p-plc gamma 2**Washout with 1 μM Compound I-4 in Ramos cells**p-plc gamma2****Figure 2**

Dose-Response with Compound I-7 in Ramos cells



Washout Experiment with 1 μM Compound I-7 in Ramos Cells

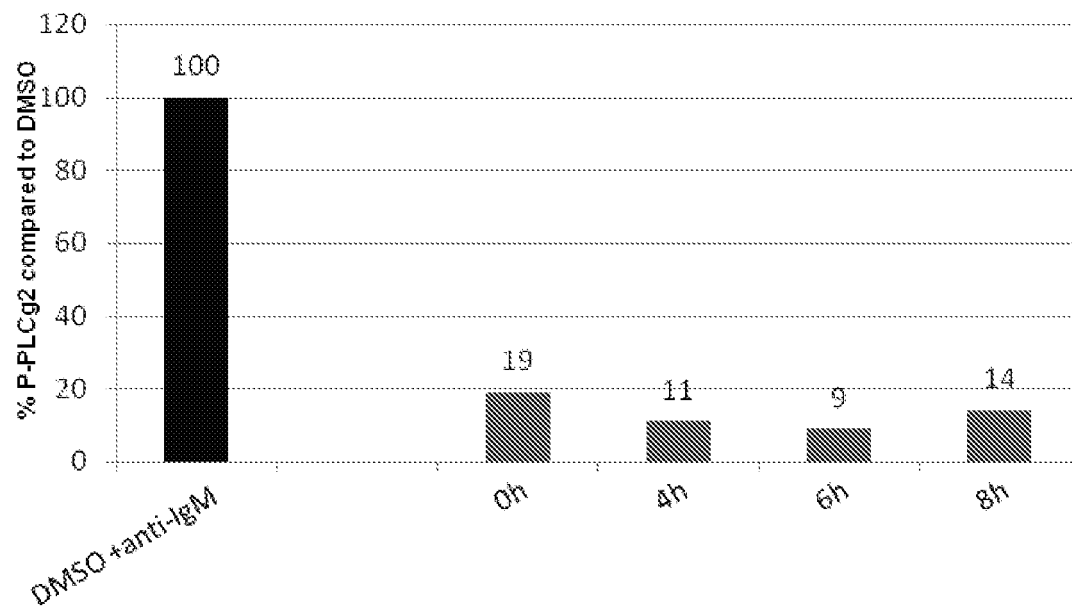
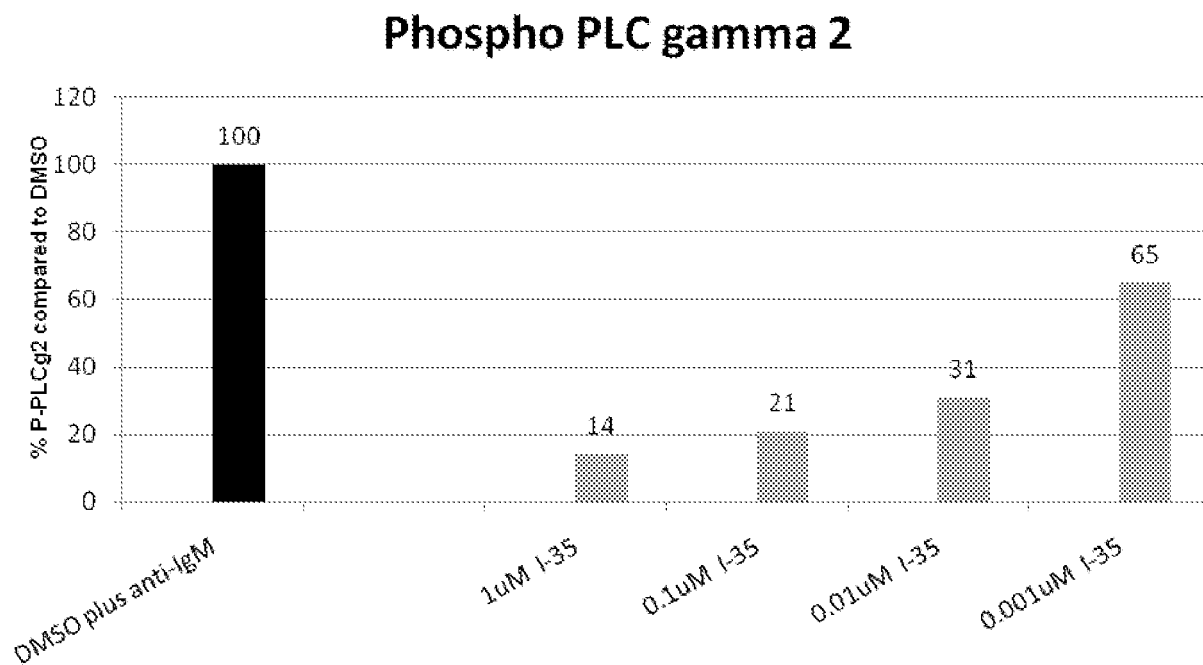
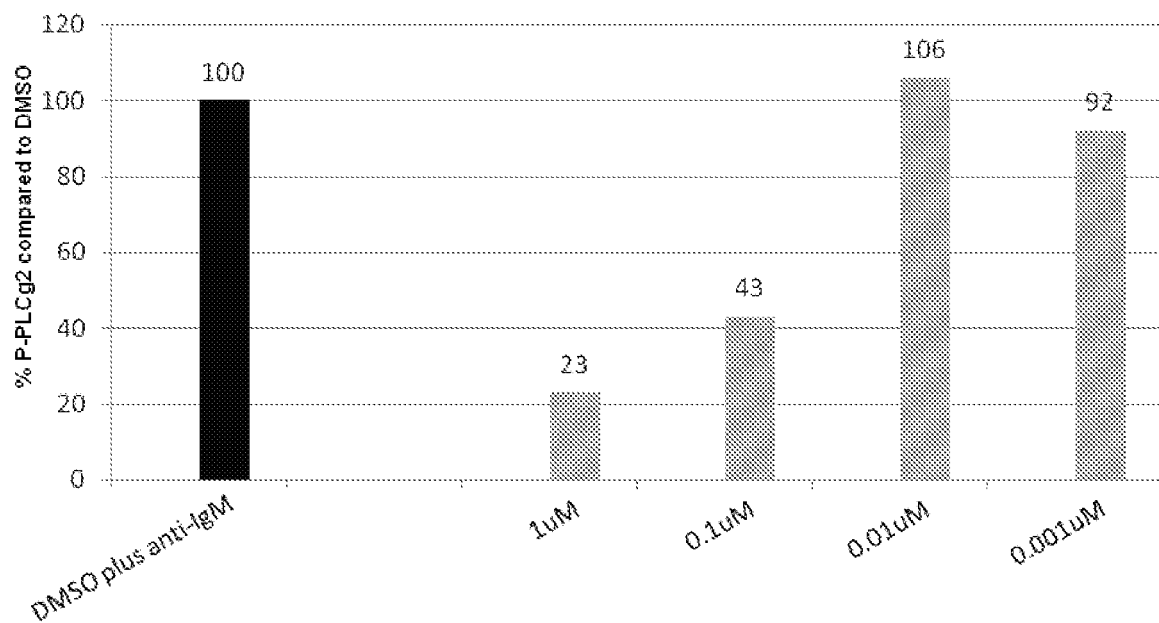


Figure 3

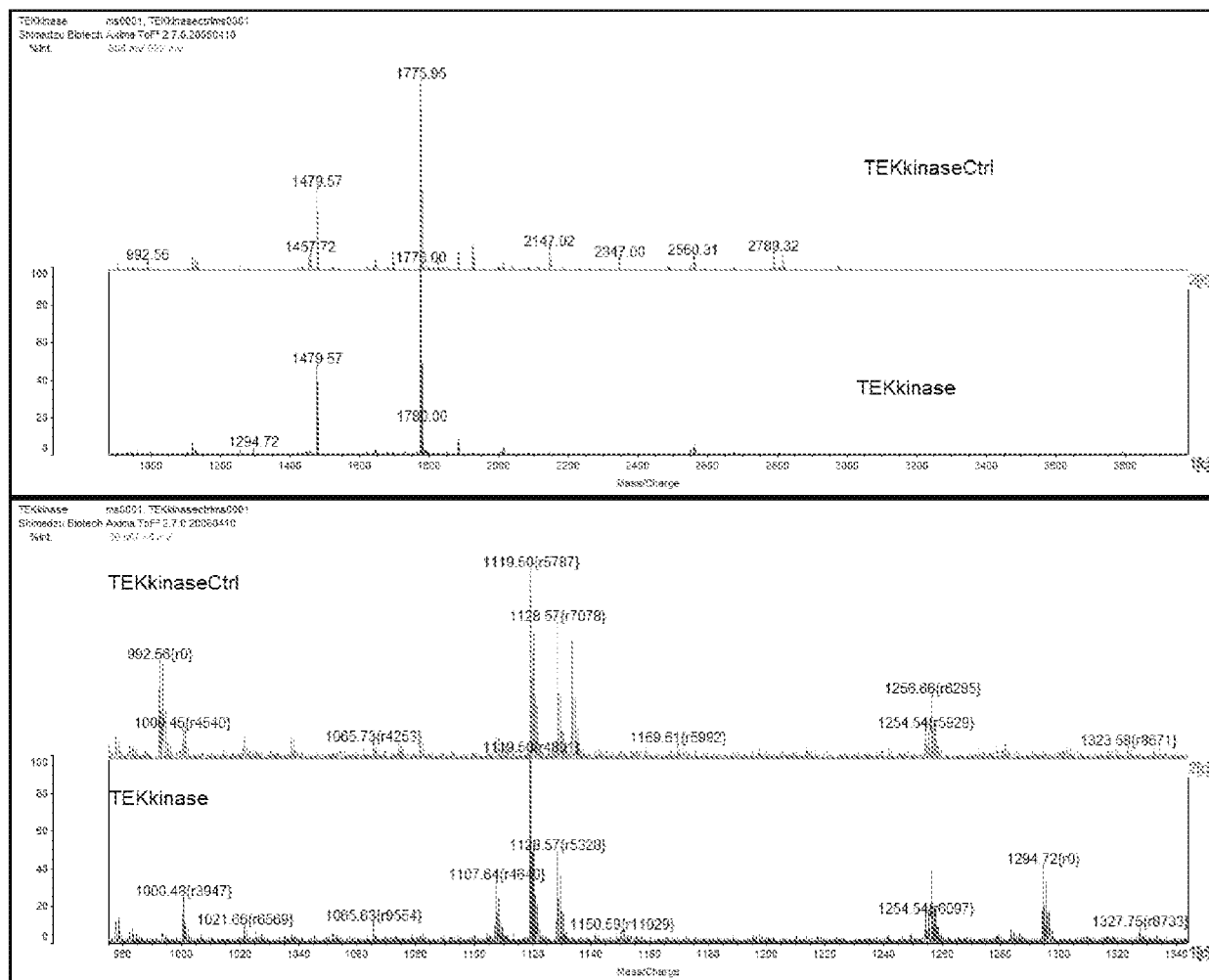
Dose-Response with Compound I-35 in Ramos cells**Figure 4**

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Dose-Response with Compound I-38 in Ramos cells**Phospho PLC gamma 2****Figure 5**

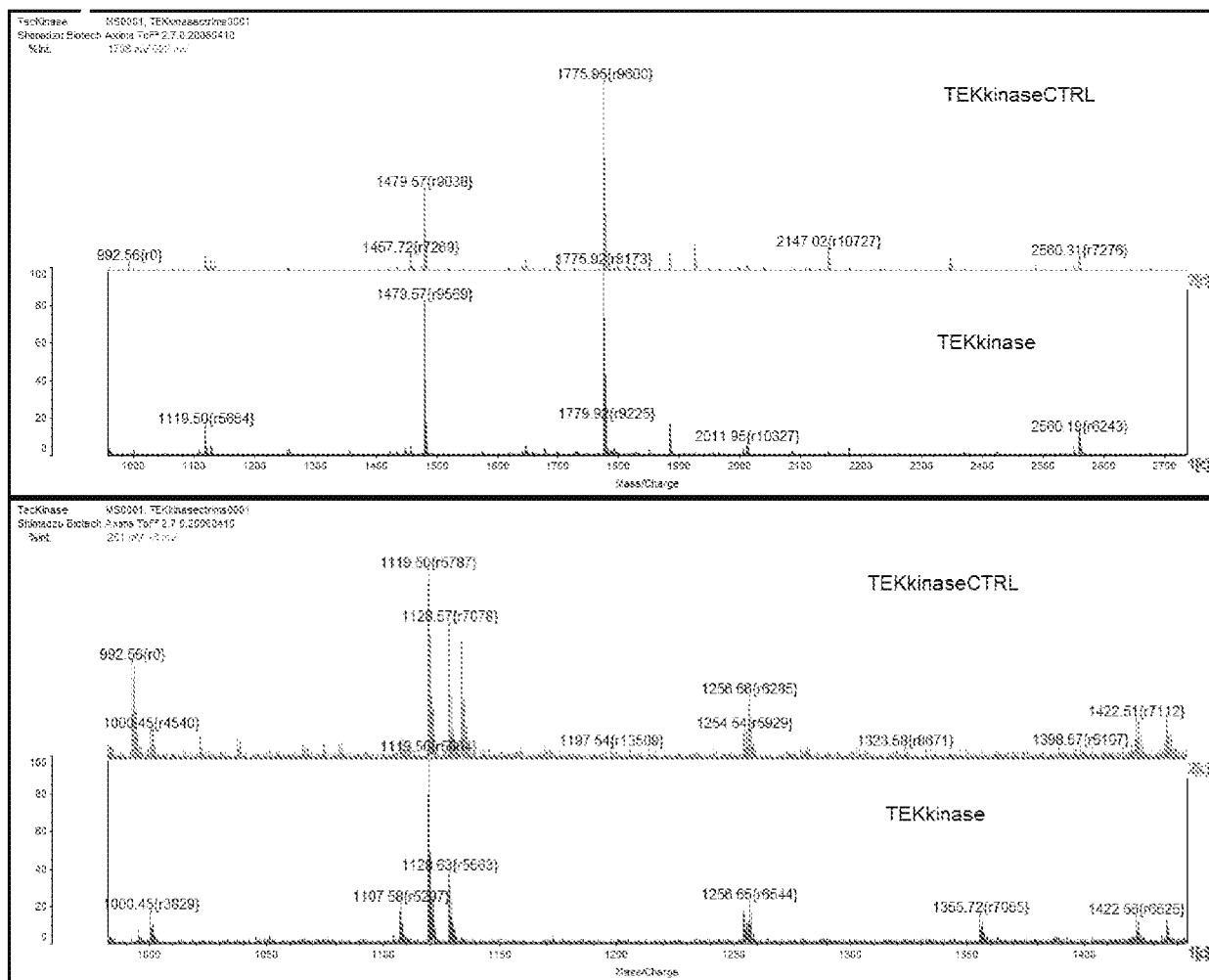
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TEC Kinase - Compound I-2 Tryptic Digest Results

**Figure 6**

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TEC Kinase - Compound I-4 Tryptic Digest Results

**Figure 7**

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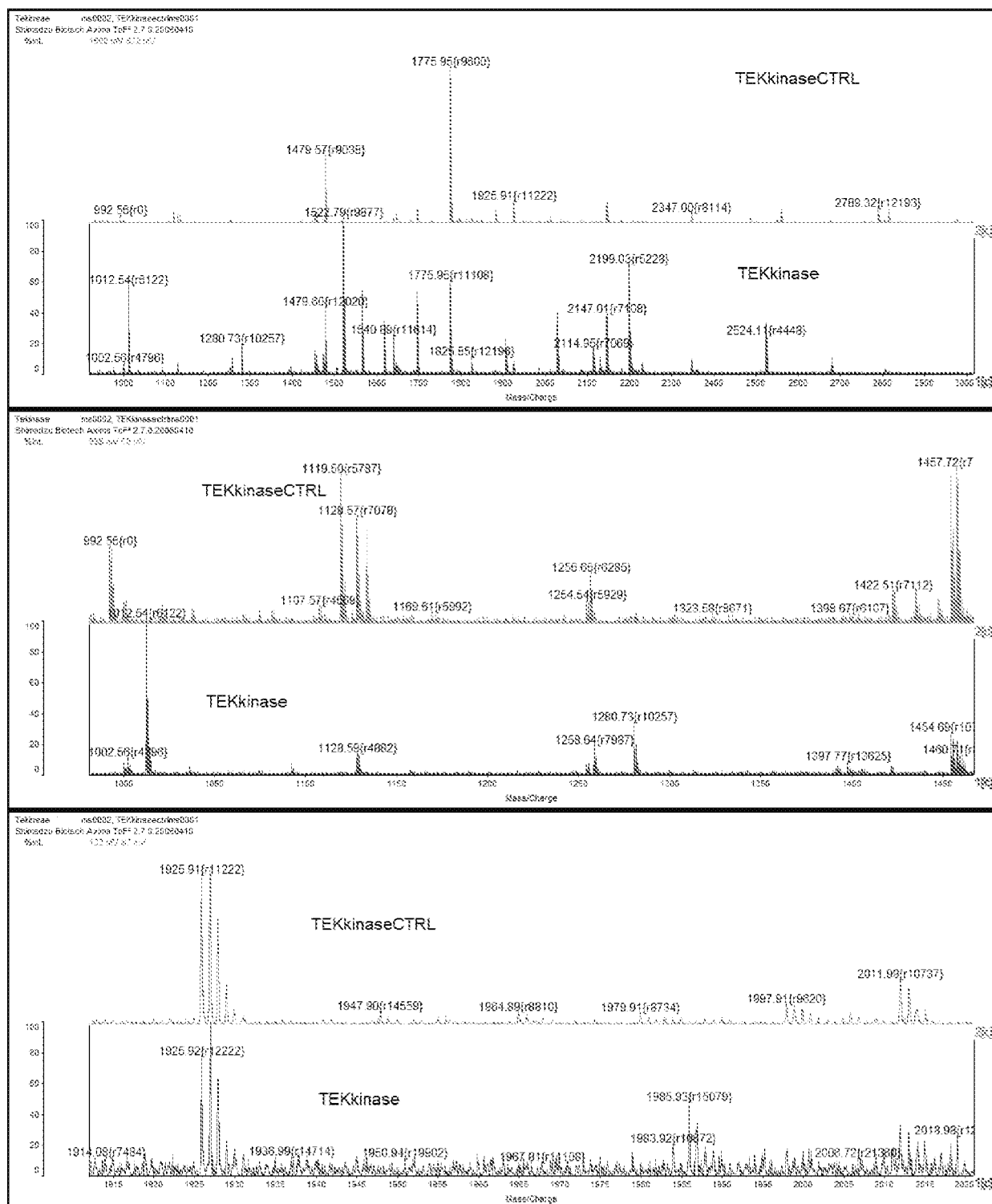
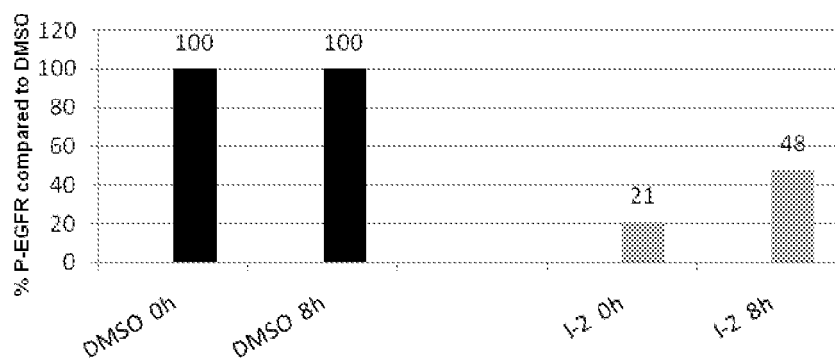
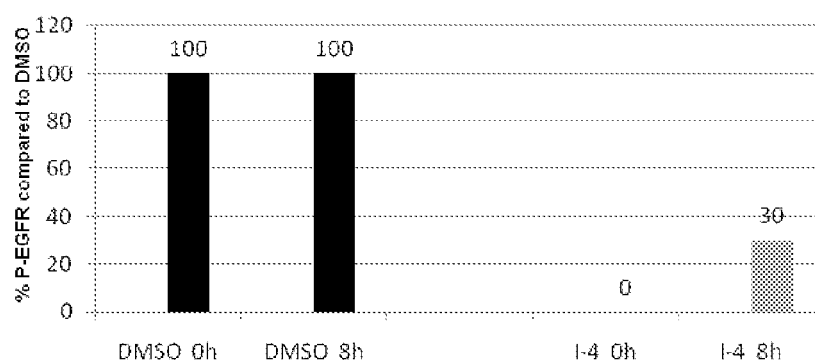
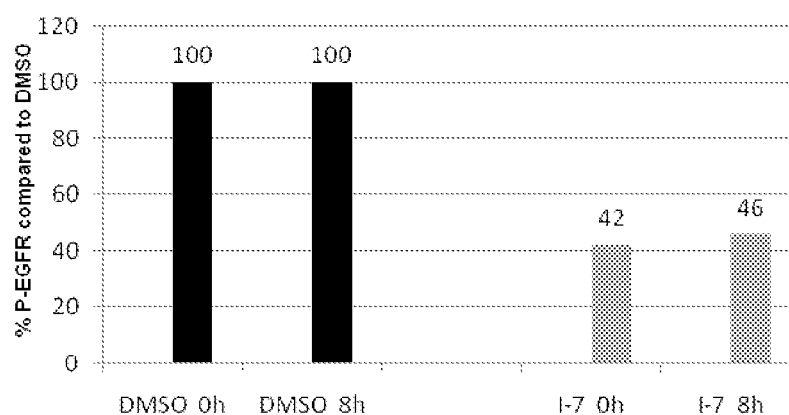
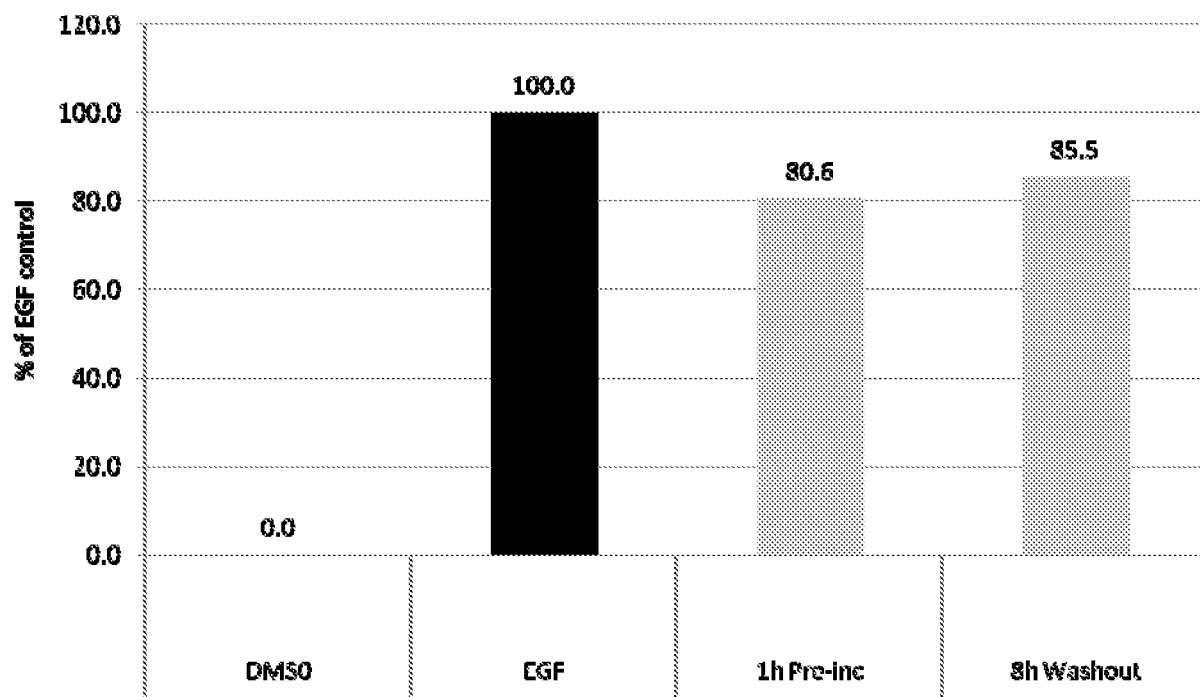
TEC Kinase - Compound I-7 Tryptic Digest Results

Figure 8

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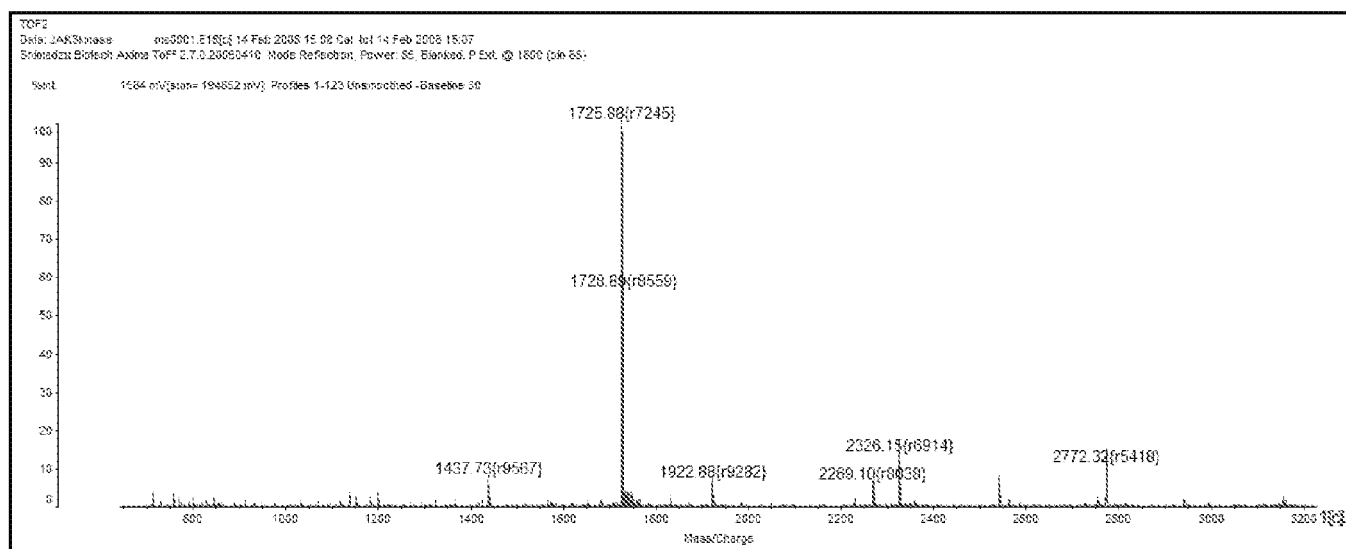
Washout Experiments with Compounds I-2, I-4, and I-7 in HCC827**cells containing EGFR Deletion mutant******Concentration of compound used is 1 μ M in all cases****Phospho Y1068 EGFR (deletion mutant)****Phospho Y1068 EGFR (deletion mutant)****Phospho Y1068 EGFR (deletion mutant)****Figure 9**

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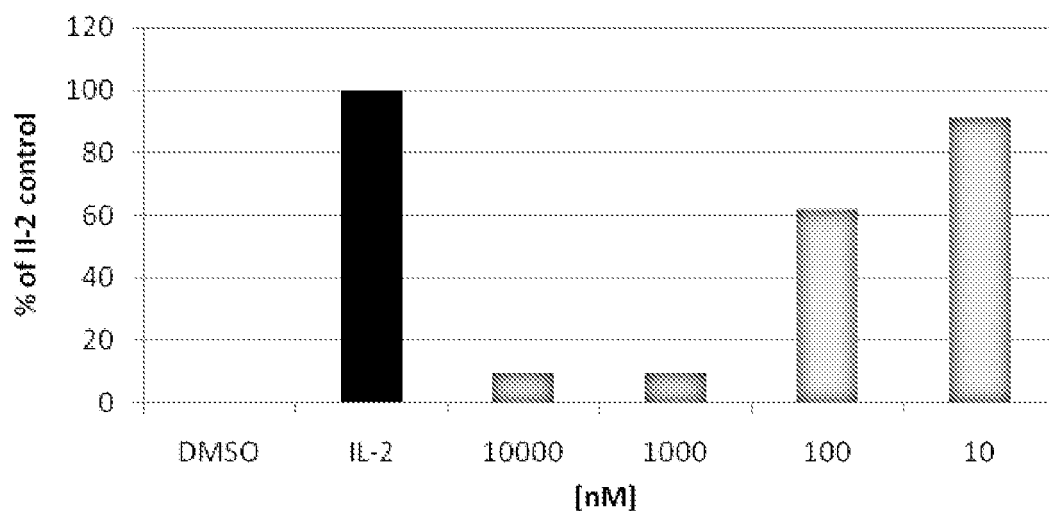
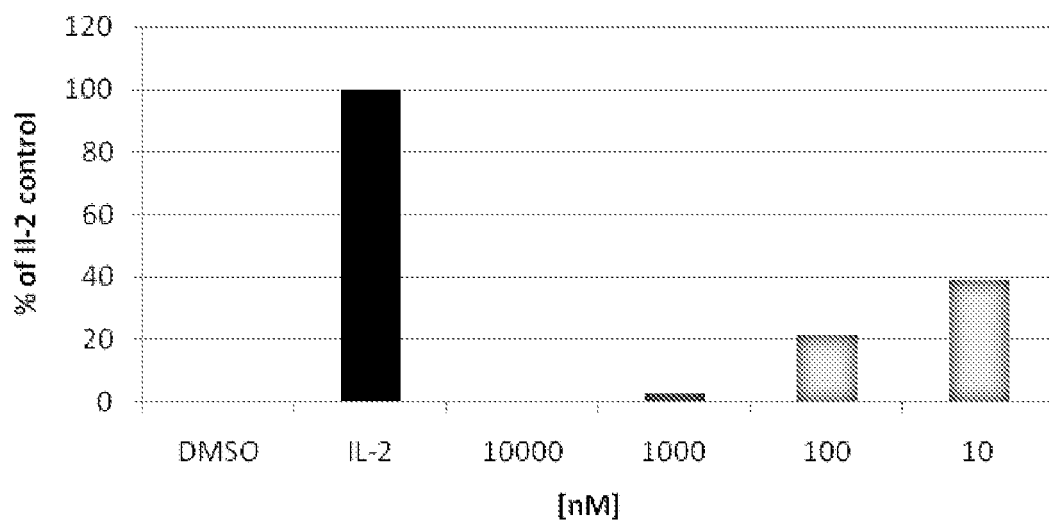
Washout Experiment with 1 μ M Compound I-7 in A431 Cells (EGFR wt)**Figure 10**

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JAK3 Kinase – Compound I-7 Tryptic Digest Results

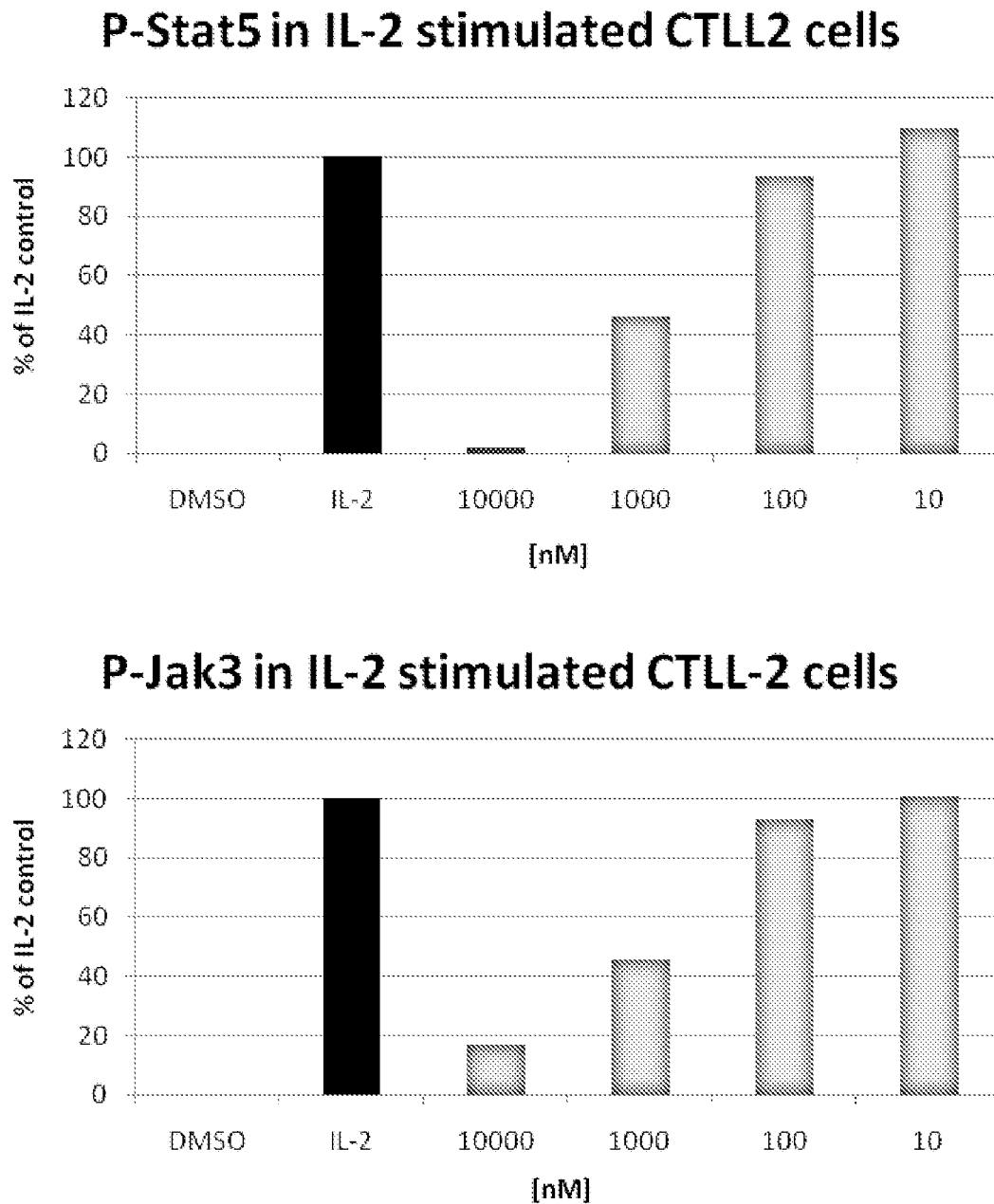
**Figure 11**

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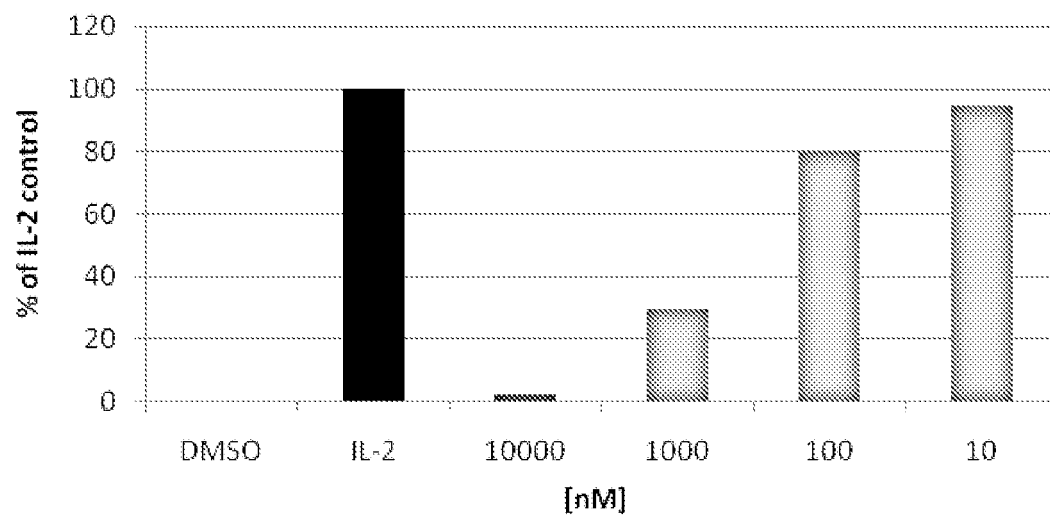
Dose Response with Compound I-2 in CTLL-2 cells**P-Jak3 in IL-2 stimulated CTLL-2 cells****P-Stat5 in IL-2 stimulated CTLL-2 cells****Figure 12**

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Dose Response with Compound I-4 in CTLL-2 Cells

**Figure 13**

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Dose Response with Compound I-7 in CTLL-2 Cells**P-Stat5 in IL-2 stimulated CTLL-2 cells****Figure 14**

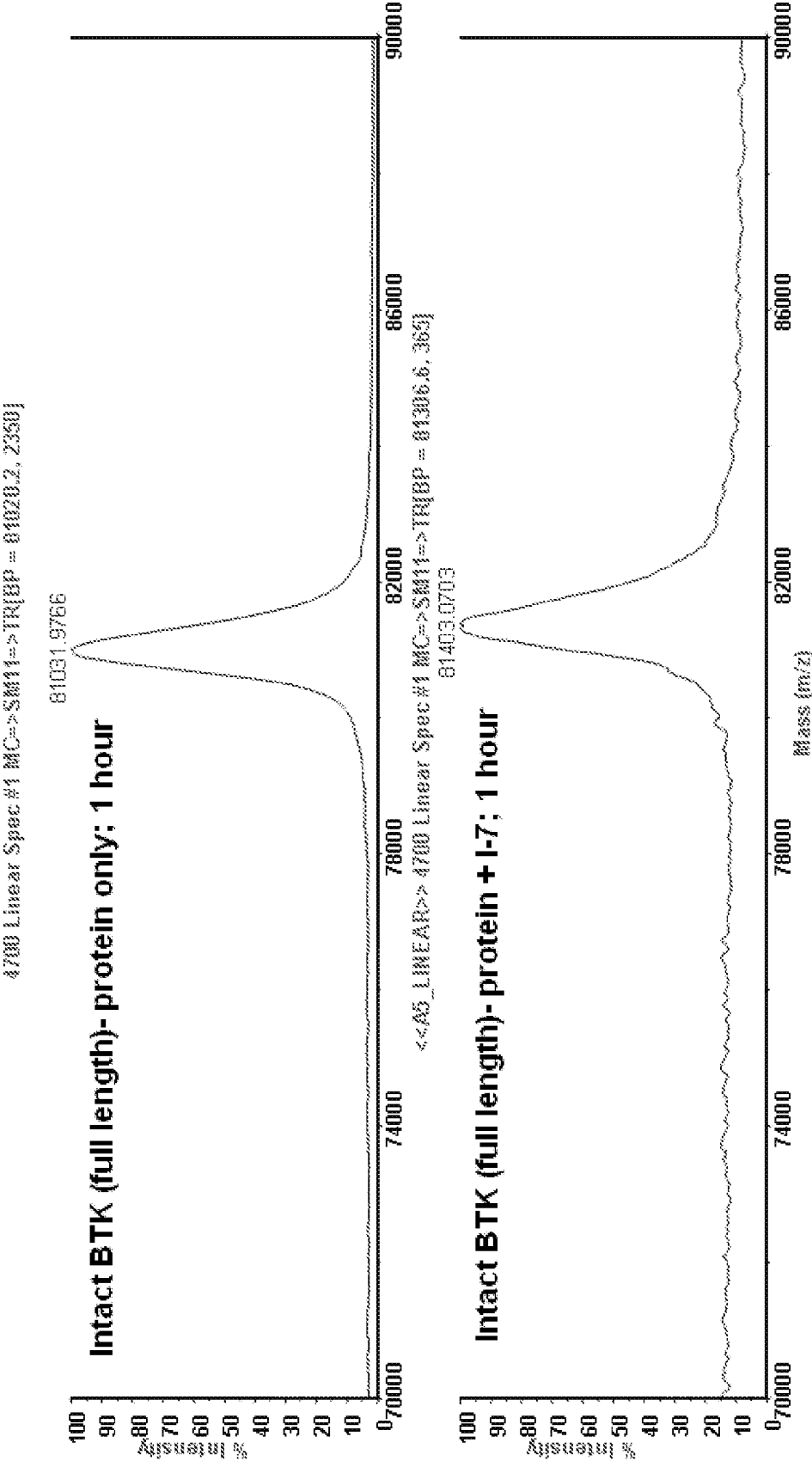


Figure 15

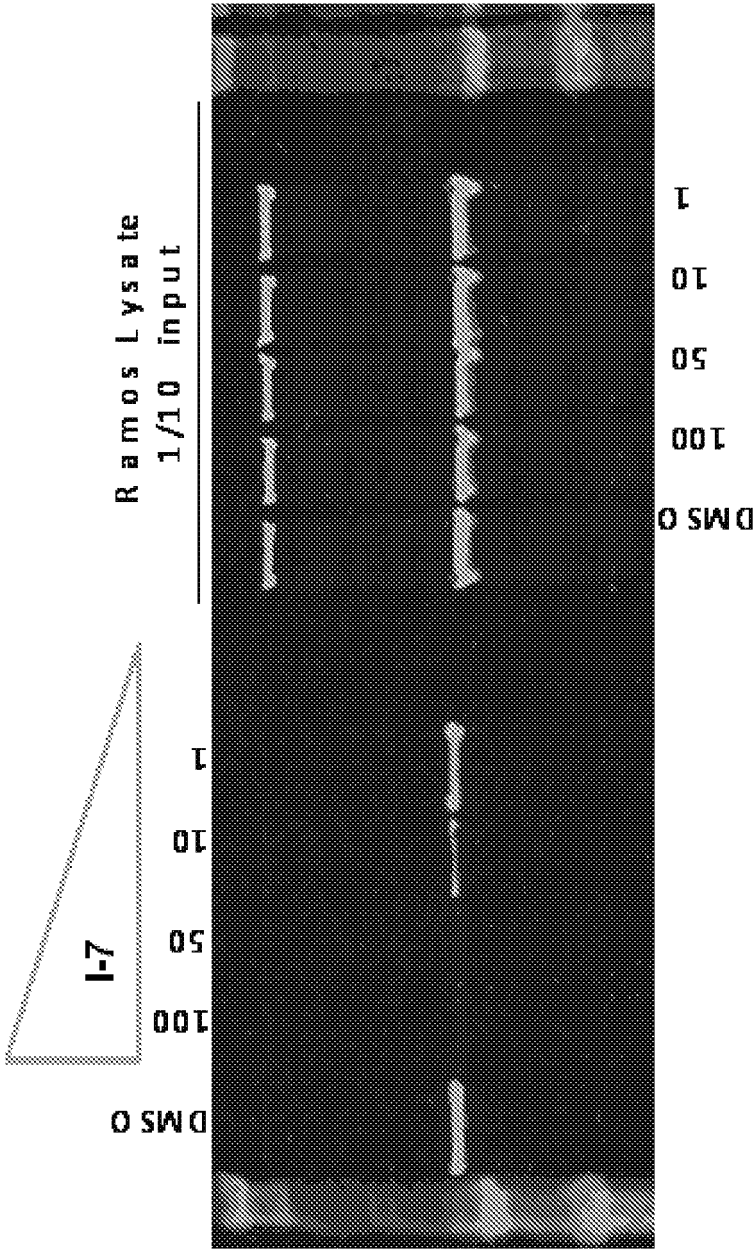


Figure 16

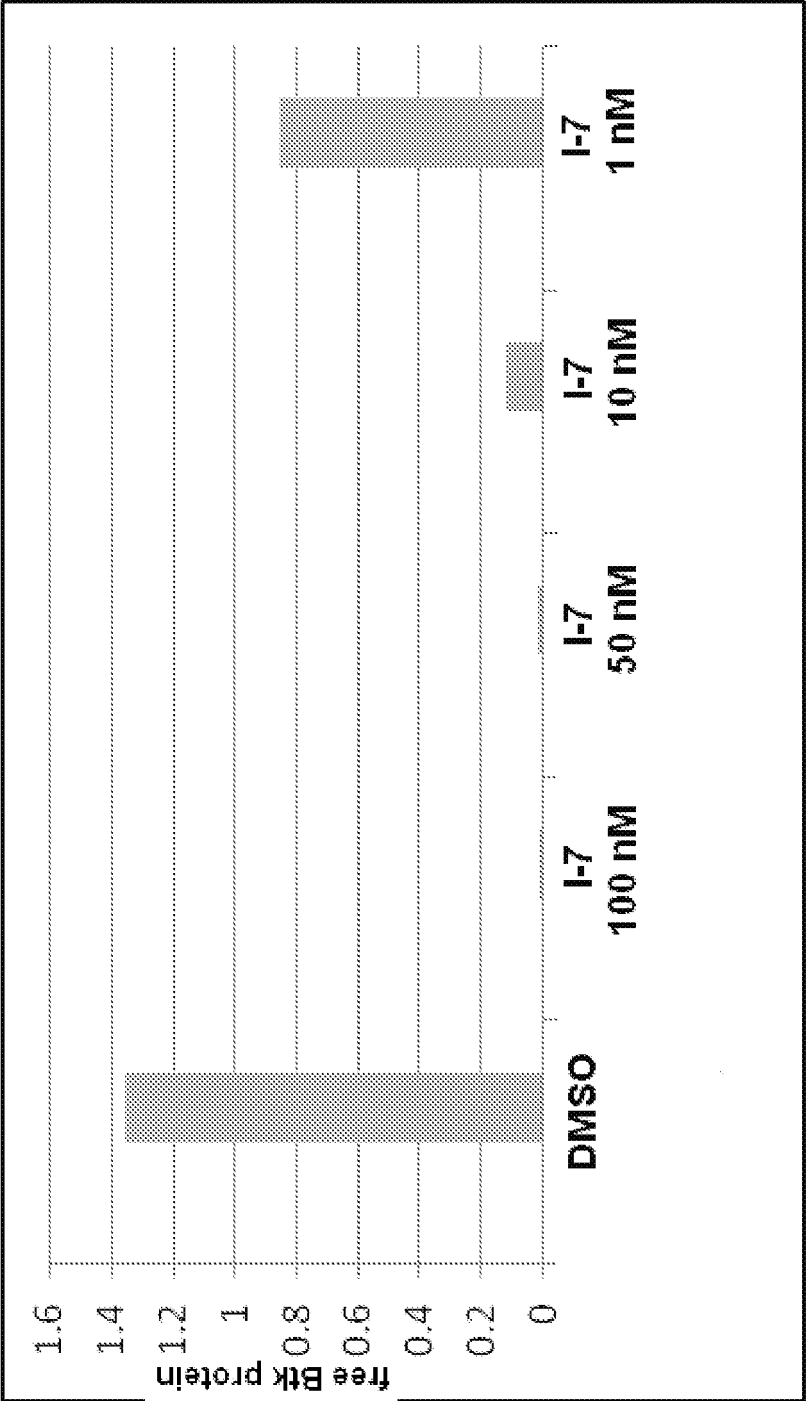


Figure 17

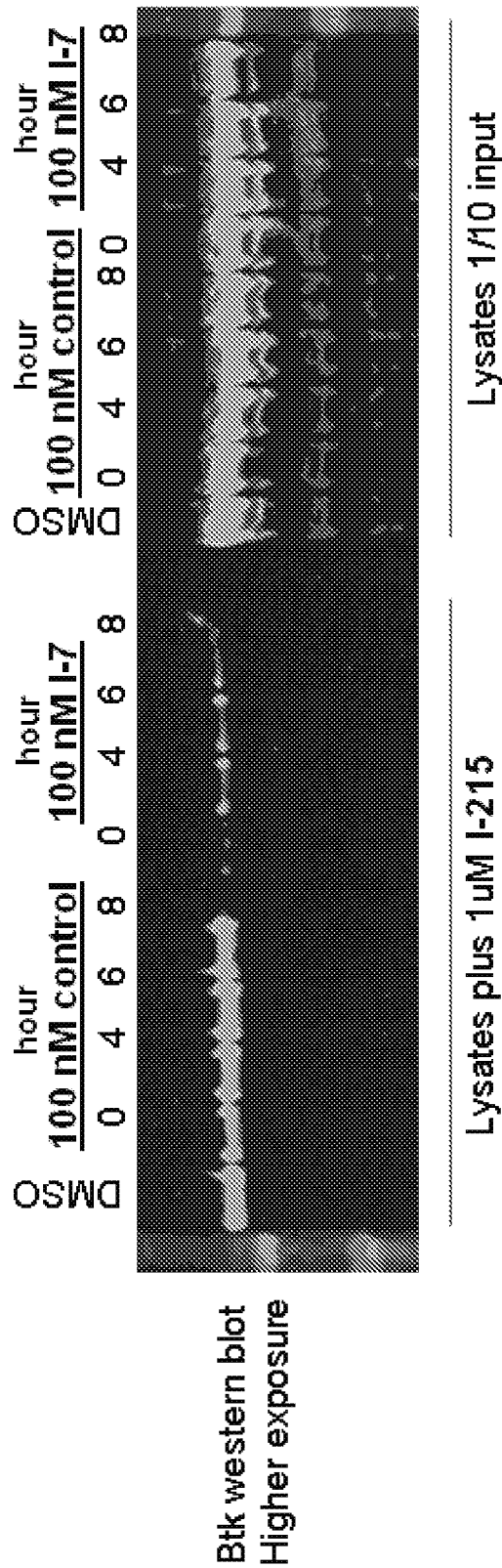


Figure 18

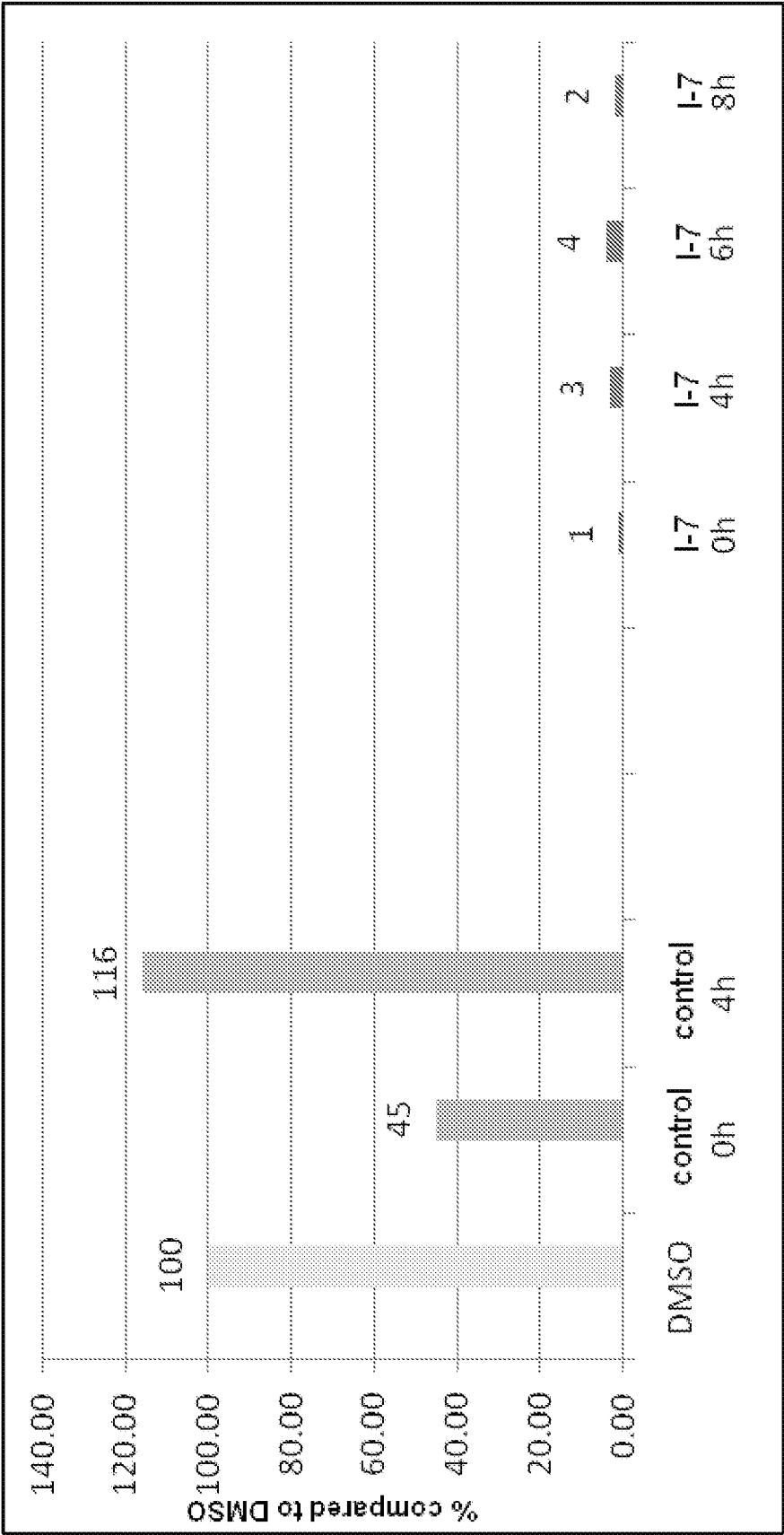


Figure 19

SEQ ID 1: FULL LENGTH BTK PROTEIN:

MAAVILEIFLKRSQLKKTSPLNFKKRLFLLTVHKLSYYEYDFERGRRGSKKGSIDVEK
ITCVETVVPKNNPPPERQIPRRGEESEMEQISIERFPYPFQVVYDEGPLYVFSPTTEL
RKRWIHLKNNVIRYNSDLVQKYHPCFWIDGQYLCCSQTAKNAMGCQILENRNGSLKPGSSHRKTKKPLPPTPEEDQILKKPL
PPEPAAAPVSTSELKKVVALYDYMPMNANDLQLRKGDYFILEESNLPWWRARDKNGQEGYPSNYVVTAEADSIEMYEWY
SKHMTRSQAELLLKQEGKEGGFIVRDSSKAGKTYTSVFAKSTGDPQGVRHYVVCSTPQSQQYYLAEKHLFSTIPELINYHQH
NSAGLISRLKYPVSQQNKNA PSTAGLYGSWEIDPKDLTFLKELGTGQFGVVKYGKWRGQYDVAIKMIKEGSMSEDEFIEEA
KVMMNLSHEKLVQLYGVCTKQRPFIITEYMANGCCLLNLYLREMRHRFQTQQLLEMCCKDVCEAMEYLESKQFLHRDLAARN
CLVNDQGVVKVSDF

Cys=481

Figure 20

SEQ ID 2: FULL LENGTH TEC PROTEIN NP_003206 631 aa

MNFNTILEEILJKRSQQKKTSPLNYKERLFVLTKSMLTYYEGRAEKKYRKGFIDVSKIKCVEIVKNDGVI PCQNKYYPFQVV
HDANTLYIFAPSPQSRDLWVKLLKEEIKNNNNIMIKYHPKFWTDGSYQCCRQTEKLAPGCEKYNLFESSIRKALPPAPETKKR
RPPPIPLEEEDNSEIIVVAMYDFQAAEGHDLRLERGQEYLILEKNDVHWWRARDKYGNEGYPNSYVTGKKSNNLDQYEW
YCRNMNRSKAEQLLRSEDKEGGFMVRDSSQPGLYTVSLYTKFGGEGSGFRHYHIKETTTSPKKYYLAEKHAFGSIPEIEIYH
KHNAAGLVTRLRYPVSVK GK
NAPTTAGFSYEKWEINPSELTFMREL GSGLFGVVRLGKWRAQYKVAIKAIREGAMCEEDFIEEAKVMMKLTHPKLVQLYGV
CTQQKPIYIVTEFMERGCLLNFLRQRQGHFSRDLVLLSMCQDVCEGMEYLERNSFIHRDLAARNCLVSEAGVVKVVSDFGMAR
YVLDDQYTSSSGAKFPVKWCPPEVFNYSRFSSKSDVWSFGVLMWEVFTEGRMPFEKYTNYE VVTMVTRGHRLYQPKLASN
YVYEVMLRCWQEKPEGRPSFEDLLRTIDELVECEETFGR

Cys=449

Figure 21

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SEQ ID 3: FULL LENGTH ITK PROTEIN NP_005537_620aa

MNNFILLEEQLIKKSQQKRRTPSNFKVRFFVLTKASLAYFEDRHGKRTLKGSIELSRJKCVEIVKSDISIPCHYKYPFQVVHD
NYLLYVFAPDRSRQRWVLALKEETRNNNSLVPKYHPNFWMDGKWRCCSQLEKLATGCAQYDPTKNASKKPLPPTPEDNR
RPLWEPEETVVIALYDYQTNDPQELALRNEEYCLLDSSEIHWWRVQDRNGHEGYVPSSYLVEKSPNNLETYEWYNKSISR
DKAEKLLLDTGKEGAFMVRDSRTAGTYTVSVFTKAVVSENNPCIKHYHIKETNDNPKRYYVAEKYVFDSIPLINYYHQHNG
GGLVTRLRYPCFGRQKAPVTAGLRYGKWVIDPSELTFVQEIGSGQFGLVHLGYWLNKDKVAIKTIREGAMSEEDFIEEAEEV
MMKLSHPKL VQLYGVCLQAICLVFEFMEHGCLSDYLRTQRLFAAETLLGMCLDVCEGMAYLEEACVIHRDLAARNCL
VGENQVIKVSDFGMTRFVLDDQYTSTGTGTFPVK WASPEVFSFSRYSSKSDVWVSFGVLMWEVFSFGKIPYENRNSSEVVEDI
STGFRLYKPRLASTHVYQIMNHCWKERPEDRPAFSRLLRQLAEIAESGL

Cys=442

Figure 22

SEQ ID 4: FULL LENGTH BMX PROTEIN NP_001712_675aa

MDTKSILEELLKRSQQKKMSPNNYKERLFVLTKTNLSEYDEYDKMRGSRKGSIEIKKIRCVEKVNLEEQTTPVERQYPFQIV
YKDGLLYVYASNEERSQWLKALQKEIRGNPHLLVKYHSGFFVDGKFLCCQQSCKAAPGCTLWEAYANLHTAVNEEKHRV
PTFPDRVLKIPRAVPVLKMDAPSSSTTLAQYDNESKKNYGSQPPSSSTSLAQYDSNSKKIYGSQPNFNMQYIPREDFPDWWQ
VRKLKSSSSSEDVASSNQKERNVNHTTTSKISWEFPESSEEEENLDDYDWFAGNISRSQSEQLLRQKGKEGAFMVRNSSQV
GMYTVSLFSKAVNDKKGTVKHYH
VHTNAENKLYLAENYCFDSIPKLIHYHQHNSAGMITRLRHPVSTKANKVPDSVSLNGIWEKREEITLLKELGSGQFGVVQ
LGKWKGGQYDVAVKMIKEGSMSEDEFQEAQTMKLSHPKLVKFYGVCSKEYPIYIVTEYISNGCLLNLYLRSHGKGLEPSQL
LEMCYDVCEGMAFLESHQFIHRDLAARNCLVDRDLCVKVSDFGMTRYVLDDQYVSSVGTKFPVKWSAPEVFHYFKYSSKS
DVWAFGILMWEVFSGLGKQPYDLYDNSQVVLKVSQGHRLYRPHLASDTIYQIMYSCWHELPEKRPTFQQLSSIEPLREKDK
H

Cys=496

Figure 23

SEQ ID 5: FULL LENGTH TXK PROTEIN NP_003319.527 aa

MILSSYNTIQSVFCCCCSVQKRQMRTQISLSTDEELPEKYTQRRRPWLSQLSNKKQSNTGRVQPSKRKPLPPLPPSEVAEE
KIQVKALYDFLPREPCNLALRR AEEYLILEKYNPHWWKARDRLGNEGLIPSNYVTENKITNLEIYEWYHRNITRNQAEHLRL
QESKEGAFIVRDSRHILGSYTISVFMGARRSTEA AIKHYQIKKNDSGQWYVAERHAFQSIPELIWYHQHNAAGLMTRLRYYPVG
LMGSCLPATAGFSYEKWEIDPSELAFIKEIGSGQG VVHLGEWRSHIQVAIKAINEGSMSEEDFIEEAKVMMKLSHSLVQLY
GVCIQRKPLYIVTEFMENGCLLN YLRENKGKLRKEMLLSVCQDICEGMEYLERNGYIHRDLAARNCLVSSTCIVKISDFGMT
RYVLDDEYVSSFGAKFPIKWSPPEVFLFNKYSSKSDVWSFGVLMWEVFTGKMPFENKSNLQVVEAISEGFRLYRPHLAPMS
IYEVMYSCWHEKPEGRPTFAELLRAVTEIAETW

Cys 350

Figure 24

SEQ ID 6: FULL LENGTH JAK3 PROTEIN NP_000206.1124 aa

MAPPSEETPLIPQRSCSLSTEAGALHVLPLPARGPGPPQRLSFSFGDHLAEDLCVQAAKASGILPVYHSLFALATEDLSCWFPP
SHIFSVEDASTQVLLYRIRFYFPNWFGLEKCHRFGLRKDLASAILDLPVLEHLFAQHRSDDLVSGRLPVGLSLKEQGECLSLAV
LDLARMAREQAQRPGELLKTVSYKACLPPLSLDLIQGLSFVTRRRIRRTVRRALRRVACQADRHSLMAKYIMDLERLDPA
GAAETFHVGLPGALGGHDGLLRVAGDGGIAWTQGEQEVLQPFCDPFIIVDISIKQAPRVGPAGEHRLVTVTTRTDNQILEA
EFPGLPEALSFVALVDGYFRLTTDSQHFFCKEVAPRLLIEEVAEQCHGPITLDFAINKLKTGGSRPGSYVLRSPQDFDSFLLT
VCVQNPLGPDYKGLIRRSPTGTFLLVGLSRPHSSLRELLATCWDGGGLHVDGVAVTLTSCCIPRPKEKSNLIVVQRGHSPPPTS
SLVQPQSQYQLSQMTTFHKIPADSLEWHENLGHGSFTKIYRGCRHEVVDGEARKTEVLLKVMDAKHKNCMESFLEAASLMS
QVSYRHLVLLHGVCMAGDSTMVQEFVHLGAIDMYLRKRGLVPASWKLQVVVKQLAYALNYLEDKGLPHGNVSARKVLL
AREGADGSPFFIKLSDPGVSPAVLSLEMLTDRIPWVAPECLREAQTLSEADKWFGGATVWEVFSGVTMPISALDPAKKLQF
YEDRQQLPAPKWTEALLIQQCMAYEPVQRPSPFRAVIRDLNLSISSDYELLSDPPTPGALAPRDGLWNGAQLYACQDPTIFEER
HLKYSISQLGKGNFGSVELCRYDPLGDNTGALVAVKQLQHSQPDQQRDFQREIQILKALHSDFIKVRGVSYGPGRQSLRLV
MEYLPSCCLRDFLQRHRARLDASRLLLYSSQICKGMEYLGSRRCVHRDLAARNILVESEAHVKIADFGLAKLLPLDKDYVYV
VREPGQSPIFWYAPESLSDNIFSRQSDVWSFGVVLYELFTYCDKSCSPSAEFLRMMGCERDVPALCRLLEELLEEGQRLPAPPA
CPAEVHELMKLCW/APSPQDRPSFSALGPQLDMLWSGSRGCETHAFTAHPEGKHHSLSFS

Cys=909

Figure 25