

Product datasheet for **SC326099**

PEX5 (NM_001131024) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PEX5 (NM_001131024) Human Untagged Clone
Tag:	Tag Free
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)



[View online »](#)

Fully Sequenced ORF: >SC326099 representing NM_001131024.
 Blue=Insert sequence Red=Cloning site Green=Tag(s)

```

GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGGATCGCC
ATGGCAATGCGGGAGCTGGTGGAGGCCGAATGCGGGGGTGCCAACCCGCTCATGAAGCTCGCCGGGCAC
TTCACCCAGGACAAGGCCCTTCGCGAGGAGGGATTGAGGCCTGGCCCTGGCCCCCGGAGCCCCGGCC
TCTGAGGCAGCCTCCAAGCCTTTGGGAGTAGCTTCTGAAGATGAGTTGGTGGCTGAATTCCTGCAGGAC
CAGAATGCACCCCTTGTGTCCCCTGCCCTCAGACCTTCAAGATGGATGACCTCCTGGCTGAGATGCAG
CAGATTGAGCAGTCAAACCTCCGCCAGGCTCCCCAGAGAGCCCTGGTGTGGCAGACTTGGCCTTGTCT
GAGAACTGGGCCAGGAGTTTCTTGACGCTGGAGATGCTGTGGATGTAACCTCAGGATTATAATGAGACT
GACTGGTCCCAAGAATTCATCTCTGAAGTTACAGACCCCTTGTCTGTGTCCCCTGCCCGTGGGCTGAG
GAATATTTGGAGCAATCAGAGGAGAAGCTGTGGCTGGGAGAACCTGAGGGAACAGCCACCGATCGCTGG
TATGATGAATATCATCCTGAGGAGGATCTGCAGCACACGGCCAGTGACTTTGTGGCCAAAGTGGATGAC
CCCAAATTTGGCTAATTCTGAGGGTACATCAGATGCCTGGGTTGACCAGTTCACAAGACCAGTAAACACA
TCTGCCCTTGATATGGAGTTTGAACGAGCCAAGTCAGCTATAGAGTCTGATGTGCGATTTCTGGGACAAG
TTGACGGCAGAGTTGGAGGAGATGGCAAAACGGGATGCTGAGGCCACCCCTGGCTTTCTGACTATGAT
GACCTTACGTGAGCTACCTATGATAAGGGGTACCAGTTTGGAGGAGGAAACCCCTTGCCTGATCACCCCT
CAGCCTTTTGAAGAAGGGCTGCGGCGCCTTCAGGAGGGGACCTGCCAAATGCTGTGCTGCTTTTGGAG
GCAGCTGTGCAGCAGGATCCTAAGCACATGGAAGCTTGGCAGTATCTGGTACCACCCAGGCAGAGAAT
GAACAAGAATAATTAGCCATCAGTGCATTGCGGAGGTGTCTGGAGCTAAAGCCAGATAACCAGACAGCA
CTGATGGCGCTGGCTGTGAGCTTACCAACGAGTCCCTGCAGCGACAGCCCTGTGAAACCCCTACGAGAC
TGGCTGCGGTACACACCAGCCTATGCCCATCTGGTGACACCTGCTGAAGAAGGGGCTGTGGGGCAGGA
CTGGGGCCCGCAAGCGTATCCTGGGATCTCTTGTCTGACTCCCTGTTTCTTGAAGTGAAGAGCTC
TTCTGGCAGCTGTGCGGCTGGACCCTACCTCCATTGACCCTGATGTGCAGTGTGGCTTGGGAGTCTT
TTCAACCTGAGTGGGAGTATGACAAGGCCGTGGACTGCTTACAGCTGCCCTCAGCGTTTCTGCCAAT
GACTATTTGCTGTGGAATAAGCTAGGCGCCACCCTGGCCAATGGAACCAGAGTGAAGAAGCAGTAGCT
GCGTACCGCCGGGCCCTCGAGCTCCAGCCTGGCTATATCCGGTCCCGCTATAACCTGGGCATCAGCTGC
ATCAACCTCGGGGCTCACCGGGAGGCTGTGGAGCACTTTCTGGAGGCCCTGAACATGCAGAGGAAAAGC
CGGGCCCCCGGGTGAAGGAGGTGCCATGTGCGGAGAACATCTGGAGCACCTGCGTTTGGCATTGTCT
ATGTTAGCCAGAGCGATGCCTATGGGGCAGCCGACGCGGGGATCTGTCCACCCTCCTAACTATGTTT
GGCTGCCCCAGTGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
  
```

- Restriction Sites:** Sgfl-MluI
- ACCN:** NM_001131024
- Insert Size:** 1809 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
- 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_001131024.1](#)

RefSeq Size: 3168 bp

RefSeq ORF: 1809 bp

Locus ID: 5830

UniProt ID: [P50542](#)

Cytogenetics: 12p13.31

Protein Families: Druggable Genome

MW: 66.8 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]
Transcript Variant: This variant (3) contains an alternate 5' terminal exon and lacks an alternate in-frame exon in the central coding region, compared to variant 6. These differences cause translation initiation at a downstream start codon, resulting in an isoform (c) which has a shorter N-terminus compared to isoform e. Variants 3 and 7-11 all encode the same isoform (c).