



FPGS Rabbit mAb

Catalog No	YP-rAb-17455
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,FC
Gene Name	FPGS
Protein Name	Folylpolyglutamate synthase, mitochondrial (EC 6.3.2.17) (Folylpoly-gamma-glutamate synthetase) (FPGS) (Tetrahydrofolylpolyglutamate synthase) (Tetrahydrofolate synthase)
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	WB 1:1000-1:5000; FC 1:100-1:500;
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	
Observed Band	65kD
Calculated Molecular Weight	65kD
Cell Pathway	SUBCELLULAR LOCATION: [Isoform 1]: Mitochondrion inner membrane {ECO:0000269 PubMed:16169100}. Mitochondrion matrix {ECO:0000269 PubMed:16169100, ECO:0000269 PubMed:8408020, ECO:0000269 PubMed:8662720}.; SUBCELLULAR LOCATION: [Isoform 2]: Cytoplasm {ECO:0000269 PubMed:8662720}.
Tissue Specificity	
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. {ECO:0000269 PubMed:8408018, ECO:0000269 PubMed:8408019, ECO:0000269 PubMed:8408021, ECO:0000269 PubMed:8662720}.





Background

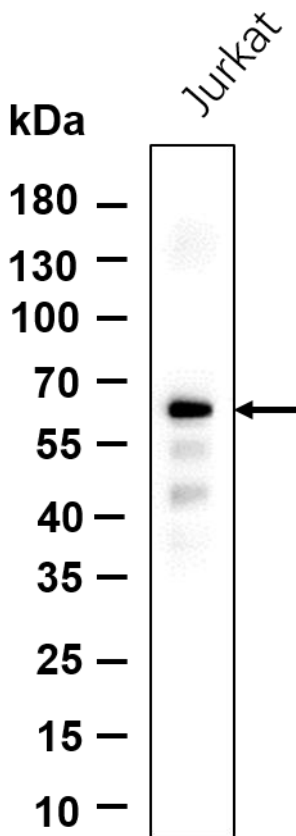
This gene encodes the folypolyglutamate synthetase enzyme. This enzyme has a central role in establishing and maintaining both cytosolic and mitochondrial folypolyglutamate concentrations and, therefore, is essential for folate homeostasis and the survival of proliferating cells. This enzyme catalyzes the ATP-dependent addition of glutamate moieties to folate and folate derivatives. Alternative splicing results in transcript variants encoding different isoforms. [provided by RefSeq, Jan 2014]

matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



Western blot analysis of lysates from Jurkat cell, primary antibody was diluted at 1:1000, 4° over night, Dylight 800 secondary antibody was diluted at 1:10000, 37° 1hour.

