

Product datasheet for **RC202062**

PEX5 (NM_000319) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PEX5 (NM_000319) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PEX5
Synonyms:	PBD2A; PBD2B; PTS1-BP; PTS1R; PXR1; RCDP5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC202062 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCAATGCGGGAGCTGGTGGAGGCCAATGCGGGGTGCCAACCCGCTCATGAAGCTCGCCGGGCACT
TCACCCAGGACAAGGCCCTTCGGCAGGAGGGATTGAGGCCTGGCCCTGGCCCCGGAGCCCCGGCCTC
TGAGGCAGCCTCCAAGCCTTTGGGAGTAGCTTCTGAAGATGAGTTGGTGGCTGAATTCCTGCAGGACCAG
AATGCACCCCTTGTGTCCCGTGCCCTCAGACCTCAAGATGGATGACCTCCTGGCTGAGATGCAGCAGA
TTGAGCAGTCAAACCTCCGCCAGGCTCCCAGAGAGCCCTGGTGTGGCAGACTTGGCCTTGTCTGAGAA
CTGGGCCCAGGAGTTTCTGCAGCTGGAGATGCTGTGGATGTAACCTCAGGATTATAATGAGACTGACTGG
TCCCAAGAATTCATCTCTGAAGTTACAGACCCCTTGTCTGTGTCCCTGCCCGCTGGGCTGAGGAATATT
TGGAGCAATCAGAGGAGAAGCTGTGGCTGGGAGAACCTGAGGGAACAGCCACCGATCGCTGGTATGATGA
ATATCATCTGAGGAGGATCTGCAGCACACGGCCAGTGACTTTGTGGCCAAAGTGGATGACCCCAAATTG
GCTAATTCGAGTTCTGAAATTCGTGCGGCAGATTGGCGAAGGGCAGGTGTCCCTGGAGTCCGGTGCAG
GGTCCGGCCGAGCTCAGGCAGAACAGTGGGCAGCAGAGTTTATACAGCAGCAGGGTACATCAGATGCCTG
GGTTGACCAGTTCACAAGACCAGTAAACACATCTGCCCTTGATATGGAGTTTGAACGAGCCAAGTCAGCT
ATAGAGTTGCAGGCAGAGTTGGAGGAGATGGCAAAACGGGATGCTGAGGCCACCCCTGGCTTTCTGACT
ATGATGACCTTACGTACGCTACCTATGATAAGGGGTACCAAGTTTGGAGGAGGAAACCCCTTGCCTGATCA
CCCTCAGCCTTTTGAAGAAGGGCTGCGGCCTTCAGGAGGGGGACCTGCCAAATGCTGTGCTGCTTTTT
GAGGCAGCTGTGCAGCAGGATCCTAAGCACATGGAAGCTTGGCAGTATCTGGGTACCACCCAGGCAGAGA
ATGAACAAGAACTATTAGCCATCAGTGCAATTGCGGAGGTGTCTGGAGCTAAAGCCAGATAACCAGACAGC
ACTGATGGCGCTGGCTGTGAGCTTCAACCAACGAGTCCCTGCAGCGACAGGCCTGTGAAACCCACGAGAC
TGGCTGCGGTACACACCAGCCTATGCCATCTGGTGACACCTGCTGAAGAAGGGGCTGGTGGGGCAGGAC
TGGGCCCCAGCAAGCGTATCCTGGGATCTCTCTTGTCTGACTCCCTGTTTCTTGAAGTGAAGAGCTCTT
CCTGGCAGCTGTGCGGCTGGACCCTACCTCCATTGACCCTGATGTGCAGTGTGGCTTGGGAGTCTTTTC
AACCTGAGTGGGAGTATGACAAGGCCGTGGACTGCTTACAGCTGCCCTCAGCGTTCGTCCCAATGACT
ATTTGCTGTGGAATAAGCTAGGCGCCACCCTGGCCAATGGAAACCAGAGTGAAGAAGCAGTAGCTGCGTA
CCGCCGGGCCCTCGAGCTCCAGCCTGGCTATATCCGGTCCCGCTATAACCTGGGCATCAGCTGCATCAAC
CTCGGGGCTCACCGGGAGGCTGTGGAGCACTTTCTGGAGGCCCTGAACATGCAGAGGAAAAGCCGGGGCC
CCCGGGGTGAAGGAGGTGCCATGTGCGGAGAACATCTGGAGCACCTGCGTTTGGCATTGTCTATGTTAGG
CCAGAGCGATGCCTATGGGGCAGCCGACGCGGGGATCTGTCCACCCCTCAACTATGTTTGGCCTGCC
CAG

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

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_000319.5](#)

RefSeq Size: 3190 bp

RefSeq ORF: 1896 bp

Locus ID: 5830

UniProt ID: [P50542](#)

Cytogenetics: 12p13.31

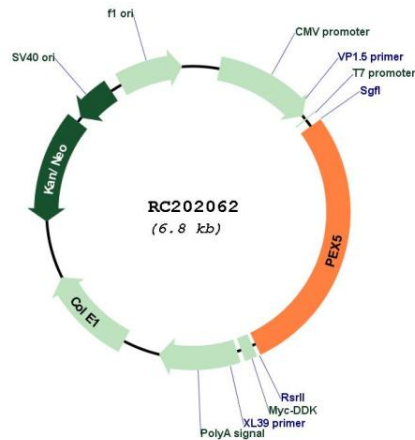
Domains: TPR

Protein Families: Druggable Genome

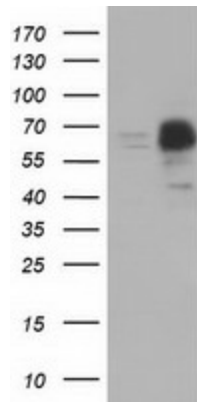
MW: 69.9 kDa

Gene Summary: The product of this gene binds to the C-terminal PTS1-type tripeptide peroxisomal targeting signal (SKL-type) and plays an essential role in peroxisomal protein import. Peroxins (PEXs) are proteins that are essential for the assembly of functional peroxisomes. The peroxisome biogenesis disorders (PBDs) are a group of genetically heterogeneous autosomal recessive, lethal diseases characterized by multiple defects in peroxisome function. The peroxisomal biogenesis disorders are a heterogeneous group with at least 14 complementation groups and with more than 1 phenotype being observed in cases falling into particular complementation groups. Although the clinical features of PBD patients vary, cells from all PBD patients exhibit a defect in the import of one or more classes of peroxisomal matrix proteins into the organelle. Defects in this gene are a cause of neonatal adrenoleukodystrophy (NALD), a cause of Zellweger syndrome (ZWS) as well as may be a cause of infantile Refsum disease (IRD). Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Oct 2008]

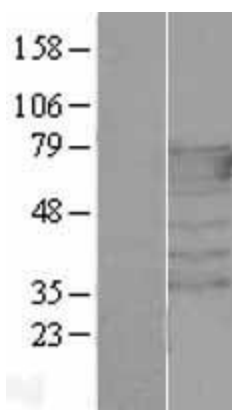
Product images:



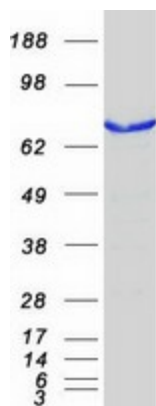
Circular map for RC202062



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PEX5 (Cat# RC202062, 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-PEX5 (Cat# [TA501430]). Positive lysates [LY424800] (100ug) and [LC424800] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY424800]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202062 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PEX5 protein (Cat# [TP302062]). The protein was produced from HEK293T cells transfected with PEX5 cDNA clone (Cat# RC202062) using MegaTran 2.0 (Cat# [TT210002]).