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Product datasheet for RG207612

PEX1 (NM_000466) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PEX1 (NM_000466) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PEX1
Synonyms:	HMLR1; PBD1A; PBD1B; ZWS; ZWS1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG207612 representing NM_000466
Red=Cloning site Blue=ORF Green=Tags(s)

GACGTTGTATACGACTCCTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGGCGCGCCC

ATGTGGGGCAGCGATCGCCTGGCGGGTGCTGGGGGAGGCGGGGCGGCAGTGACTGTGGCCTTCACCAACG
CTCGCGACTGCTTCCTCCACCTGCCGCGGCGTCTCGTGGCCCAGCTGCATCTGCTGCAGAATCAAGCTAT
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TACATTTTCAAAAGCTGATGCTGAATATAAAAAACTTCATAGTTATGGAAGAGACCAGAAAGGAATGATG
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GAAACTAAAGATGGACTGAAGGAATTTTCTCTGAGTATAGTTCATTCTTGGGAAAAAGAAAAAGATAAAA
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CAAAATCCAAAGAGGAGAAAAAATCAAAGTGGAACAATGTTTCGACCTGGACAGAAAGTAACTTTAGCA

AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG207612 representing NM_000466
Red=Cloning site Green=Tags(s)

MWGSDRLAGAGGGGAAVTVAFTNARDCFLHLPRRLVAQLHLLQNQAIEVVWSHQPAFLSWVEGRHFSDQG
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KELQTKQLQSNTVGITESNENESEIPVDSSSVASLWTMIGSIFSFQSEKKQETSWGLTEINAFKNMQSKV
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EQRDQLRADISIIKGRYRSQSGEDESMNQPGPIKTRLAISQSHLMTALGHTRPSISEDDWKNFAELYESF
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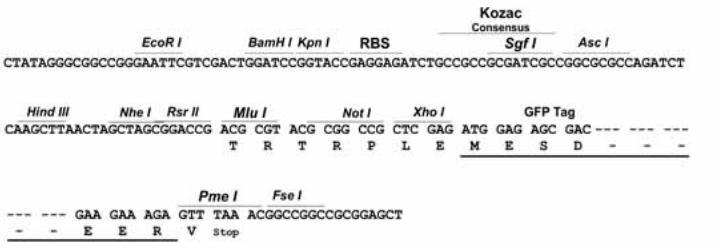
SGPTRTRPLE – GFP Tag – V

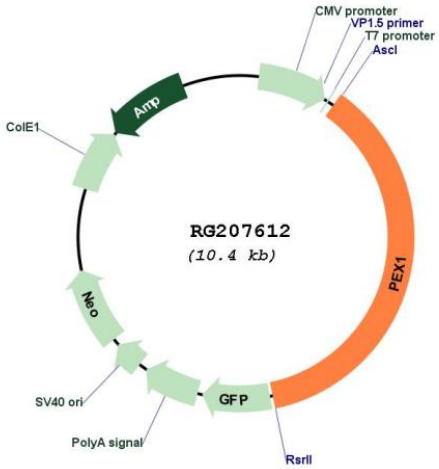
Restriction Sites: AscI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN:	NM_000466
ORF Size:	3849 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_000466.1, NP_000457.1
RefSeq Size:	4390 bp
RefSeq ORF:	3852 bp
Locus ID:	5189
UniProt ID:	O43933
Cytogenetics:	7q21.2

Domains:	AAA, AAA
Protein Families:	Druggable Genome
Gene Summary:	This gene encodes a member of the AAA ATPase family, a large group of ATPases associated with diverse cellular activities. This protein is cytoplasmic but is often anchored to a peroxisomal membrane where it forms a heteromeric complex and plays a role in the import of proteins into peroxisomes and peroxisome biogenesis. Mutations in this gene have been associated with complementation group 1 peroxisomal disorders such as neonatal adrenoleukodystrophy, infantile Refsum disease, and Zellweger syndrome. Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Sep 2013]