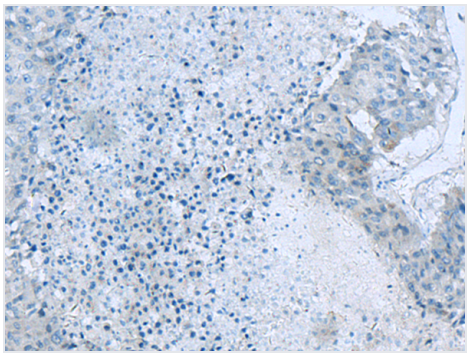
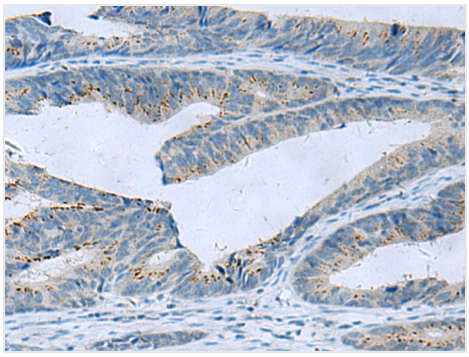
GLS Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	GLS, Polyclonal Antibody
Full Product Name	GLS Polyclonal Antibody
Product Gene Name	anti-GLS antibody
Product Synonym Names	AAD20; DKFZp686O15119; FLJ10358; GAC; GAM; GLS; GLS1; GLSK; Glutaminase C; Glutaminase kidney isoform; Glutaminase phosphate activated; K-glutaminase; KGA; KIAA0838; L-glutamine amidohydrolase; Mitochondrial
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Form/Format	PBS with 0.05% NaN3 and 40% Glycerol, pH7.4
Purity/Purification	Antigen Affinity Purification
Concentration	0.78mg/mL (lot specific)
Preparation and Storage	Store at -20 degree C. Avoid freeze/thaw cycles.
OMIM	138280
3D Structure	ModBase 3D Structure for O94925
Immunogen	Synthetic peptide of human GLS
Conjugation	Unconjugated
Product Categories/Family for anti-GLS antibody	Cancer; Metabolism; Neuroscience; Signal transduction
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-GLS antibody	Immunohistochemistry (IHC), ELISA (EIA)
Application Notes for anti-GLS antibody	IHC: 1:50-1:100 ELISA: 1:5000-1:10000
Related Product Information for anti-GLS antibody	GLS,also named as GLS1 and KIAA0838,belongs to the glutaminase family. It catalyzes the first reaction in the primary pathway for the renal catabolism of glutamine. Glutaminase-,glutamate-,and taurine-immunoreactive neurons develop neurofibrillary tangles in Alzheimer's disease.The glutaminase band in AA/C1 cells is more intense than in HT29 cells,in accordance with measurements of glutaminase activity,and had the same molecular mass of approx. 63 kDa. The bands for both cell lines are clearly different in size from both rat liver glutaminase (58 kDa) and rat kidney glutaminase (65 kDa). It also reveals a molecular weight of 83-84 kDa as a phosphate-dependent glutaminase. It has 3 isoforms named as KGA,GAM,GAC.
Other Notes	Small volumes of anti-GLS antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for GLS purchase	MBS2563216 is an antibody targeting GLS. Also known as GLS Polyclonal Antibody. Reactive in Human, Mouse, Rat. Host: Rabbit.



Immunohistochemistry (IHC) of anti-GLS antibody
Immunohistochemistry of paraffin-embedded Human liver cancer tissue using GLS Polyclonal Antibody at dilution of 1:60(×200)



Immunohistochemistry (IHC) of anti-GLS antibody
Immunohistochemistry of paraffin-embedded Human colorectal cancer tissue using GLS Polyclonal Antibody at dilution of 1:60(×200)

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for GLS. It may not necessarily be applicable to this product.

NCBI GI #	12643334
NCBI GeneID	2744
NCBI Accession #	O94925.1
UniProt Primary Accession #	O94925
UniProt Related Accession #	O94925
NCBI Official Full Name	Glutaminase kidney isoform, mitochondrial
NCBI Official Synonym Full Names	glutaminase
NCBI Official Symbol	GLS
NCBI Official Synonym Symbols	GAC; GAM; KGA; GLS1; AAD20; GDPAG; CASGID; EIEE71
UniProt Protein Name	Glutaminase kidney isoform, mitochondrial
UniProt Synonym Protein Names	K-glutaminase; L-glutamine amidohydrolase
Protein Family	Glutaminase kidney
UniProt Gene Name	GLS
UniProt Synonym Gene Names	GLS1; KIAA0838; GLS
UniProt Entry Name	GLSK_HUMAN
NCBI Protein Information	glutaminase kidney isoform, mitochondrial
NCBI Summary for GLS	This gene encodes the K-type mitochondrial glutaminase. The encoded protein is an phosphate-activated amidohydrolase that catalyzes the hydrolysis of glutamine to glutamate and ammonia. This protein is primarily expressed in the brain and kidney plays an essential role in generating energy for metabolism, synthesizing the brain neurotransmitter glutamate and maintaining acid-base balance in the kidney. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Jan 2012]

UniProt Comments for GLS	glutaminase: 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 in the brain. Isoform 2 lacks catalytic activity. Belongs to the glutaminase family. 3 isoforms of the human protein are produced by alternative splicing. Protein type: Amino Acid Metabolism - arginine and proline; Hydrolase; Mitochondrial; Amino Acid Metabolism - alanine, aspartate and glutamate; Other Amino Acids Metabolism - D-Glutamine and D-glutamate; Energy Metabolism - nitrogen; EC 3.5.1.2 Chromosomal Location of Human Ortholog: 2q32-q34 Cellular Component: mitochondrion; mitochondrial matrix; cytosol Molecular Function: protein binding; glutaminase activity Biological Process: synaptic transmission; glutamate secretion; suckling behavior; neurotransmitter secretion; glutamine catabolic process; neurological control of breathing; glutamate biosynthetic process; amino acid biosynthetic process; protein homotetramerization
Research Articles on GLS	**1.** HSF1 stimulated GLS1-dependent mTOR activation to promote colorectal carcinogenesis.
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