

Glutaminase Rabbit mAb

Catalog # AP78642

Product Information

Application WB, IHC-P, IF, ICC

Primary Accession 094925

Reactivity Rat, Human, Mouse

Host Rabbit

Clonality Monoclonal Antibody

Isotype IgG

Conjugate Unconjugated

Immunogen A synthesized peptide derived from human Glutaminase

Purification Affinity Chromatography

Calculated MW 73461

Additional Information

Gene ID 2744

Other Names GLS

Dilution WB~~1/500-1/1000 IHC-P~~N/A IF~~1:50~200 ICC~~N/A

Format Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02%

sodium azide and 50% glycerol.

Storage Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

Protein Information

Name GLS

Synonyms GLS1, KIAA0838

Function Catalyzes the first reaction in the primary pathway for the renal catabolism

of glutamine. Plays a role in maintaining acid-base homeostasis. Regulates the

levels of the neurotransmitter glutamate, the main excitatory

neurotransmitter in the brain (PubMed:30239721, PubMed:30575854,

PubMed:30970188).

Cellular Location [Isoform 1]: Mitochondrion {ECO:0000250 | UniProtKB:P13264}. Cytoplasm,

cytosol. Note=The 74-kDa cytosolic precursor is translocated into the mitochondria and processed via a 72-kDa intermediate to yield the mature 68- and 65-kDa subunits {ECO:0000250|UniProtKB:P13264} [Glutaminase kidney isoform, mitochondrial 68 kDa chain]: Mitochondrion matrix {ECO:0000250|UniProtKB:P13264} Note=Produced by the proteolytic

processing of the 74-kDa cytosolic precursor. {ECO:0000250|UniProtKB:P13264}

Tissue Location

Isoform 1 and isoform 3 are detected in brain cortex. Isoform 3 is highly expressed in astrocytoma, ganglioglioma and ependymoma. Isoform 1 is highly expressed in brain and kidney, but not detected in liver. Isoform 3 is highly expressed in heart and pancreas, detected at lower levels in placenta, lung, pancreas and kidney, but is not detected in liver. Isoform 2 is expressed in cardiac and skeletal muscle.

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