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FPGS Rabbit pAb

Catalog # AP98813

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q05932
Other Accession	Q05932
Predicted	Rat, Human, Mouse, Rabbit, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	64609
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human FPGS/Folylpolyglutamate synthase
Epitope Specificity	51-150/587
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 folylpolyglutamate synthase family.
SUBUNIT	Monomer.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes the folylpolyglutamate synthetase enzyme. This enzyme has a central role in establishing and maintaining both cytosolic and mitochondrial folylpolyglutamate concentrations and, therefore, is essential for folate homeostasis and the survival of proliferating cells. This enzyme catalyzes the ATP-dependent addition of glutamate moieties to folate and folate derivatives. While several transcript variants may exist for this gene, the full-length natures of only two have been biologically validated to date. These two variants encode distinct isoforms. [provided by RefSeq, Jul 2008].

Additional Information

Gene ID	2356
Other Names	FOLC_HUMAN; FPGS; Folylpoly-gamma-glutamate synthetase (FPGS); Tetrahydrofolylpolyglutamate synthase (Tetrahydrofolate synthase); 6.3.2.17; folylpolyglutamate synthase
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
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	FPGS
Function	Catalyzes conversion of folates to polyglutamate derivatives allowing concentration of folate compounds in the cell and the intracellular retention of these cofactors, which are important substrates for most of the folate-dependent enzymes that are involved in one-carbon transfer reactions involved in purine, pyrimidine and amino acid synthesis. Unsubstituted reduced folates are the preferred substrates. Metabolizes methotrexate (MTX) to polyglutamates.
Cellular Location	[Isoform 1]: Mitochondrion inner membrane. Mitochondrion matrix

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