

Product datasheet for **RC214268**

RET (NM_020975) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RET (NM_020975) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RET
Synonyms:	CDHF12; CDHR16; HSCR1; MEN2A; MEN2B; MTC1; PTC; RET-ELE1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC214268 representing NM_020975 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGAAGGCGACGTCCGGTGCCGCGGGGCTGCGTCTGCTGTTGCTGCTGCTGCTGCCGCTGCTAGGCA
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CACGCCCTTGTGTACGTCCATGCCCTGCGGGACGCCCTGAGGAGGTGCCAGCTTCCGCTGGGCCAG
CATCTCTACGGCACGTACCGCACACGGCTGCATGAGAACAACCTGGATCTGCATCCAGGAGGACACCGGCC
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CCTGCTCACCGTCTACCTCAAGGTCTTCTGTCAACCCACATCCCTTCGTGAGGGCGAGTGCCAGTGGCCA
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CAGACCTCTAGGCAGGCCAGGCCAGCTGCTTGTAAACAGTGGAGGGTCATATGTGGCCGAGGAGGCGG
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Protein Sequence:

>RC214268 representing NM_020975
 Red=Cloning site Green=Tags(s)

MAKATSGAAGRLLLLLLLPLLGKVALGLYFSRDAYWEKLYVDQAAGTPLLIVHALRDAPEEVPFRLGQ
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 VHDYRLVLRNLSISENRTMQLAVLVNDSDFQPGAGVLLLHFVSVLPVSLHLPSTYSLSVSRRARRFA
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 DLLSEFNVLKQVNHPHVIKLYGACSDGPLLLIVEYAKYGLRGLRESRKGVPGYLGSGGSRNSSLDH
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 YRLMLQCWKQEPDKRPVFADISKDLEKMMVKRRDYLDLAASTPSDSLIIYDDGLSEETPLVDCNNAPLPR
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UniProt ID: [P07949](#)

Cytogenetics: 10q11.21

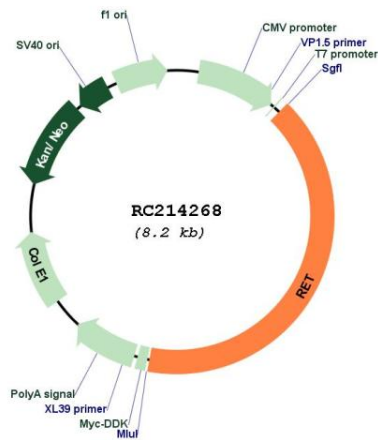
Protein Families: Druggable Genome, Protein Kinase, Transmembrane

Protein Pathways: Endocytosis, Pathways in cancer, Thyroid cancer

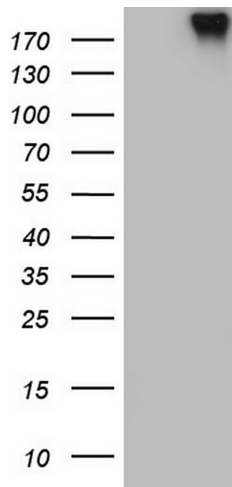
MW: 124.3 kDa

Gene Summary: This gene encodes a transmembrane receptor and member of the tyrosine protein kinase family of proteins. Binding of ligands such as GDNF (glial cell-line derived neurotrophic factor) and other related proteins to the encoded receptor stimulates receptor dimerization and activation of downstream signaling pathways that play a role in cell differentiation, growth, migration and survival. The encoded receptor is important in development of the nervous system, and the development of organs and tissues derived from the neural crest. This proto-oncogene can undergo oncogenic activation through both cytogenetic rearrangement and activating point mutations. Mutations in this gene are associated with Hirschsprung disease and central hypoventilation syndrome and have been identified in patients with renal agenesis. [provided by RefSeq, Sep 2017]

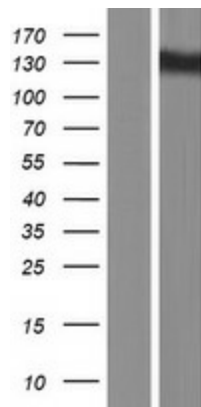
Product images:



Circular map for RC214268



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY RET (Cat# RC214268, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-RET (Cat# [TA805761])(1:500).



Western blot validation of overexpression lysate (Cat# [LY412167]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214268 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).