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FPGS Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP6975c

Specification

FPGS Antibody (Center) Blocking Peptide - Product Information

Primary Accession Q05932

FPGS Antibody (Center) Blocking Peptide - Additional Information

Gene ID 2356

Other Names
Folylpolyglutamate synthase, mitochondrial, Folylpoly-gamma-glutamate synthetase, FPGS, Tetrahydrofolylpolyglutamate synthase, Tetrahydrofolate synthase, FPGS

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP6975c was selected from the Center region of human FPGS. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

FPGS Antibody (Center) Blocking Peptide - 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

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FPGS Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

FPGS Antibody (Center) Blocking Peptide - Images

FPGS Antibody (Center) Blocking Peptide - Background

FPGS is 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.

FPGS Antibody (Center) Blocking Peptide - References

Sharma,S., et.al., Pharmacogenet. Genomics 18 (12), 1041-1049 (2008)