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Product datasheet for SC105415

PTRH2 (AK057033) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PTRH2 (AK057033) Human Untagged Clone
Tag:	Tag Free
Symbol:	PTRH2
Synonyms:	BIT1; CFAP37; CGI-147; IMNEPD; PTH; PTH 2; PTH2
Mammalian Cell Selection:	None
Vector:	pCMV6-XL4
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene ORF within SC105415 sequence for AK057033 edited (data generated by NextGen Sequencing)

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ATGCCCTCCAAATCCTTGGTTATGGAATATTTGGCTCATCCCAGTACACTCGGCTTGGCT
GTTGGAGTTGCTTGTGGCATGTGCCTGGGCTGGAGCCTTCGAGTATGCTTTGGGATGCTC
CCCAAAAGCAAGACGAGCAAGACACACACAGATACTGAAAGTGAAGCAAGCATCTTGGGA
GACAGCGGGGAGTACAAGATGATTCTTGTGGTTCGAAATGACTTAAAGATGGGAAAAGGG
AAAGTGGCTGCCCAGTGCTCTCATGCTGCTGTTTCAGCCTACAAGCAGATTCAAAGAAGA
AATCCTGAAATGCTCAAACAATGGGAATACTGTGGCCAGCCCAAGGTGGTGGTCAAAGCT
CCTGATGAAGAAACCCTGATTGCATTATTGGCCCATGCAAAAATGCTGGGACTGACTGTA
AGTTTAATTCAAGATGCTGGACGTACTCAGATTGCACCAGGCTCTCAAACTGTCCTAGGG
ATTGGGCCAGGACCAGCAGACCTAATTGACAAAGTCACTGGTCACCTAAAACTTTACTAG

Clone variation with respect to AK057033.1
311 c=>t
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View online »

5' Read Nucleotide Sequence:

>OriGene 5' read for AK057033 unedited
CTCACTATTAGGGCGGCCGCGAATTCGCACGAGGAGAAGGGAAGGCGCGAGTGAGGAAAG
GAGGTACTGTAGCTACACTTNTCTGGAAAATTCAGTATGGACAGTCTCCGACTTAGGATT
TTTCAACTTTAGGATGGTGTGAAAGAGACACCCATTCAGTAGAAACTGTACTTCGAGTTT
TGCATTTTGATCTTTTCCTGGCCTAGTGATAATGTGGTACAGTACACTCTTGTGATGCTG
GGCAGCGGCAGCGAGCCACAGCTCCCAGTCACCCATGTGATCACGGGAATCAACAACCCA
TCCTCTACCGTGTACTGTGTTGTCAGCTTTTTTGGATATTGTGTTTTGTGTTTTCACATT
CCATCATGTCTACAAAATGTCCATCAGTGTCTCCTGTTTCTGGTGAGATGAAGAAGAGGA
AGGCAATTACTCTTGAAATGAAACTCAAGATAATTGCCCAGCATGAAGGTGGCAAGCCAG
TAATGGCCATTGCACGTGAGTTAGGACTTTGGCAATCCACGATTTCAACCATCTTAAGGG
ATAAGAAGCAAATCAGTGATGCAGCGAAATCGTCAGCATCAGTTAAATCCACTGTCATCA
CAAAGAAAAGGGCTGGACCAATTGATGATATGGAAAAATTACTTGTTATGTGGATGGAAG
ACCAGATACAGAAGCGTATACCACTTAGCCTACTGATGATCNCAGGCTAAGCAAGAAGTC
TTTTTAATATGCTAAAAGACCGTGCCAGTGATCCTACATATACACAAATGTTTAAAGCAG
TCATGGATGGTTCCAGCGCTTAAAAGGCGTCATAATTNTCACATGTANAGATCACTGGTG
AGGCANCACGTGCTGGTAATGAAGGTGCATAGCTTTAAGGAN

3' Read Nucleotide Sequence:

>OriGene 3' read for AK057033 unedited
TGTACCTCTGCCGCAATCNANATTGAGTTTTTTTCTTTTTTTTTTTGGAACATGGGAATT
TGTTTTATTTTCATCTCAAGAACATTTAAGTTGGGTGAAGAAATTCAGCTTTTGTTGTTA
GAATCTGACAGGCTTCAAACACTTGTGATGGAGGGGTTGTTGTCATATCAAAGTCCACCT
AGTAAAGTTTTAGGTGACCAGTGACTTTGTCTTTTAGGTCTGCTGGTCCTGGCCCAATCC
CTAGGACAGTTTGAGAGCCTGGTGCAATCTGAGTACGTCCAGCATCTTGAATTAAACTTA
CAGTCAGTCCCAGCATTTTTGCATGGGCCAATAATGCAATCAGGGTTTCTTCATCAGGAG
CTTTGACCACCACCTTGGGCTGGCCACAGTATTCCCATTGTTTGAGCATTTCAGGATTTC
TTCTTTGAATCTGCTTGTAGGCTGAAACAGCAGCATGAGAGCACTGGGCAGCCACTTTCC
CTTTTCCCATCTTTAAGTCATTTCGAACCACAAGAATCATCTTGTACTCCCCGCTGTCTC
CCAAGATGCTTGCTTCACTTTCAGTATCTGTGTGTGTCTTGCTCGTCTTGCTTTTGGGGA
GCATCCCAAAGCATACTCNGAGGCTCCAGCCCAGGCACATGCCACAAGCAACTCCAACAG
CCAAGCCGAGTGTACTGGGATGAGCCAAATATTTCCATACCAAGATTTGAAGGCATCATT
AATTTCACAGCTGGAAGCACAGTGTCCTCGAAAATGTTTGAGCCTGAAAAGAATTAATTG
CTGATGAAGGGATGCACAAGGCCTCAATTTTCTTCTCTGTGAACATCCAGATAGTTGGTG
AGGCTTGGGACTCAAACTTTTGATGGTTACCAGCTGTGTTGTCTCAGGAGTACCAGTTTG
CCGGCACCTGGTCTCTTTACTACAATTTTGTGAAGCAACATCTGTTT

Restriction Sites: NotI-NotI

ACCN: AK057033

Insert Size: 2500 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).

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:	AK057033.1, BAB71351.2
RefSeq Size:	2047 bp
RefSeq ORF:	540 bp
Locus ID:	51651
Cytogenetics:	17q23.1
Domains:	CENPB, CENP-B_N
Protein Families:	Transmembrane

Gene Summary: The protein encoded by this gene is a mitochondrial protein with two putative domains, an N-terminal mitochondrial localization sequence, and a UPF0099 domain. In vitro assays suggest that this protein possesses peptidyl-tRNA hydrolase activity, to release the peptidyl moiety from tRNA, thereby preventing the accumulation of dissociated peptidyl-tRNA that could reduce the efficiency of translation. This protein also plays a role regulating cell survival and death. It promotes survival as part of an integrin-signaling pathway for cells attached to the extracellular matrix (ECM), but also promotes apoptosis in cells that have lost their attachment to the ECM, a process called anoikos. After loss of cell attachment to the ECM, this protein is phosphorylated, is released from the mitochondria into the cytosol, and promotes caspase-independent apoptosis through interactions with transcriptional regulators. This gene has been implicated in the development and progression of tumors, and mutations in this gene have been associated with an infantile multisystem neurologic, endocrine, and pancreatic disease (INMEPD) characterized by intellectual disability, postnatal microcephaly, progressive cerebellar atrophy, hearing impairment, polyneuropathy, failure to thrive, and organ fibrosis with exocrine pancreas insufficiency (PMID: 25574476). Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Mar 2015]