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Product datasheet for RC205199

PTS (NM_000317) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PTS (NM_000317) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PTS
Synonyms:	PTPS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC205199 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGCACGGAAGGTGGTGGCCGTCGCTGCCAGGCACAAGTGTCCCGCCGCATCTCCTTCAGCGCGAGCC
ACCGATTGTACAGTAAATTTCTAAGTGATGAAGAAAACTTGAAACTGTTTGGGAAATGCAACAATCCAAA
TGGCCATGGGCACAATTATAAAGTTGTGGTGACAGTACATGGAGAGATTGACCCTGCTACGGGAATGGTT
ATGAATCTGGCTGATCTCAAAAAATATATGGAGGAGGCGATTATGCAGCCCCTTGATCATAAGAATCTGG
ATATGGATGTGCCATACTTTGCAGATGTTGTGAGCACGACTGAAAATGTAGCTGTTTATATGTGGGACAA
CCTCCAGAAAGTTCTTCCTGTAGGAGTTCTTTATAAAGTAAAAGTATACGAAACTGACAATAATATTGTG
GTTTATAAAGGAGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC205199 protein sequence
Red=Cloning site Green=Tags(s)

MSTEGGGRRCQAQVSRRISFSASHRLYSKFLSDEENLKLFGKCNNPNGHGHNYKVVVTVHGEIDPATGMV
MNLADLKKYMEEAIMQPLDHKNLDMDVPYFADVVSTTENVAVYMWDNLQKVLPVGVLYKVKVYETDNNIV
VYKGE

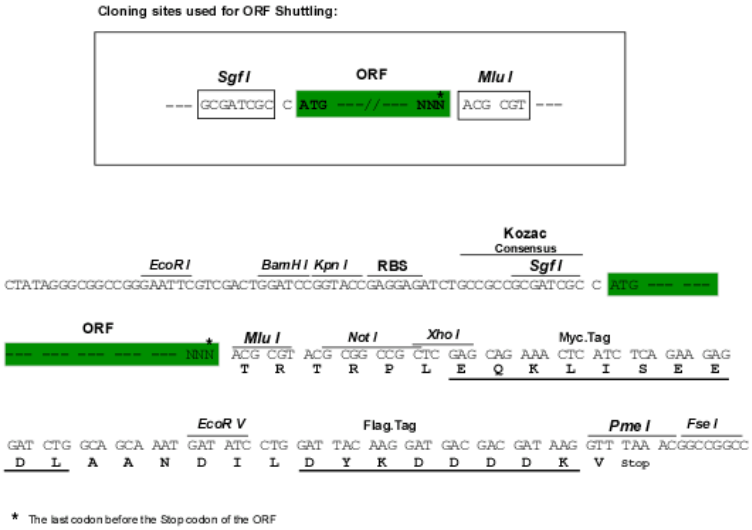
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6027_f02.zip

View online »

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000317

ORF Size: 435 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_000317.3

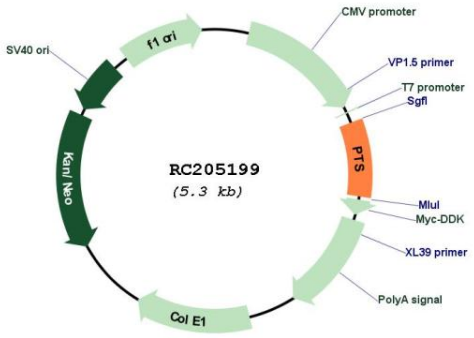
RefSeq Size: 948 bp

RefSeq ORF: 438 bp

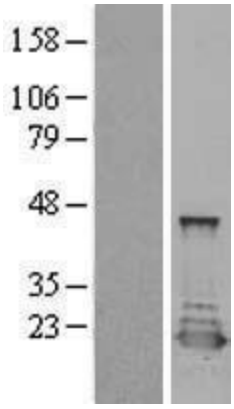
Locus ID: 5805

UniProt ID:	Q03393
Cytogenetics:	11q23.1
Domains:	PTPS
Protein Families:	Druggable Genome
Protein Pathways:	Folate biosynthesis, Metabolic pathways
MW:	16.4 kDa
Gene Summary:	The enzyme encoded by this gene catalyzes the elimination of inorganic triphosphate from dihydroneopterin triphosphate, which is the second and irreversible step in the biosynthesis of tetrahydrobiopterin from GTP. Tetrahydrobiopterin, also known as BH(4), is an essential cofactor and regulator of various enzyme activities, including enzymes involved in serotonin biosynthesis and NO synthase activity. Mutations in this gene result in hyperphenylalaninemia. [provided by RefSeq, Oct 2008]

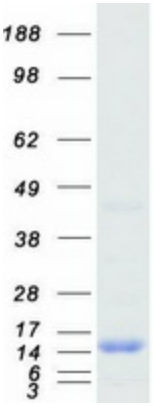
Product images:



Circular map for RC205199



Western blot validation of overexpression lysate (Cat# [LY400120]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205199 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PTS protein (Cat# [TP305199]). The protein was produced from HEK293T cells transfected with PTS cDNA clone (Cat# RC205199) using MegaTran 2.0 (Cat# [TT210002]).