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KD-Validated Anti-Glutaminase Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1918

Product Information

Application	WB, FC, ICC
Primary Accession	O94925
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	23GB 1720
Calculated MW	73461
Gene Name	GLS
Aliases	GLS; Glutaminase; GLS1; K-Glutaminase; KIAA0838; GAC; GAM; KGA; Glutaminase Kidney Isoform, Mitochondrial; L-Glutamine Amidohydrolase; Glutaminase C; EC 3.5.1.2; Glutaminase, Phosphate; Activated; CASGID; EIEE71; AAD20; DEE71; GDPAG
Immunogen	A synthesized peptide derived from human Glutaminase

Additional Information

Gene ID	2744
Other Names	Glutaminase kidney isoform, mitochondrial, GLS, 3.5.1.2, K-glutaminase, L-glutamine amidohydrolase, Glutaminase kidney isoform, mitochondrial 68 kDa chain, GLS, GLS1, KIAA0838

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.