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GLS Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant GLS.
Catalog # AT2211a

Product Information

Application	WB, IF, E
Primary Accession	O94925
Other Accession	NM_014905
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	5C4
Calculated MW	73461

Additional Information

Gene ID	2744
Other Names	Glutaminase kidney isoform, mitochondrial, GLS, K-glutaminase, L-glutamine amidohydrolase, GLS, GLS1, KIAA0838
Target/Specificity	GLS (NP_055720, 580 a.a. ~ 669 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	GLS Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

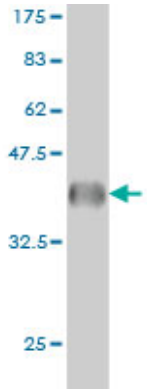
Background

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.

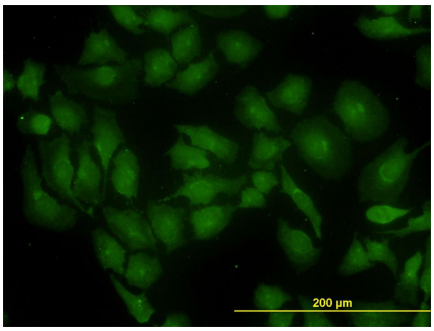
References

1.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 YBehav Brain Res. 2013 Sep 20. pii: S0166-4328(13)00576-7. doi: 10.1016/j.bbr.2013.09.026.2.Control of glutamine metabolism by the tumor suppressor Rb.Reynolds MR, Lane AN, Robertson B, Kemp S, Liu Y, Hill BG, Dean DC, Clem BFOncogene. 2013 Jan 28. doi: 10.1038/onc.2012.635.3.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.Proc Natl Acad Sci U S A. 2012 Jan 24;109(4):1092-7. Epub 2012 Jan 6.4.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 Aug;9(4):247-59. Epub 2008 Mar 4.

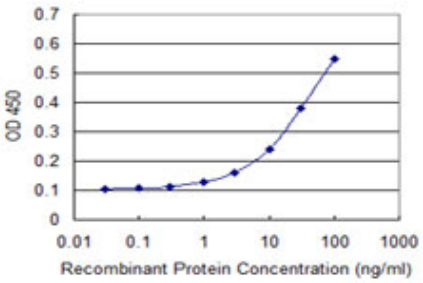
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (35.64 KDa) .



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



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.