

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

Size:

2344 ug/ml

Source:

Mouse

Isotype:

IgG2b

Immunogen Catalog Number:

AG6309

GenBank Accession Number:

BC011700

GeneID (NCBI):

2752

UNIPROT ID:

P15104

Full Name:

glutamate-ammonia ligase
(glutamine synthetase)

Calculated MW:

374 aa, 42 kDa

Observed MW:

42 kDa

Purification Method:

Protein A purification

CloneNo.:

1D10G8

Applications

Tested Applications:

WB, IHC, IF, Cytometric bead array, Indirect ELISA

Species Specificity:

human, pig, zebrafish

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.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:

PBS Only

For technical support and original validation data for this product please contact:

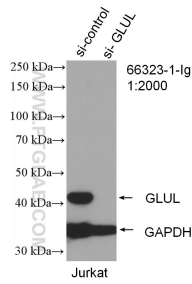
T: 4006900926

E: Proteintech-CN@ptglab.com

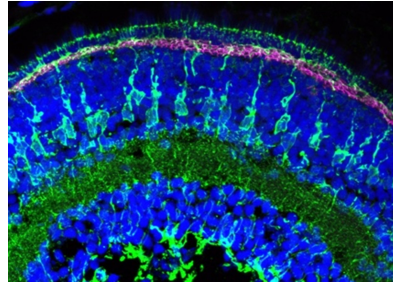
W: ptgcn.com

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

Selected Validation Data

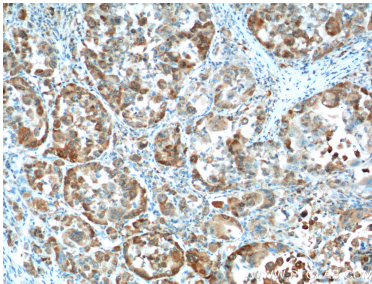
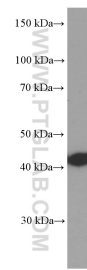


WB result of Glutamine synthetase antibody (66323-1-Ig; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Glutamine synthetase transfected Jurkat cells. This data was developed using the same antibody clone with 66323-1-PBS in a different storage buffer formulation.

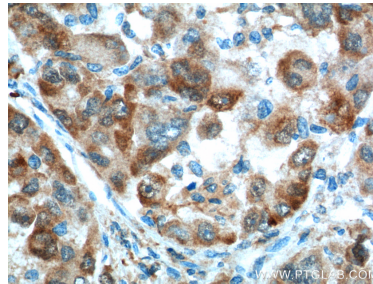


Immunofluorescence analysis of the zebrafish retina at 5 days post fertilisation. Collagen18a1 (aka Endostatin) polyclonal antibody (18301-1-AP, magenta). Dilution 1:200. Glutamine synthetase (66323-1-Ig, green) dilution 1:500. Tissue fixed overnight in 4% PFA; DAPI, blue. Data generated by Natalia Jaroszynska 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

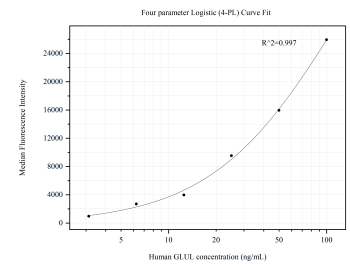
Jurkat cells were subjected to SDS PAGE followed by western blot with 66323-1-Ig (Glutamine synthetase Antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66323-1-PBS in a different storage buffer formulation.



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.