

For Research Use Only

Glutamine Synthetase Monoclonal antibody, PBS Only (Detector)

Catalog Number: 66323-1-PBS

Featured Product



Basic Information

Catalog Number: 66323-1-PBS	GenBank Accession Number: BC011700	Purification Method: Protein A purification
Size: 100ug, Concentration: 1mg/ml by Nanodrop;	GeneID (NCBI): 2752	CloneNo.: 1D10G8
Source: Mouse	UNIPROT ID: P15104	
Isotype: IgG2b	Full Name: glutamate-ammonia ligase (glutamine synthetase)	
Immunogen Catalog Number: AG6309	Calculated MW: 374 aa, 42 kDa	
	Observed MW: 42 kDa	

Applications

Tested Applications:
WB, IHC, IF, Cytometric bead array, Indirect ELISA

Species Specificity:
human, pig, zebrafish

Product Information

66323-1-PBS targets Glutamine Synthetase as part of a matched antibody pair.

MP50483-1: 66323-2-PBS capture and 66323-1-PBS detection (validated in Cytometric bead array)

Unconjugated mouse monoclonal antibody pair in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

Background Information

GLUL (Glutamine synthetase) is also named as GS, GLNS and belongs to the glutamine synthetase family. This enzyme has 2 functions: it catalyzes the production of glutamine and 4-aminobutanoate (gamma-aminobutyric acid, GABA), the latter in a pyridoxal phosphate-independent manner. By similarity, Essential for proliferation of fetal skin fibroblasts (PMID:18662667). Defects in GLUL are the cause of congenital systemic glutamine deficiency (CSGD). Organismal glutamine production is augmented secondary to an increase in the activity of glutamine synthetase in the lung and skeletal muscle (PMID:7630137). There are other bands with higher (66 kDa, 97 kDa) and lower (30 kDa) molecular weights also detected besides the 42 kDa band indicating the proteolysis of GLUL protein by the ubiquitin system (PMID:10091759).

Storage

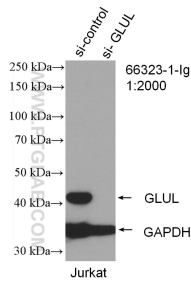
Storage:
Store at -80°C.

Storage Buffer:
PBS Only

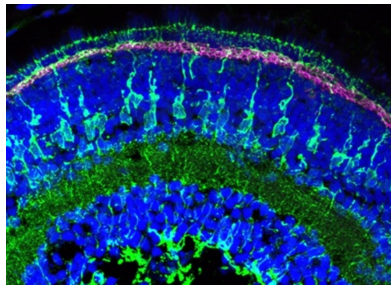
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data

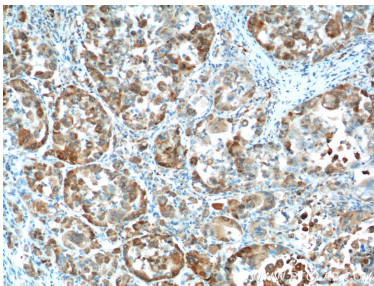
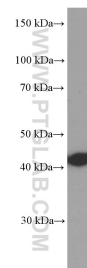


WB result of Glutamine synthetase antibody (66323-1-Ig; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Glutamine synthetase transfected Jurkat cells. This data was developed using the same antibody clone with 66323-1-PBS in a different storage buffer formulation.

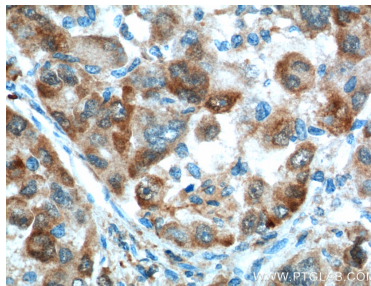


Immunofluorescence analysis of the zebrafish retina at 5 days post fertilisation. Collagen18a1 (aka Endostatin) polyclonal antibody (18301-1-AP, magenta). Dilution 1:200. Glutamine synthetase (66323-1-Ig, green) dilution 1:500. Tissue fixed overnight in 4% PFA; DAPI, blue. Data generated by Natalia Jaroszynska in Professor Ryan MacDonald's lab, University College London, UK. This data was developed using the same antibody clone with 66323-1-PBS in a

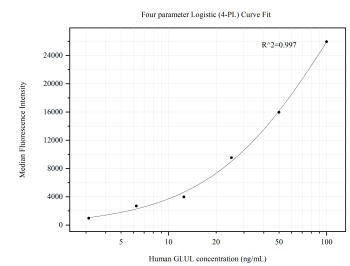
Jurkat cells were subjected to SDS PAGE followed by western blot with 66323-1-Ig (Glutamine synthetase Antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66323-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66323-1-Ig (Glutamine synthetase Antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66323-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66323-1-Ig (Glutamine synthetase Antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66323-1-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP50483-1, Glutamine synthetase Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 66323-2-PBS. Detection antibody: 66323-1-PBS. Standard: Ag6309. Range: 3.125-100 ng/mL.