

## Product datasheet for RC218627

### DOP1B (NM\_005128) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DOP1B (NM_005128) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DOP1B
Synonyms:	21orf5; C21orf5; DOPEY2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC218627 representing NM_005128 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGATCCAGAAGAGCAGGAGCTCTAAATGATTACAGATACAGAAGCTACTCTTCAGTGATTGAAAAGG  
CTTTGAGAAATTTGAGTCTCGAGTGAATGGCGGATCTCATATCTTCACTTGGCAAACCAACAAGGC  
TCTTCAGAGTAACCTGAGGTACTCTTGTGTTGCCAAGACGGCTCCTCATCAGCAAAGATTAGCTCAGTGT  
TTGACCCTGCCCTGCCAGTGGTGTCCACTTAAAAGCTCTGAAACCTACGAGATTATCTTTAAAATCG  
TGGGGACCAAATGGCTGGCCAAGGACTTGTTCGTACAGCTGCGGGTTATTTCCCTCCTGGCACACGC  
GGCGGTGTCGGTGAAGCCGGTGTGCTCACCTGTACGAGAAGTACTTCCCTCCACTGCAGAAGCTGCTC  
CTGCCAGTCTGCAGGCCTTCATCGTGGCCTGTGCCCGGCCTTGAAGAGGGCTCCGAGATCTCCGACA  
GAACGGATGCTCTGCTCCTGAGACTGTCTGCTGGTGGTGGCAAAGAGGTGTTTTACACCGCCCTCTGGGG  
GAGCGTCTGGCCAGCCCGTCCATCCGCTCCCTGCCCTCAGTCTTCGTGGTGGGCCACATCAACAGGGAT  
GCCCCGGCCGGGAGCAGAAGTACATGCTGGGGACCAATCACTCACTCACGGTGAAGTCTTTGCGTGCTC  
CCCTGTTGGACTCAAATGTTCTTGTGCAAAGAAATAATCTGAAATCGTTCGTTTTCTCCCATTTTA  
TACCTGTCTGGATTCCAATGAGAGAGCCATCCCCCTCCTCAGATCTGACATCGTGCCATTCTCTCAGCC  
GCCACCAGACCCTACTGAGAAGGACATGTCCTGAACAGAAGACTGTATGCATGGTACTAGGCTCAG  
ACATAAAAGGAAATACCGTTGTGCCAGAATCTGAAATCTCAAATCTTATGAAGACCAGTCTTATTT  
TTTTGAAAAATACTCCAAGGATCTTTTAGTTGAGGGTTTGGCTGAGATATTGCATCAGAAGTTCATAGAT  
GCTGACGTGGAGGAACGCCATCATGCATACCTGAAGCCTTTTCGCGTCTCATCAGTCTGCTTGACAAGC  
CAGAAATAGGGCCTCAAGTGGTTGGAAATTTGTTTCTCGAAGTCATCAGGGCCTTTTATTCTACTGCAG  
AGATGCCCTTGGCTCTGATCTTAACTTAGCTACACCCAGAGTGGAAATTCGCTGATAAGTGCAATCAAG  
GAAAACAGAAATGCCTCTGAGATTGTCAAACGGTAAATTTGCTGATAACTTCTCTAAGCACAGACTTTC  
TCTGGGATTATATGACAAGGTGTTTTGAGGAATGCTTTAGACCAGTGAAGCAGCGTTACAGCGTGAGGAA  
CAGCGTCAGCCCTCCCCCACGGTCTCGGAGCTCTGCGCCCTCCTGGTCTTCTGCTGGATGTCATTCT



[View online >](#)

TTGGAACCTTACTCTGAGGTGCAAACCCAGTATCTCCCTCAGGTGCTCGGCTGCCTGGTGCAGCCTCTTG  
 CTGAGGACATGGAGGCCTTAAGTTTACCTGAACTCACGCATGCCTTGAAGACGTGTTTCAAGGTGCTCAG  
 CAAAGTCCAGATGCCTCCTTCTACCTCGACACGGAGTCCACCAGCGAACCTCGAGTCCAGTAAAAGGT  
 GAAAACGGCAAAATAATTTTGGAAACAAAGGCAGTGATCCCGGTGACGAAGATGCTTCGTTTCCCCTC  
 TGAAGTCTGAGGACAGTGGGATCGGGCTCAGTGCCTCGTACCCGAGCTCTCTGAGCACTTGAGGGTTCC  
 TCGAGTTTCTCTGAAAGGGACGACGTTTGAAGAAGGGCGGGAGCATGCAGAGGACGTTTCTTTGCATC  
 CAAGACTAATCGCCAACCTTTGCCAGCAAGAACATTTTGGAGTACAGCTGACAGCGTCAGGAGAAGAAA  
 GCAAGTCCGAGGAGCCTGCAGGGAAGGGACAGGGATGGGACGACAGCCTGGCAGCCAATGATCCAG  
 CAGGAAGAACTCTGGGAGCCCAAGCCATCACTGTGCCTCAGTTCAAGCAGATGCTGTGAGACTTGTTT  
 ACAGCACGAGGGTCTCCATTCAAGACAAAAAGTTCAGAGTACCATCGTCTTCGCCACGAGCCCTGCCA  
 GGAAAAACGGGGGAGAATGGGATGTTGAGAAGTGGTCAATTGACCTGGGGGTTCCAGGGAGAACGCGAG  
 GGAGGCCCTTGGCCGCGCTGCCACCTGCTGCTGGATTGTCCACTTTCCTGTCTACCTGTCCGAGGAA  
 GAGACCGAGCAGTCTGTGCAACGCTCTCCAGCTGCCAGGAGCCGGTATTCCAGTTTTCCATCTTGGC  
 TGAAGTCCCTCATGACTATTTGCTGCTGTGTGACTGACTGCTACCTCCAGAACGTGGCCATTTCCACTCT  
 GCTGGAAGTGATAAACCATTTCCAGTCCCTGGCGTTGTCAATTGAAGACAAGATGAAACGCTATAAGAGC  
 TCTGGACACAACCTTTTTTGGCAAGCTGCAGATGGTGCAGGTTCTCCATTGCTCCAGGGATATTGA  
 AAGTCATTGCAGAGAAAACAGATTTCTATCAGAGGGTGGCTCGCGTGCTTGGAAATCAGCTGAACAAAGA  
 GACCCGGGAGCATCACGTACCTGCGTAGAATTGTTCTACCGGCTGCACTGCCTGGCCCTACGGCCAAC  
 ATCTGCGAGGACATCATCTGCCATGCCCTCCTGGACCCTGACAAGGGAACAAGGCTGGAAGCTCTGTTTA  
 GATTTTCCGTGATCTGGCATCTGACAAGAGAGATCCAAGGCAGTCGAGTAAACATCTACAATCGTCCTT  
 TGATAGTCCCTGTTTGTGCTGCTGGACAGCCTGGCTGCACGGATGGTCCATCGGTGCGGCAGCCAG  
 GGCTGGCTGGTGGTGCCTCTCCCTCGGGACGTGGCTCGCATCCTCGAACCCGTGCTCCTGCTGCTGC  
 GAGCTCAAAAACCCAGAGAACCTCCATCCATGCCTCAAGCAGGAGAAGTCCGGCCGATGACTTGTACCCG  
 TTGGTTTTAACAGGAAGAAAACCTTTTCCAGAGGCATGCGCAGTGCCCGAGCCTCAGGAGCGGCTCT  
 GAAGAGCACCTGCCTCTGAGCCAGTTCACCACAGTGGACCGTGAAGCATTGGGGCCGAAGTGGAGAAGG  
 AGCCCGAGAAGTACCCGCTGCGAGGCGAGCTGAGCGAGGAAGAGCTGCCCTACTACGTGGAGCTCCAGA  
 CAGGACGGCCACGGCGCCCGGACAGCAGCGAGCACACCGAGTCTGCAGATAACAAGCTCCTGCCACAG  
 GACAGCGAGAACAGTCTCCTTCTCCTCCCTTCCCACGACTGCAGGAGCTGAGCAACGAAGAGAAGT  
 GCTGTGCCACCCATCCCCATGGGGGCGAGGGCGTACCCAAAGCGCTCGGCCCTGCTGGCGGCTTCCAGT  
 AGAAAGCTTCAAGGCTGGGGCAAGTTAAGCCTGGTGGGGTGGACTCGGACAAGACGAGGCTTCTGAG  
 TCGTTCTCCAGCGACGAGGAGGGGACTTGGAGCTCCAGGCCCTACCACATCCAGGCTGCTAAAGCAGC  
 AGCGGGAAGGCAGGAGGCGCTCGAGGCCCTGTTCAAGCACATCTGCTACTCCTGCAGCCCTACGACTC  
 TCGGGGGTCTCTATGCCTTCTCGGTGCTGGAGGCTGTGCTCAAAACCAACCCTAAGGAATTCATCGAG  
 GCTGTGTCAGGACTAGCATGGATACCAGCTCCACCGCGCACCTCAACCTCATCTCCAACCTCCTCGCTC  
 GCCACCAGGAGGCCCTCATTGGCCAGAGTTTCTACGGAAGCTCCAGACCCAGGTCCCCAACGTGTGCC  
 CCACTCTCTGCTCCTGGAGCTGCTACCTACCTGCTGCTGAGCTTCTGCGCTCTACTACCTTGTCTAT  
 TTGAAGTCTCGCACCGAGACATTTCTCGCAACCGGGACGTGCAGGTCAAAGTGTGCGAGGTTTTGATCA  
 GGATAATGATGCAGTGGTCTCAGTGGCCAAGTCTTGGAAAGGAAGAAGTGGAGTTTATCCACAGCTT  
 GCTGCAGAGGTGCAAAGTTCAGGAGTTTGTCTGCTCTCCCTGTGCGGCTCCATGTACACGAGCCGAAG  
 CGCTACGGGCTGGCCACCGCCACCGCAGGGCCCTGCCAGAGGACAGCCTTTTGGAGAGAGTCTCA  
 TTAACCTGGGTCAGGACCAGATCTGGAGTGGACCCCGTGCAGATTGAGCTGCTGAAGTGTGAGGT  
 GCTGATTGCTTGGAAACCCACCTGGGTGGGGCCATGAGGAGGCGGAAAACAGCCGACCTGTCCCGG  
 GAGTGGCAGAGAGCCCTGAACTTCCAGCAGGCCATCAGCGCCCTGCAGTACGTGCAGCCCAACCCCTCA  
 CCTCCAGGGTCTTCTGGTCTCTGCGGTGGTGGGGTCTGCAGCCGCTACGGTTACGGCATGCATCC  
 GGCTGGGTGAGCTTGGTACGCATTCTTGCCTACTTCGAAAGTCCCTGGGCTGGACGGTGCACCC  
 TTTGTTGTCCAGATTTGCAAAAACCTGGATGACTTGGTCAAGCAGTATGAAAGCGAATCTGTGAAGCTCT  
 CTGTCAGCACAACTCCAAGAGGAAAACATTTCTCCAGATTATCCACTACCCTTCTAGAAGTCTAAC  
 GACCATTAGTCATTTTTGTCTTTTGAACAAGCAACCAAAAACAAAAGACCATGGCTGCAGGTGATCCT  
 GCCAACTTGAGGAATGCCAGAAATGCCATTTTGAAGAGCTGCCTCGAACTGTTAACACCATGGCCCTT  
 TCTGGAATGTTCTCAGAAAGGAGGAGACTCAAAAGAGACCTGTCGATCTCCTAGGGGCCAGGAAGGGATC  
 CTCTTCGTTTACTTTAAACCACCAAAACCATAAGACAAAAATTTTAGACTTCTTAAACCCTTGACG  
 GCCCATCTGGGGTTCAGTTGACAGCGGCTGTTGCGGCAGTGTGGAGCAGAAAGAAAGCCAGCGTCA

GT AAGATGAAGATTATCCCAACGGCAAGTGCATCCCAGCTAACCCCTTGTCGACTTGGTGTGTGCACTCAG  
CACCCCTGCAGACTGACACGCTGCTGCACCTGGTGAAGGAGGTGGTGAAGAGGCCACCCCAAGTCAAAGGG  
GGTGATGAGAAATCGCCCTAGTGGACATTCCTGTGTTGCAGTTTTGCTATGCTTTTTCTCAAAGGCTCC  
CAGTACCAGCCTTGCAAGAGAACTTTTCTCACTGTTGGGAGTATTGAAAGAGTCTGTACAGTTGAATCT  
AGCCCCACCTGGGTATTTCTGCTTCTCAGCATGCTGAATGACTTTGTAAACAAGAACTCCCAACCTGGAA  
AACAGAAGGACCAAAAAGACCTGCAGGAAATCACTCAGAAAATCCTAGAAGCTGTGGGGAACATTGCCG  
GCTCTTCCTTGGAGCAAACCAGCTGGCTAAGCAGAAACCTGGAAGTGAAGGCCAACCTCAGGCCTCTCT  
AGAAGAATCTGATGCTGAGGAGGACCTGTATGATGCTGCTGCAGCTTCAGCAATGGTGTCTTCATCCGCC  
CCGTGGTGTACAGCGTCAAGCCCTCTCTCTCCTGGCAGAGGTAAGTGGCTTCCCTCCTGGACATGGTTT  
ATCGAAGTGATGAGAAGGAGAAAGCTGTGCCGTTAATCTCCCGTCTGCTTTACTATGTTTTTCCATACTT  
ACGCAACCACAGTGCCTACAATGCTCCCAGCTTCCGGGCTGGCGCTCAGCTGCTGAGCTCCCTGAGTGGC  
TATGCCTACACAAAGCGAGCCTGGAGGAAGGAGTCTGGAGCTGTTTCTCGACCCCGCTTTCTTTCAGA  
TGGATACTTCTGTGTTCAATGGAAGTCCATTATTGACCATCTTTGACTCATGAGAAAACAATGTTTAA  
GGATTTAATGAACATGCAGAGCAGTTCTTTGAAACTATTCTCAAGTTTTGAACAGAAAGCCATGCTGTTA  
AAGCGCCAGGCTTTTGTGTCTTCAGTGGAGAACTTGATCAATACCACCTTTACCTTCCACTGATACAAG  
AACGCCTGACAGACAATCTCAGAGTTGGACAGACATCCATAGTTGCTGCTCAGATGTTTTTTTTTCAG  
AGTTTTGCTGCTAAGAATATCTCCTCAACATTTGACTTCAATGTGGCCAATAATGGTCTCTGAATTGATT  
CAGACATTCACACAGCTTGAAGAAGATCTAAAAGATGAAGATGAGTCATTGAGAAGCACCAACAAAGTAA  
ACAGAACGAAAGTTTCAGTCCCGGATGCAAATGGACCCTCAGTGGGGGAGATACCCAGAGTGAACTCAT  
CTTGATTTATCAGCTTGCAAATCTTGGACACAGCGCTTTCTTTCCACCTGACAAGATGCCATTATTT  
CAAATTTATAGGTGGGCATTTATCCAGAAGTGGACACAGAGGCCCTGCCTTCTGTGCGATGTAGAGG  
AGAATCACCAAGAATGCAAACCCACACTGTGAGGATCTAGAACTTCTAAAATTAAGTTTGGGGAAT  
CAGTAGCTCTGATGAGATCACCATGAAGAGTGAATCCCGCTTCTGCGCCAACATTCTGTTTCCAGCATC  
AGGCAGTTGATGCCATTCTTCATGACTCTAAATGGTGCATTTAAGACCCAGAGACAGCTGCCTGCTGATA  
GCCCAGGAACTCCATTCTTGACTTTCTGTACAGATAGCCCAAGGATCTTAAAACAACCTGGAAGAATG  
CATCGAATATGATTTTCTGGAACATCCAGAATGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC218627 representing NM\_005128  
 Red=Cloning site Green=Tags(s)

MDPEEQELLNDYRYSYSSVIEKALRNFESSSEWADLISSLGKLNKALQSNLRYSLPRLLISKRLAQC  
 LHPALPSGVHLKALETYEIIFKIVGKWLAKDLFLYSCGLFPLLAHAAVSVRPVLLTYEKYFLPKQLL  
 LPSLQAFIVGLLPGLEEGSEISDRTDALLLRLSLVVGKEVFYALWGSVLASPSIRLPASVFFVGHINRD  
 APGREQKYMGLTNNHQLTVKSLRASLLDSNVLVQRNNLEIVLFFPFYTCCLDSNERAIPLLRSDIVRILSA  
 ATQTLLRRDMSLNRRLYAWLLGSDIKGNTVVPESEISNSYEDQSSYFFEKYSKDLLVEGLAEILHQKFID  
 ADVVEERHHAYLKPFRVLISSLDKPEIGPQVVGNLFLFVIRAFYSYCRDALGSDLKLSYTSQSGNSLSAIAK  
 ENRNASEIVKTVNLLITSLSTDFLWDMTRCFEFCFRPVKQRYSVRNSVSPPTVSELCALLVFLLDVIP  
 LELYSEVQTQYLPQVLGCLVQPLAEDMEALSLPELTHALKTCFKVL SKVQMPPSYLDTESTSGTSSPVKG  
 ENGIKIILETKAVIPGDEASFPPLKSEDSGIGLSASSPELSEHLRVPRVSLERDDVWKKGGSMQRTFLCI  
 QELIANFASKNIFGVQLTASGEESKSEEPAGKRDRDGTQSLAANDSSRKNWEKPKITVPQFKQMLSDLF  
 TARGSPFKTKSSESPSSPSPARKNGGEWDVEKVVIDLGGREERREAF AAACHLLLDCAFPVYLSEE  
 ETEQLCATLFLQPGAGDSSFPWLKSLMTICCCVTDCYLQNVAI STLLEVINHSQSLALVIEDKMKRYKS  
 SGHNPFPGKLMQVTVPPIAPGILK VIAEKTD FYQRVARVLWNQLNKETREHHVTCVELFYRLHCLAPTAN  
 ICEDIICHALLDPDKGTRLEALFRFSVIWHL TREIQGSRVTSHNRSFDRSLFVVLDSLACTDGAIGAAAQ  
 GWLVRALSLGDVARILEPVL LLLQPKTQRTSIHCLKQENSADDLHRWFNRKTSFREACAVPEPQESGS  
 EEHLPLSQFTTVDREAIWAEVEKEPEKYPLRGELSEEELPYVELPDRTAHGAPDSSEHTESADTSSCHT  
 DSENTSSFSSPHDLQEL SNEENCCAPIPMGGRAYPKRSALLAAFQSESFKAGAKLSLVRVDSDKTQASE  
 SFSDEEADLELQAL TTSRLKQQRERQEAVEALFKHILLYLQPYDSRRVLYAFSVLEAVLKTNPKEFIE  
 AVSRTSMDTSSTAHLNLSNLLARHQEALIGQSFYGKLQTQVPNVCPHSLLELLTYLCLSLFRSYPCY  
 LKVSHRDILGNRDVQKSVLEVLIRIMMQLVSVAKSSEGKNVEFIHSLLRCKVQEFVLLSLSASMYTSQK  
 RYGLATAHHGRALPEDSLFEESL INLGQDQIWSEHPLQIELLKLQVLIVLEHHLGRAHEEAENQPDLSR  
 EWQRALNFQQAISALQYVQPHLTSQGLLVSAVVRGLQPAYGYGMHPAWVSLVTHSLPYFGKSLGWTVTP  
 FVVQICKNLDDLKQYSESVKLSVSTTSKRENI SPDYPLTLLEGLTTISHFCLLEQANQNKKTMAAGDP  
 ANLRNARNAILLEELPRTVNTMALLWNVLRKEETQKRPVDLLGATKGSSSVYFKTKTIRQKILDFLNPLT  
 AHLGVQLTAAVAAVWSRKAQRHSMKIIPTASASQLTLDLVCALSTLQTDLLHLVKEVVKRPQVKG  
 GDEKSPLVDIPVLQFCYAFQLRPLVPALQENFSSLLGVLKESVQLNLAPPGYFLLL SMLNDFVTRTPNLE  
 NKKDQKDLQEITQKILEAVGNIAGSSLEQTSWLSRNLEVKAPQASLEESDAEEDLYAAAAASAMVSSA  
 PSVYSVQALSLLAEVLASLLDMVYRSDEKEKAVPLISRLLYYVFPYLRNHSAYNAPSFRAGAQLLSSLSG  
 YAAYTKRAWRKEVLELFLDPAFFQMDTSCVHWKSIIDHLLTHEKTMFKDLMNMQSSSLKLFSSFEQKAMLL  
 KRQAFAVFSGELDQYHLYLPLIQERLTDNLRVGQTSIVAAQMFLFFRVLLLRISPQHLTSLWPIMVSELI  
 QTFTQLEEDLKDDESLRSTNKVNRTKVSVPDANGPSVGEIPQSELILYLSACKFLDTALSFPPDKMPLF  
 QIYRWAFIPEVDTEGPAFLSDVEENHQECKPHTVRILELLKLFGEISSSDEITMKSEFPLLRQHSVSSI  
 RQLMPFFMTLNGAFKTRQLPADSPGTPFLDFPVTDSPRILKQLEECIEYDFLEHPEC

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk8021\\_a01.zip](https://cdn.origene.com/chromatograms/mk8021_a01.zip)

Restriction Sites: SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_005128

**ORF Size:** 6894 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:** [NM\\_005128.2](#), [NP\\_005119.2](#)

**RefSeq Size:** 7689 bp

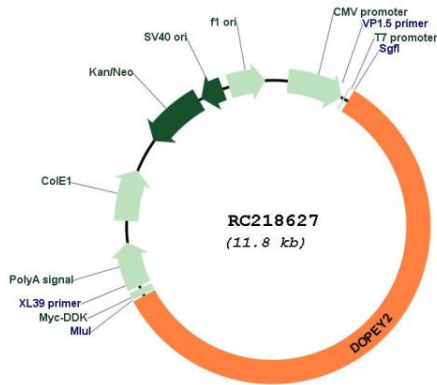
**RefSeq ORF:** 6897 bp

**Locus ID:** 9980

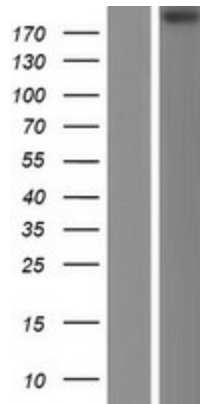
**UniProt ID:** [Q9Y3R5](#)

**Cytogenetics:** 21q22.12  
**MW:** 258.1 kDa  
**Gene Summary:** May be involved in protein traffic between late Golgi and early endosomes.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for RC218627



Western blot validation of overexpression lysate (Cat# [LY417485]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218627 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).