

Beta Galactosidase Polyclonal antibody

Catalog Number: 15518-1-AP

45 Publications

Basic Information

Catalog Number:

15518-1-AP

Concentration:

400 µg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG7792

GenBank Accession Number:

BC007493

GeneID (NCBI):

2720

UNIPROT ID:

P16278

Full Name:

galactosidase, beta 1

Calculated MW:

76 kDa

Observed MW:

67 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:500-1:1000

IHC 1:200-1:800

IF-P 1:50-1:500

IF/ICC 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, ELISA

Cited Applications:

WB, IHC, IF, IP

Species Specificity:

human, mouse

Cited Species:

human, mouse, rat, bovine

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: SH-SY5Y cells,

IHC: human prostate cancer tissue, human gliomas tissue, human liver cancer tissue

IF-P: human liver cancer tissue, human prostate cancer tissue

IF/ICC: HeLa cells,

Background Information

GLB1 (Beta-galactosidase) is also named as ELNR1 or Lactase. It cleaves beta-linked terminal galactosyl residues from gangliosides, glycoproteins, and glycosaminoglycans. This protein is identical to the elastin-binding protein (EBP), a major component of the nonintegrin cell surface receptor complex expressed in fibroblasts, smooth muscle cells, chondroblasts, leukocytes, and certain cancer cell types. Defects in GLB1 are the cause of GM1-gangliosidosis type 1 (GM1G1), GM1-gangliosidosis type 2 (GM1G2), GM1-gangliosidosis type 3 (GM1G3) and mucopolysaccharidosis type 4B (MPS4B). GLB1 is synthesized as an 85-kDa precursor that is C-terminally processed into a 64-66 kDa mature form and the released ~20-kDa proteolytic fragment was thought to be degraded (PMID: 10744681). The MW of GLB1 after glycosylation is 100-120 kDa. GLB1 is prone to produce homodimers (220-240 kDa) and higher multimers (PMID: 3926488). GLB1 has 3 isoforms with MW of 76 kDa, 73 kDa, and 61 kDa.

Notable Publications

Author	Pubmed ID	Journal	Application
Chao Cheng	36121292	Appl Immunohistochem Mol Morphol	WB, IHC
Wenyou Zhang	36144658	Molecules	IF
Jian Tian	33144900	Pain Res Manag	IHC

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

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

T: 4006900926

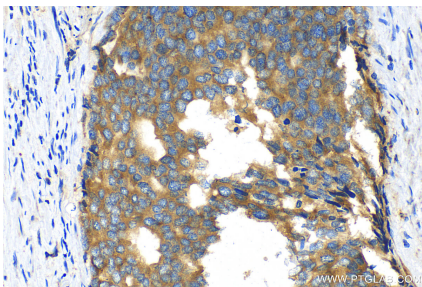
E: Proteintech-CN@ptglab.comW: ptgcn.com

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

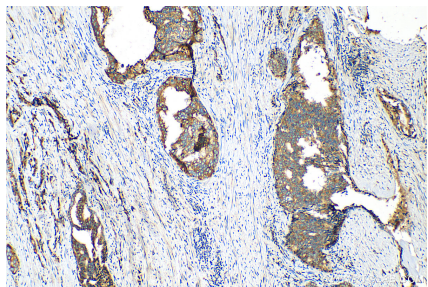
Selected Validation Data



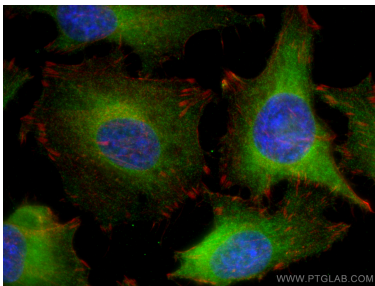
SH-SY5Y cells were subjected to SDS PAGE followed by western blot with 15518-1-AP (GLB1 antibody) at dilution of 1:400 incubated at room temperature for 1.5 hours.



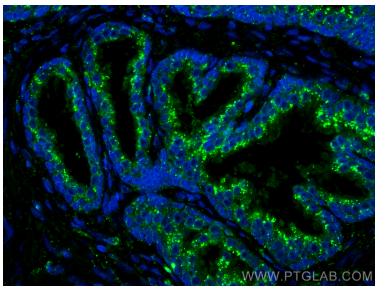
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 15518-1-AP (Beta Galactosidase antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



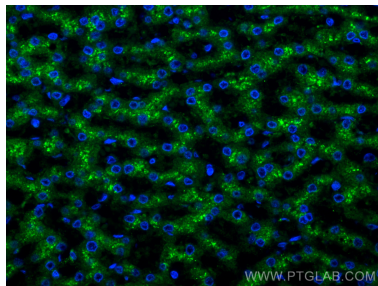
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 15518-1-AP (Beta Galactosidase antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using Beta Galactosidase antibody (15518-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human prostate cancer tissue using Beta Galactosidase antibody (15518-1-AP) at dilution of 1:200 and Multi-rAb CoraLite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded human liver cancer tissue using Beta Galactosidase antibody (15518-1-AP) at dilution of 1:200 and Multi-rAb CoraLite® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).