

KD-Validated Anti-Glutaminase Rabbit Monoclonal Antibody
Rabbit monoclonal antibody
Catalog # AGI1918**Specification****KD-Validated Anti-Glutaminase Rabbit Monoclonal Antibody - Product Information**

| | |
|-------------------|--|
| Application | WB, FC, ICC |
| Primary Accession | O94925 |
| Reactivity | Rat, Human, Mouse |
| Clonality | Monoclonal |
| Isotype | Rabbit IgG |
| Calculated MW | Predicted, 73 kDa , observed, 55-65 kDa |
| 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 |

KD-Validated Anti-Glutaminase Rabbit Monoclonal Antibody - 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 | |

KD-Validated Anti-Glutaminase Rabbit Monoclonal Antibody - 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

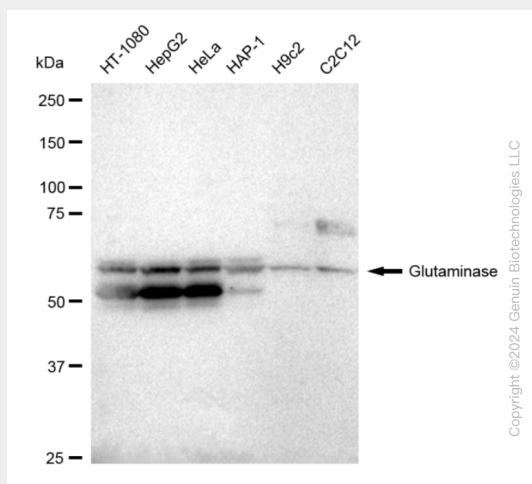
Isoform 1 and isoform 3 are detected in brain cortex. Isoform 3 is highly expressed in astrocytoma, ganglioglioma and ependymoma. Isoform 1 is highly expressed in brain and kidney, but not detected in liver. Isoform 3 is highly expressed in heart and pancreas, detected at lower levels in placenta, lung,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

KD-Validated Anti-Glutaminase Rabbit Monoclonal Antibody - Protocols

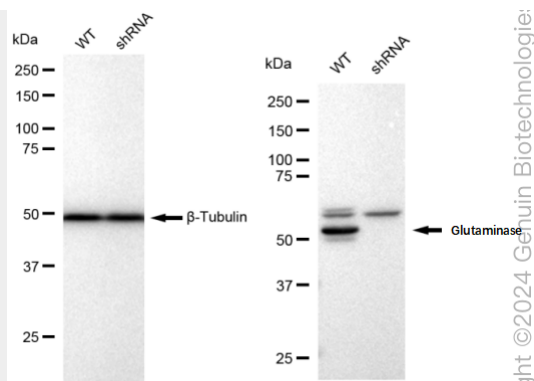
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

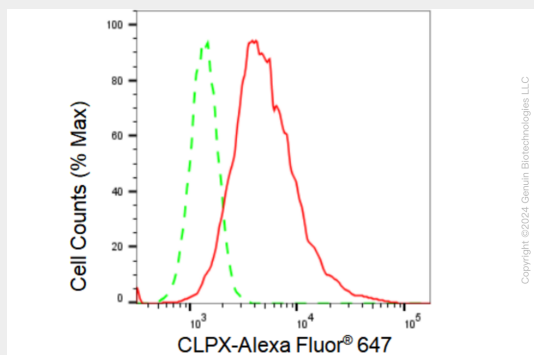
KD-Validated Anti-Glutaminase Rabbit Monoclonal Antibody - Images



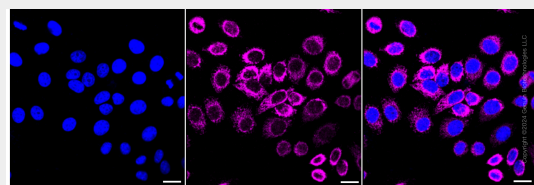
Western blotting analysis using anti-Glutaminase antibody (Cat#AGI1918). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Glutaminase antibody (Cat#AGI1918, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-Glutaminase antibody (Cat#AGI1918). Glutaminase expression in wild type (WT) and glutaminase shRNA knockdown (KD) Hela cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-Glutaminase antibody (Cat#AGI1918, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Glutaminase expression in HepG2 cells using Glutaminase antibody (Cat#AGI1918, 1:2,000). Green, isotype control; red, Glutaminase.



Immunocytochemical staining of HepG2 cells with Glutaminase antibody (Cat#AGI1918, 1:1,000). Nuclei were stained blue with DAPI; Glutaminase was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.