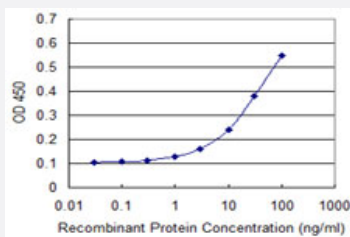


GLS monoclonal antibody (M01), clone 5C4

Catalog # H00002744-M01

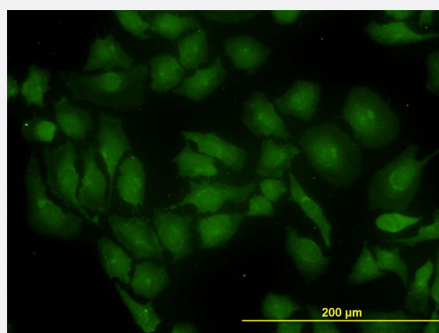
Size 100 ug

Applications



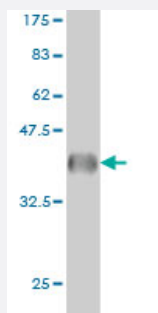
Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged GLS is approximately 0.3ng/ml as a capture antibody.



Immunofluorescence

Immunofluorescence of monoclonal antibody to GLS on HeLa cell. [antibody concentration 10 ug/ml]



Western Blot detection against Immunogen (35.64 KDa) .

Specification

Product Description

Mouse monoclonal antibody raised against a partial recombinant GLS.

Immunogen	GLS (NP_055720, 580 a.a. ~ 669 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	EQRDYDSRTALHVAAAEGHVEVVKFLLEACKVNPFPKDRWNNTPMDEALHFGHHDVFKILQEYQ VQYTPQGDS DNGKENQTVHKNLDGLL
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (98)
Isotype	IgG2a Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (35.64 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged GLS is approximately 0.3ng/ml as a capture antibody.

[Protocol Download](#)

- ELISA

- Immunofluorescence

Immunofluorescence of monoclonal antibody to GLS on HeLa cell. [antibody concentration 10 ug/ml]

Gene Info — GLS

Entrez GeneID [2744](#)

GeneBank Accession# [NM_014905](#)

Protein Accession#	NP_055720
Gene Name	GLS
Gene Alias	AAD20, DKFZp686O15119, FLJ10358, GLS1, KIAA0838
Gene Description	glutaminase
Omim ID	138280
Gene Ontology	Hyperlink
Gene Summary	Sahai (1983) [PubMed 6825316] 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.[supplied by OMIM]
Other Designations	K-glutaminase L-glutamine amidohydrolase glutaminase C glutaminase, phosphate-activated

Publication Reference

- [Elucidating the role of N-acetylglucosamine in Group A Carbohydrate for the development of an effective glycoconjugate vaccine against Group A Streptococcus.](#)

Olimpia Pitirollo, Roberta Di Benedetto, Pedro Henriques, Gianmarco Gasperini, Francesca Mancini, Martina Carducci, Luisa Massai, Omar Rossi, Anne Geert Volbeda, Jeroen D C Codée, Francesco Berlanda Scorza, Danilo Gomes Moriel, Francesca Necchi, Luigi Lay, Roberto Adamo, Francesca Micoli.

Carbohydrate Polymers 2023 Jul; 311:120736.

Application: Cap Ab, Recombinant proteins, Recombinant proteins

- [Combination of neonatal PolyI:C and adolescent phencyclidine treatments is required to induce behavioral abnormalities with overexpression of GLAST in adult mice.](#)

Hida H, Mouri A, Ando Y, Mori K, Mamiya T, Iwamoto K, Ozaki N, Yamada K, Nabeshima T, Noda Y.

Behavioural Brain Research 2014 Jan; 258:34.

Application: WB-Ti, Mouse, Prefrontal cortex

- [Control of glutamine metabolism by the tumor suppressor Rb.](#)

Reynolds MR, Lane AN, Robertson B, Kemp S, Liu Y, Hill BG, Dean DC, Clem BF.

Oncogene 2014 Jan; 33(5):556.

Application: WB, Mouse, MEF cells

- [Mitochondrial localization and structure-based phosphate activation mechanism of Glutaminase C with implications for cancer metabolism.](#)

Cassago A, Ferreira AP, Ferreira IM, Fornezari C, Gomes ER, Greene KS, Pereira HM, Garratt RC, Dias SM, Ambrosio AL. PNAS 2012 Jan; 109(4):1092.

Application: WB, IF, Human, SKBR3, MDA-MB231, PC3, DU145, A549

- [Premature senescence of human endothelial cells induced by inhibition of glutaminase.](#)

Unterluggauer H, Mazurek S, Lener B, Hutter E, Eigenbrodt E, Zwerschke W, Jansen-Durr P. Biogerontology 2008 Mar; 9(4):247.

Application: WB-Ce, Human, HUVEC

Pathway

- [Alanine](#)
- [Arginine and proline metabolism](#)
- [D-Glutamine and D-glutamate metabolism](#)
- [Metabolic pathways](#)
- [Nitrogen metabolism](#)

Disease

- [Birth Weight](#)
- [Cognition](#)
- [Genetic Predisposition to Disease](#)
- [Glioblastoma](#)
- [Glioma](#)
- [Hepatic Encephalopathy](#)
- [Leukemia](#)
- [Liver Cirrhosis](#)
- [Meningeal Neoplasms](#)

- [Meningioma](#)
- [Schizophrenia](#)
- [Schizophrenic Psychology](#)
- [Weight Gain](#)