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MTG1/GTPBP7 Rabbit pAb

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Catalog # AP56879

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q9BT17
Predicted	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	37237
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human MTG1/GTPBP7
Epitope Specificity	1-100/334
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	Mitochondrion.
SIMILARITY	Belongs to the MMR1/HSR1 GTP-binding protein family. MTG1 subfamily. Contains 1 G (guanine nucleotide-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	MTH1 is a 179 amino acid cytoplasmic protein that is a member of the nudix hydrolase family. Highly expressed in testis, thymus and proliferating blood lymphocytes, MTH1 functions as an antimutagenic that hydrolyzes oxidized purine nucleoside triphosphates to their corresponding monophosphates. Through its ability to enzymatically hydrolyze ATP and GTP to AMP and GMP, respectively, MTH1 prevents misincorporation of GTP into DNA, thus preventing A:T to C:G transversions. The cytoplasmic location of MTH1, along with its antimutagenic capabilities, suggests that it may also be involved in the sanitization of nucleotide pools for both mitochondrial and nuclear genomes. Four isoforms of MTH1 exist—three of which are formed due to alternative splicing events and one of which is formed via a single-nucleotide polymorphism. Overexpression of MTH1 is implicated in prostate and cell lung carcinomas

Additional Information

Gene ID	92170
Other Names	Mitochondrial ribosome-associated GTPase 1, GTP-binding protein 7, Mitochondrial GTPase 1, MTG1, GTPBP7
Dilution	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	MTG1
Synonyms	GTPBP7
Function	Plays a role in the regulation of the mitochondrial ribosome assembly and of translational activity. Displays mitochondrial GTPase activity.
Cellular Location	Mitochondrion inner membrane; Peripheral membrane protein; Matrix side

Background

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