

## Anti-GLS Rabbit pAb

Purified Rabbit Polyclonal Antibody

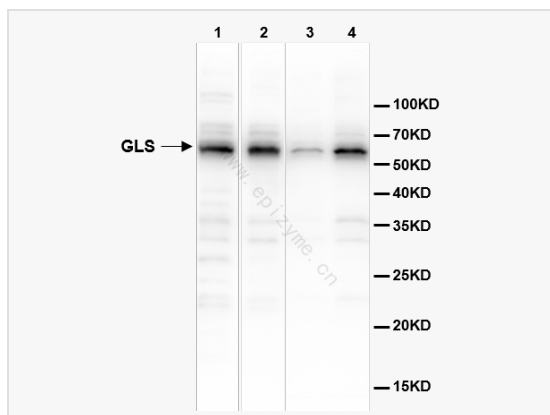
Catalog # P018306

### Product Information

Application	ELISA, WB
Reactivity	Human
Dilution	WB 1:1,000~1:2,000
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Label	Unconjugated
Immunogen	P018306 is generated from rabbits immunized with a KLH conjugated synthetic peptide between 516-545 amino acids from the C-terminal region of human GLS.
Format	Affinity purified polyclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-GLS Rabbit pAb is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

Synonyms	Glutaminase kidney isoform, mitochondrial, K-glutaminase, L-glutamine amidohydrolase, GLS1, KIAA0838.
Calculated MW	56 kDa
Uniprot ID	O94925, P13264, D3Z7P3
Gene ID	2744
Antigen Region	516-545 aa
Background	Sahai (1983) demonstrated phosphate-activated glutaminase (EC 3.5.1.2) in human platelets. It is the major enzyme yielding glutamate from glutamine. Significance of the enzyme derives from its possible implication in behavior disturbances in which glutamate acts as a neurotransmitter(Prusiner, 1981). High heritability of platelet glutaminase was indicated by studies of Sahai and Vogel (1983) [PubMed 6682827] who found an intraclass correlation coefficient of 0.96 for monozygotic twins and 0.53 for dizygotic twins.
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



Western Blot - Anti-GLS Rabbit pAb

All lanes: P018306 at 1:1,000 dilution

Lane 1: HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: MCF7 (human breast adenocarcinoma epithelial cell) whole cell lysates

Lane 3: SCC-9 (human tongue squamous carcinoma epithelial cell) whole cell lysates

Lane 4: U2OS (human osteosarcoma epithelial cell) whole cell lysates

Lysates/proteins at 10  $\mu$ g per lane.

Secondary antibody: Goat Anti-Rabbit IgG(H+L), HRP Conjugated (Cat. No. LF102) at 1:5,000 dilution

Predicted band size: 56 kDa

Observed band size: 56 kDa

Developed using the ECL technique (Cat. No. SQ201).