10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GMP Synthase Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55166

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	P49915
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	76715
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human GMP Synthase
Epitope Specificity	301-400/693
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm.
SIMILARITY	Contains 1 glutamine amidotransferase type-1 domain. Contains 1 GMP-binding domain.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	In the de novo synthesis of purine nucleotides, IMP is the branch point metabolite at which point the pathway diverges to the synthesis of either guanine or adenine nucleotides. In the guanine nucleotide pathway, there are 2 enzymes involved in converting IMP to GMP, namely IMP dehydrogenase (IMPD1), which catalyzes the oxidation of IMP to XMP, and GMP synthetase, which catalyzes the amination of XMP to GMP. [provided by RefSeq, Jul 2008].

Additional Information

Gene ID	8833
Other Names	GMP synthase [glutamine-hydrolyzing], 6.3.5.2, GMP synthetase, Glutamine amidotransferase, GMPS
Target/Specificity	Note=A chromosomal aberration involving GMPS is found in acute myeloid leukemias. Translocation t(3,11)(q25,q23) with MLL.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
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	GMPS
Function	Catalyzes the conversion of xanthine monophosphate (XMP) to GMP in the presence of glutamine and ATP through an adenyl-XMP intermediate.
Cellular Location	Cytoplasm, cytosol.