

Product datasheet for RC210708

RHBDD1 (NM_032276) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	RHBDD1 (NM_032276) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	RHBDD1
Synonyms:	RHBDL4; RRP4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC210708 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCAACGGAGATCAAGAGGGATAAATACTGGACTTATTCTACTCCTTTCTCAAATCTTCCATGTTGGGA
TCAACAATATTCCACCTGTCACCCTAGCAACTTTGGCCCTCAACATCTGGTTCTTCTTGAACCTCAGAA
GCCACTGTATAGCTCCTGCCTTAGTGTGGAGAAGTGTACCAGCAAAAAGACTGGCAGCGTTTACTGCTC
TCTCCCTTACCATGCTGATGATTGGCATTGTATTTCAATATGGCATCCATGCTCTGAAAGGAATAA
ATCTAGAAAGAAGACTGGGAAGTAGATGGTTTGCCTATGTTATCACCGCATTTTCTGTACTTACTGGAGT
GGTATACCTGCTCTTGCAATTTGCTGTTGCCGAATTTATGGATGAACCTGACTTCAAAGGAGCTGTGCT
GTAGGTTTCTCAGGAGTTTTGTTGCTTTGAAAGTTCTTAACAACCATTATTGCCCTGGAGGCTTTGTCA
ACATTTTGGGCTTTCCTGTACCGAACAGATTTGCTTGTGGGTGCAACTTGTGGCTATTCATTTATTCTC
ACCAGGGACTTTCCTCGCTGGGCATCTGGCTGGGATTCTGTTGGACTAATGTACTCAAGGGCCTCTG
AAGAAAATCATGGAAGCATGTGCAGCGGTTTTTCTCCAGTGTGGTTACCCAGGACGGCAATACTACT
TTAATAGTTCAGGCAGCTCTGGATATCAGGATTATTATCCGCATGGCAGGCCAGATCACTATGAAGAAGC
ACCCAGGAATATGACACGTACACAGCAGGACTGAGTGAAGAAGAAGCAGCTCGAGAGAGCATTACAAGCC
AGCCTCTGGGACCGAGGAAATACCAGAAATAGCCACCACCTACGGTTTCATCTCTCACCAGAAGAAA
TGAGGAGACAGCGCTTACAGATTCGATAGCCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC210708 protein sequence
Red=Cloning site Green=Tags(s)

MQRRSRGINTGLILLLSQIFHVGINNIPPVTLATLALNIWFFLNPQKPLYSSCLSVEKCYQQKDWQRLLL
 SPLHHADDWHL YFNMASMLWKGINLERRLGSRWFAVVITAFSVL TGVVYLLLQFAVAEFMDEPDFKRSCA
 VGFSGVL FALKVLNNHYCPGGFVNILGFPVFNRFACWVELVAIHLSFGT SFAGHLA GILVGLMYTQGPL
 KKIMEACAGGFSSSVGYGRQYYFNSSGSGYQDYYPHGRPDHYEEAPRNYDYYTAGLSEEEQLERALQA
 SLWDRGNTRNSPPPYGFHLSPEEMRRQRHRFDSQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6377_c05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_032276

ORF Size: 945 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_032276.5](#)

RefSeq Size: 4868 bp

RefSeq ORF: 948 bp

Locus ID: 84236

UniProt ID: [Q8TEB9](#)

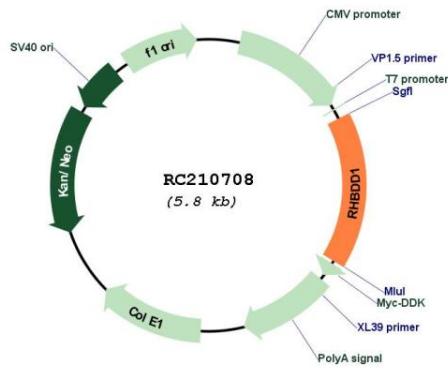
Cytogenetics: 2q36.3

Protein Families: Transmembrane

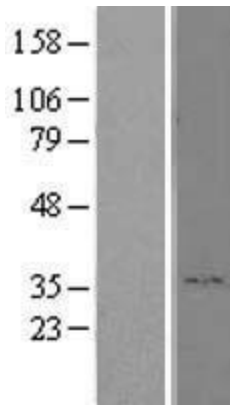
MW: 35.8 kDa

Gene Summary: Intramembrane-cleaving serine protease that cleaves single transmembrane or multi-pass membrane proteins in the hydrophobic plane of the membrane, luminal loops and juxtamembrane regions. Involved in regulated intramembrane proteolysis and the subsequent release of functional polypeptides from their membrane anchors. Functional component of endoplasmic reticulum-associated degradation (ERAD) for misfolded membrane proteins. Required for the degradation process of some specific misfolded endoplasmic reticulum (ER) luminal proteins. Participates in the transfer of misfolded proteins from the ER to the cytosol, where they are destroyed by the proteasome in a ubiquitin-dependent manner. Functions in BIK, MPZ, PKD1, PTCRA, RHO, STEAP3 and TRAC processing. Involved in the regulation of exosomal secretion; inhibits the TSAP6-mediated secretion pathway. Involved in the regulation of apoptosis; modulates BIK-mediated apoptotic activity. Also plays a role in the regulation of spermatogenesis; inhibits apoptotic activity in spermatogonia.[UniProtKB/Swiss-Prot Function]

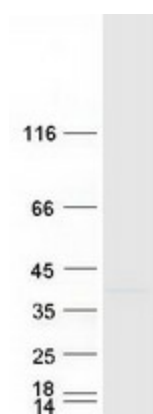
Product images:



Circular map for RC210708



Western blot validation of overexpression lysate (Cat# [LY410222]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210708 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RHBDD1 protein (Cat# [TP310708]). The protein was produced from HEK293T cells transfected with RHBDD1 cDNA clone (Cat# RC210708) using MegaTran 2.0 (Cat# [TT210002]).