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PTS Rabbit pAb

Catalog # AP98818

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q03393
Other Accession	Q03393
Reactivity	Rat, Human, Mouse
Predicted	Pig, Rabbit, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	16386
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PTS
Epitope Specificity	91-145/145
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the PTPS family.
Post-translational modifications	Phosphorylation of Ser-19 is required for maximal enzyme activity.
DISEASE	Defects in PTS are the cause of BH4-deficient hyperphenylalaninemia type A (HPABH4A) [MIM:261640]; also called 6-pyruvoyl-tetrahydropterin synthase deficiency (PTS deficiency) or hyperphenylalaninemia tetrahydrobiopterin-deficient due to PTS deficiency. HPABH4A is an autosomal recessive disorder characterized by depletion of the neurotransmitters dopamine and serotonin, and clinically by severe neurological symptoms unresponsive to the classic phenylalanine-low diet.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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]

Additional Information

Gene ID	5805
Other Names	PTPS; PTPS_HUMAN; PTS; PTP synthase; 4.2.3.12; 6-pyruvoyltetrahydropterin synthase
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	PTS
Function	Involved in the biosynthesis of tetrahydrobiopterin, an essential cofactor of aromatic amino acid hydroxylases. Catalyzes the transformation of 7,8-dihydroneopterin triphosphate into 6-pyruvoyl tetrahydropterin.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.