

## Product datasheet for RC216670

### PTPN13 (NM\_006264) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PTPN13 (NM_006264) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PTPN13
Synonyms:	FAP-1; hPTP1E; PNP1; PTP-BAS; PTP-BL; PTP1E; PTPL1; PTPLE
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC216670 representing NM_006264 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCACGTGCTACTAGCTGAGGCCCTGGAGGTTTCGGGGTGGACCACTTCAGGAGGAAGAAATATGGGCTG  
TATTAATCAAAGTGCTGAAAGTCTCCAAGAATTATTCAGAAAAGTAAGCCTAGCTGATCCTGCTGCCCT  
TGGCTTCATCATTCTCCATGGTCTCTGCTGTTGCTGCCATCTGGTAGTGTGCATTTACAGATGAAAAT  
ATTTCCAATCAGGATCTTCGAGCATTCACTGCACCAGAGGTTCTTCAAAATCAGTCACTAATTCTCTCT  
CAGATGTTGAAAAGATCCACATTTATTCTTTGGAATGACTGTATTGGGGGGCTGATTATGAAGTGCC  
TCAGAGCCAACCTATTAAGCTTGGAGATCATCTCAACAGCATACTGCTTGGAAATGTGTGAGGATGTTATT  
TACGCTCGAGTTTCTGTTTCGGACTGTGCTGGATGCTTGCAGTGCCACATTAGGAATAGCAATTGTGCAC  
CCTCATTTTCTACGTGAAACACTTGGTAAAATGGTTCTGGGAAATCTTTCTGGGACAGATCAGCTTTC  
CTGTAACAGTGAACAAAAGCCTGATCGAAGCCAGGCTATTCGAGATCGATTGCGAGGAAAAGGATTACCA  
ACAGAACCAGTTCGAAGATACAAAATTATCATGGTGATGTCTTTAGTACCTCCAGTGAAAGTCCATCTA  
TTATTTCTCTGAATCAGATTTTCAGACAAGTGAGAAGAAGTGAAGCCTCAAAGAGGTTTGAATCCAGCAG  
TGGTCTCCAGGGGTAGATGAAACCTTAAGTCAAGGCCAGTACAGAGACCGAGCAGACAATATGAAACA  
CCCTTTGAAGGCAACTTAATTAATCAAGAGATCATGCTAAAACGGCAAGAGGAAGAACTGATGCAGCTAC  
AAGCCAAAATGGCCCTTAGACAGTCTCGGTTGAGCCTATATCCAGGAGACACAATCAAAGCGTCCATGCT  
TGACATCACCGAGGATCCGTTAAGAGAAAATGGCCCTAGAAAACAGCCATGACTCAAAGAAAATGAGGAAT  
TTCTTTGGCCCTGAGTTTGTGAAAATGACAATTGAACATTTATATCTTTGGATTTGCCACGGTCTATTC  
TTACTAAGAAAAGGAAGAATGAGGATAACCGAAGGAAAGTAAACATAATGCTTCTGAACGGGCAAAGACT  
GGAAGTACCTGTGATACAAAATATATGTAAGATGTGTTTGATGTTGTGGCACATATTGGCTTA  
GTAGAGCATCATTGTTTGTCTTAGCTACCCTCAAAGATAATGAATTTCTTTGTTGATCTGACTTAA  
AATTAACCAAAGTGGCCCGAGGGATGGAAGAAGAACCAAAGAAAAGACCAAAGCCACTGTTAATTT  
TACTTTGTTTTTCAGAATTAATTTTTTATGGATGATGTTAGTCTAATACAACATACTCTGACGTGTCAT



[View online >](#)

CAGTATTACCTTCAGCTTCGAAAAGATATTTTGGAGGAAAGGATGCACTGTGATGATGAGACTTCCTTAT  
TGCTGGCATCCTTGGCTCTCCAGGCTGAGTATGGAGATTATCAACCAGAGGTTTCATGGTGTGCTTACTT  
TAGAATGGAGCACTATTTGCCCGCCAGAGTGTGGAGAACTTGATTTATCCTATATCAAAGAAGAGTTA  
CCCAAATTGCATAATACCTATGTGGGAGCTTCTGAAAAAGAGACAGAGTTAGAATTTTTAAAGGTCTGCC  
AAAGACTGACAGAATATGGAGTTCATTTTACCAGAGTGCACCTGAGAAGAAGTCACAAACAGGAATATT  
GCTTGGAGTCTGTTCTAAAGGTGCTTGTGTTGAAGTTCACAAATGGAGTGCACACATTTGGTCTTCGC  
TTTCCATGGAGGAAACCAAGAAAATATCTTTTTCTAAAAAGAAAATCACATTGCAAAAATACATCAGATG  
GAATAAAAACATGGCTTCCAGACAGACAAGTAAGATATGCCAGTACCTGCTGCACCTCTGCTCTTACCA  
GCATAAGTTCAGCTACAGATGAGAGCAAGACAGAGCAACCAAGATGCCCAAGATATTGAGAGAGCTTCG  
TTTAGGAGCCTGAATCTCCAAGCAGAGTCTGTTAGAGGATTTAATATGGGACGAGCAATCAGCACTGGCA  
GTCTGGCCAGCAGCACCTCAACAACTTGCTGTTTCGACCTTTATCAGTTCAGCTGAGATTCTGAAGAG  
GCTATCCTGCTCAGAGCTGTCGCTTTACCAGCCATTGCAAAACAGTTCAAAAGAGAAGAATGACAAAAGCT  
TCATGGGAGGAAAAGCCTAGAGAGATGAGTAAATCATACCATGATCTCAGTCAGGCTCTCTCTATCCAC  
ATCGGAAAAATGTCATTGTTAACATGGAACCCCAACCAAAACCGTTGCAGAGTTGGTGGGAAAACCTTC  
TCACCAGATGCAAGATCTGATGCAGAATCTTTGGCAGGAGTGCACAACTTAATAATTCAAAGTCTGTT  
GCGAGTTTTAAATAGAAGTCTGAAAGGAGGAAACATGAATCAGACTCCTCATCCATTGAAGACCCCTGGGC  
AAGCATATGTTCTAGATGTGCTACACAAAAGATGGAGCATAGTATCTTACCAGAAAAGGGAGATCACCTT  
AGTGAACCTGAAAAAGATGCAAGTATGGCTTGGGATTTCAAATATTGGTGGGAGAAGATGGGAAGA  
CTGGACCTAGGCATATTTATCAGTTCAGTTGCCCTGGAGGACCAGCTGACTTGGATGGATGCTTGAAGC  
CAGGAGACCGTTTGATATCTGTGAATAGTGTGAGTCTGGAGGGAGTCAAGCACCATGCTGCAATTTGAAAT  
TTTGCAAAATGCACCTGAAGATGTGACACTTGTATCTCTCAGCCAAAAGAAAAGATATCCAAAGTGCCT  
TCTACTCTGTGCATCTACCAATGAGATGAAAACTACATGAAGAAATCTTCTACATGCAAGACAGATG  
CTATAGATCTTCTTCCAAGGATCACCACTGGTCAAGTGGTACCCTGAGGCACATCTCGGAGAACCTCTT  
TGGGCGCTCTGGGGCCCTGCGGGAAGGAAGCCTGAGTTCTCAAGATTCCAGGACTGAGAGTGCACAGTTG  
TCTCAAAGCCAGGTCAATGGTTTCTTGGCAGCCATTTAGGTGACCAACCTGGCAGGAATCACAGCATG  
GCAGCCCTTCCCATCTGTAATATCCAAAGCCACCGAGAAAGAGACTTTCACTGATAGTAACCAAAGCAA  
AACTAAAAGCCAGGCATTTCTGATGTAAGTACTACTCAGACCGTGGAGATTGAGACATGGATGAAGCC  
ACTTACTCCAGCAGTCAGGATCATCAAACACCAAAACAGGAATCTTCTCTTTCAGTGAATACATCCAACA  
AGATGAATTTTTAAACTTTTTCTTATCACCTCCTAAGCCTGGAGATATCTTTGAGGTGAACTGGCTAA  
AAATGATAACAGCTTGGGATAAGTGTACCGTACTGTTTGACAAGGGAGGTGTGAATACGAGTGCAG  
CATGGTGGCATTATGTGAAAGCTGTTATCCCCAGGGAGCAGCAGAGTCTGATGGTGAATTCACAAAG  
GTGATCGCGTCTAGCTGTCAATGGAGTTAGTCTAGAAGGAGCCACCATAAGCAAGCTGTGAAACACT  
GAGAAATACAGGACAGGTGGTTCATCTGTTATTAGAAAAGGGACAATCTCCAACATCTAAAGAACATGTC  
CCGGTAACCCACAGTGTACCCTTTCAGATCAGAATGCCCAAGGTCAAGGCCAGAAAAAGTGAAGAAAA  
CAACTCAGGTCAAAGACTACAGCTTTGTCACTGAAGAAAAATACATTTGAGGTAAAATTTTAAAAATAG  
CTCAGGTCTAGGATTCAGTTTTTCTCGAGAAGATAATCTTATACCGGAGCAAATTAATGCCAGCATAGTA  
AGGGTTAAAAGCTCTTCTCGGACAGCCAGCAGCAGAAAGTGGAAAAATGATGTAGGAGATGTTATCT  
TGAAAGTGAATGGAGCCTCTTTGAAAGGACTATCTCAGCAGGAAGTCATATCTGCTCTCAGGGAACTGC  
TCCAGAAGTATTCTTGTCTCTGACAGCCTCCACCTGGTGTGCTACCGGAAATGATACTGCGCTTTTG  
ACCCCACTTCAGTCTCCAGCACAAAGTACTTCAAACAGCAGTAAAGACTTCTCAGCCATCATGTGTGG  
AGCAAAGCACCAGCTCAGATGAAAATGAAATGTACAGACAAAAGCAAAAAACAGTGAAGTCCCATCCAG  
AAGAGACAGTTACAGTGACAGCAGTGGGAGTGGAGAAGATGACTTAGTGACAGCTCCAGCAACATATCA  
AATTCGACCTGGAGTTCAGCTTTGCATCAGACTTAAGCAACATGGTATCACAGGCACAGAGTCATCATG  
AAGCACCAAGAGTCAAGAAGATACATTTGTACCATGTTTTACTATCCTCAGAAAAATCCCAATAAACC  
AGAGTTTGAGGACAGTAATCCTTCCCCTACCACCGGATATGGCTCCTGGGCAGAGTTATCAACCCCAA  
TCAGAATCTGCTTCTCTAGTTCGATGGATAAGTATCATATACATCACATTTCTGAACCAACTAGACAAG  
AAAAGTGGACACCTTTGAAAAATGACTTGGAAAATCACCTTGAAGACTTTGAACTGGAAGTGAAGTCTCT  
CATTACCCTAATTAATCAGAAAAAGGAAGCCTGGGTTTTACAGTAACCAAGGCAATCAGAGAATTGGT  
TGTTATGTTTCATGATGTCATACAGGATCCAGCCAAAAGTATGGAAGGCTAAAACCTGGGACCGGCTCA  
TAAAGGTTAATGATACAGATGTTACTAATATGACTCATACAGATGCAGTTAATCTGCTCCGGGCTGCATC  
CAAAACAGTCAGATTAGTTATTGGACGAGTCTAGAATTACCCAGAAATACCAATGTTGCCTCATTGCTA  
CCGGACATAACACTAACGTGCAACAAAGAGGAGTTGGGTTTTCTTATGTGGAGGTCATGACAGCCTTT

ATCAAGTGGTATATATTAGTGATATTAATCCAAGTCCGTCGCAGCCATTGAGGGTAATCTCCAGCTATT  
AGATGTCATCCATTATGTGAACGGAGTCAGCACACAAGGAATGACCTTGGAGGAAGTTAACAGAGCATT  
GACATGCACTTCCTTCATTGGTATTGAAAGCAACAAGAAATGATCTCCAGTGGTCCCCAGCTCAAAGA  
GGTCTGCTGTTTCAGCTCCAAGTCAACCAAGGCAATGGTTCTACAGTGTGGGGTCTTGCAGCCAGCC  
TGCCCTCACTCCTAATGATTCATTCTCCACGGTTGCTGGGAAGAAAATAATGAAATATCGTACCCAAA  
GGAAAATGTTCTACTTATCAGATAAAGGGATCACAAACTTGACTCTGCCAAAGAATCTTATATACAAG  
AAGATGACATTTATGATGATCCCAAGAAGCTGAAGTTATCCAGTCTCTGCTGGATGTTGTGGATGAGGA  
AGCCCAGAATCTTTAAACGAAAATAATGCAGCAGGATACTCCTGTGGTCCAGGTACATTAAGATGAAT  
GGGAAGTTATCAGAAGAGAGAACAAGATACAGACTGCGATGGTTCACCTTTACCTGAGTATTTTACTG  
AGGCCACCAAAAATGAATGGCTGTGAAGAATATTGTGAAGAAAAAGTAAAAAGTGAAGCTTAATTCAGAA  
GCCACAAGAAAAGAAGACTGATGATGATGAAATAACATGGGGAAATGATGAGTTGCCAATAGAGAGAACA  
AACCATGAAGATTCTGATAAAGATCATTCTTTCTGACAAACGATGAGCTCGCTGTACTCCCTGTCGTCA  
AAGTGCTCCCTCTGGTAAATACACGGGTGCCAACTTAAAATCAGTCATTGAGTCTGCGGGGTTTGTCT  
AGATCAAGGAATTCCTTCTAAGGAGCTGGAGAATCTTCAAGAATAAAACCTTTGGATCAGTGTCTAATT  
GGGCAAACTAAGGAAAACAGAAGGAAGAACAGATATAAAAATATACTTCCCTATGATGCTACAAGAGTGC  
CTCTTGGAGATGAAGGTGGCTATATCAATGCCAGCTTCATTAAGATACCAGTTGGGAAAGAAGAGTTCGT  
TTACATTGCCTGCCAAGGACCCTGCCTACAACCTGTTGGAGACTTCTGGCAGATGATTTGGGAGCAAAAA  
TCCACAGTGATAGCCATGATGACTCAAGAAGTAGAAGGAGAAAAAATCAAATGCCAGCGCTATTGGCCCA  
ACATCCTAGGCCAAAACAATGGTCAGCAACAGACTTCGACTGGCTCTTGTGAGAATGCAGCAGCTGAA  
GGGCTTTGTGGTGAGGGCAATGACCCTTGAAGATATTCAGACCAGAGAGGTGCGCCATATTTCTCATCTG  
AATTTCACTGCCTGGCCAGACCATGATACACCTTCTCAACCAGATGATCTGCTTACTTTTATCTCCTACA  
TGAGACACATCCACAGATCAGGCCAATCATTACGCACTGCAGTGTGGCATTGGACGTTTCAGGGACCCT  
GATTTGCATAGATGTGGTTCTGGGATTAATCAGTCAGGATCTTGTATTTGACATCTGATTTGGTGCGC  
TGCATGAGACTACAAAGACCGGAATGGTTCAGACAGAGGATCAATATATTTTCTGCTATCAAGTCATCC  
TTTATGTCTGACACGTCTTCAAGCAGAAGAAGAGCAAAAACAGCAGCCTCAGCTTCTGAAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC216670 representing NM\_006264  
 Red=Cloning site Green=Tags(s)

MHVSLAEALEVRGGPLQEEEEIWAFLNQSASLQELFRKVSADPAALGFIIISPWLLLLPSGSVSFTDEN  
 ISNQDLRAFTAPEVLQNSLTSLSVVEKIHIYSLGMTLYWGADYEVPSQPIKLDGHLNSILLGMCEDVI  
 YARVSVRTVLDACSAHIRNSNCAPSF SYVKHLVKLVGNLSGTDQLSCNSEQKPDQSQAIRDRLRGKGLP  
 TEPVRRYKTYHGDFVSTSSSEPSIISSSEDFRQVRRSEASKRFESSGLPGVDETL SQGQSQRPSRQYET  
 PFEGNLIHQEIMLKRQEEELMQLQAKMALRQSRLSLYPGDTIKASMLDITRDPLREIALETAMTQRKLRN  
 FFGPEFVKMTIEPFISLDLPRSLTKKGNEDNRRKVNIMLLNGQRLELTCDTKTICKDVFDMVVAHIGL  
 VEHLHFAALTKDNEYFFVDPDLKTKVAPEGWKEPKKTKATVNFTLFFRIKFFMDDVSLIQHTLTCH  
 QYYLQLRKDI LEERMHCDETSLLLASLALQAEYGDYQPEVHGVSYFRMEHYLPARVMEKLDLSYIKEEL  
 PKLHNTYVGA SEKETELEFLKVCQRLTEYGVHFRVHPEKKSQTGILLGVC SKGVLVFEVHNGVRTLVLR  
 FPWRETKKISF SKKKITLQNTSDGIKHFQTDNSKICQYLLHLCSYQHKFQLQMRARQSNQDAQDIERAS  
 FRSLNLQAESVRGFNMGRAISTGSLASSTLNKLAVRPLSVQAEILKRLSCSEL SLYQPLQNSSKEKNKA  
 SWEKPREMSKSYHDL SQASLYPHRKNVIVNMEPPPQTVAELVKGPSHQMSRSDAESLAGVTKLNNSKSV  
 ASLNRSPEERRKHESDSSSIEDPGQAYVLDVLRKRSIVSSPEREITLVNLKDKAYGLGFQIIGGEMGR  
 LDLGIFISSVAPGGPADLDGCLKPGDRLISVNSVSLGEGVSHAAIEILQNAPEVDVTLVISQPKKISKVP  
 STPVHLTNEMKNYMKSSYMQSDAIDSSSKDHHWSRGTLRHISENSFGPSGGLREGSLSSQDSRTESASL  
 SQSQVNGFFASHLGDQWQESQHGSPSPSVISKATEKETFTDSNQSKTKKPGISDVTDYSDRGSDMDEA  
 TYSSSQDHQTPKQESSSSVNTSNKMNKFTFSSSPPKPGDIFEVELAKNDNSLGISVTVLFDKGGVNTSVR  
 HGGIYVKAVIPQGAASDGRHKGDRVLAVNGVSLLEGATHKQAVETLRNTGOVHLLLEKQGSPTSKEHV  
 PVTPQCTLSDQNAQGGQPEKVKTTQVKDYSFVTEENTFEVVKL FKNSSGLGF SFSREDNLIPEQINASIV  
 RVKCLFPGQPAAESGKIDVGDVILKVN GASL KGLSQQEVISALRGTAPEVFLLLCRPPPGLPEIDTALL  
 TPLQSPAQVLPNSSKDSQPSCVEQSTSSDENEMSDKSKKQCKSPSRRDSYSDSSSGGEDDLVTAPANIS  
 NSTWSSALHQTL SNMVSQAQSHHEAPKSQEDTICTMFYYPQKIPNKPEFEDSNPSPLPPDMPAGQSYQPQ  
 SESASSSSMDKYIHHSI SEPTRQENWTLKNDLENHLED FELEVELLITLIKSEKSLGFTVTKGNQRIG  
 CYVHDVIQDPAKSDGRLKPGDRLIKVNDT DVTNMHTDAVNLLRAASKTVRLVIGRVLELPRIPMLPHLL  
 PDITLTCNKEELGFSLCGGHDSLQV VVYISDINPRSVAAIEGNLQLLDVHYVNGVSTQGMTLEEVNRL  
 DMSLPSLVL KATRNDLPVVPSSKRS AVSAPKSTKNGS YSVGSCSQPALTPNDSFSTVAGEEINEISYPK  
 GKCSTYQIKGSPNLTPKESYIQEDDIYD DSQEA EVIQSLLDVVDEEAQNLLNENNAAGYSCGPGTLKMN  
 GKLSEERTEDTDCDGSPLPEYFTEATKMGCEEYCEEKVKSESLIQKPQEKKTDDDEITWGNDELPIERT  
 NHEDSDKDHSFLTNDLAVLPVVKVLP SGKYTGANLKS VIRVLRGLLDQGI PSKELENLQELKPLDQCLI  
 GQTKENRRKNRYKNILPYDATRVPLGDEGGYINASF IKIPVGKEEFVYIACQGPLPTTVGDFWQMIWEQK  
 STVIAMMTQEVEGEKIKCQRYWPNILGKTTMVSNRLRLALVRMQQLKGFVVRAMTLEDIQTREVRHISHL  
 NFTA WPDHDTPSQPDDLTFISYMRHIHRSGPIITHCSAGIGRSGTLICIDVVLGLISQDLDFDISDLVR  
 CMRLQRHGMVQTEDQYIFCYQVILYV LTRLQAE EEEQKQPQLLK

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM\_006264

ORF Size: 6852 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- Reconstitution Method:
1. Centrifuge at 5,000xg for 5min.
  2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
  3. Close the tube and incubate for 10 minutes at room temperature.
  4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
  5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq Size: 8062 bp

RefSeq ORF: 7401 bp

Locus ID: 5783

UniProt ID: [Q12923](#)

Cytogenetics: 4q21.3

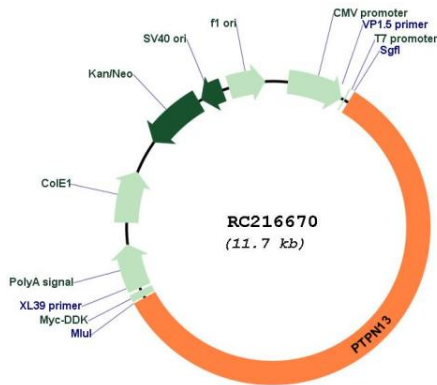
Domains: Y\_phosphatase, B41, PDZ, PTPc\_motif

**Protein Families:** Druggable Genome, Phosphatase

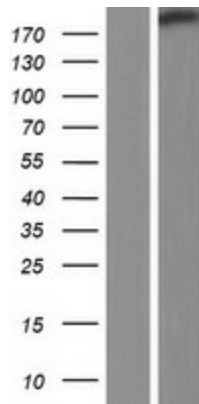
**MW:** 254.51 kDa

**Gene Summary:** The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP is a large intracellular protein. It has a catalytic PTP domain at its C-terminus and two major structural domains: a region with five PDZ domains and a FERM domain that binds to plasma membrane and cytoskeletal elements. This PTP was found to interact with, and dephosphorylate, Fas receptor and I kappa B alpha through the PDZ domains. This suggests it has a role in Fas mediated programmed cell death. This PTP was also shown to interact with GTPase-activating protein, and thus may function as a regulator of Rho signaling pathways. Four alternatively spliced transcript variants, which encode distinct proteins, have been reported. [provided by RefSeq, Oct 2008]

**Product images:**



Circular map for RC216670



Western blot validation of overexpression lysate (Cat# [LY416761]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216670 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).