

For Research Use Only

# Beta Galactosidase Polyclonal antibody

Catalog Number: 15518-1-AP

43 Publications



## Basic Information

|   |  |   |
|---|--|---|
| <b>Catalog Number:</b><br>15518-1-AP                          | <b>GenBank Accession Number:</b><br>BC007493 | <b>Purification Method:</b><br>Antigen affinity purification  |
| <b>Size:</b><br>150ul , Concentration: 400 ug/ml by Nanodrop; | <b>GeneID (NCBI):</b><br>2720                | <b>Recommended Dilutions:</b><br>WB 1:500-1:1000<br>IHC 1:200-1:800<br>IF-P 1:50-1:500<br>IF/ICC 1:50-1:500 |
| <b>Source:</b><br>Rabbit                                      | <b>UNIPROT ID:</b><br>P16278                 |   |
| <b>Isotype:</b><br>IgG  | <b>Full Name:</b><br>galactosidase, beta 1   |   |
| <b>Immunogen Catalog Number:</b><br>AG7792                    | <b>Calculated MW:</b><br>76 kDa              |   |
|   | <b>Observed MW:</b><br>67 kDa                |   |

## Applications

|   |   |
|---|---|
| <b>Tested Applications:</b><br>WB, IHC, IF/ICC, IF-P, ELISA | <b>Positive Controls:</b><br>WB : SH-SY5Y cells,<br>IHC : human prostate cancer tissue, human gliomas tissue, human liver cancer tissue<br>IF-P : human liver cancer tissue, human prostate cancer tissue<br>IF/ICC : HeLa cells, |
| <b>Cited Applications:</b><br>WB, IHC, IF, IP               |   |
| <b>Species Specificity:</b><br>human, mouse                 |   |
| <b>Cited Species:</b><br>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**

## 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 kD. GLB1 is prone to produce homodimers (220-240 kD) 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

\*\*\* 20ul sizes contain 0.1% BSA

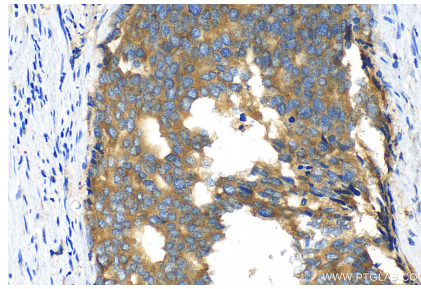
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

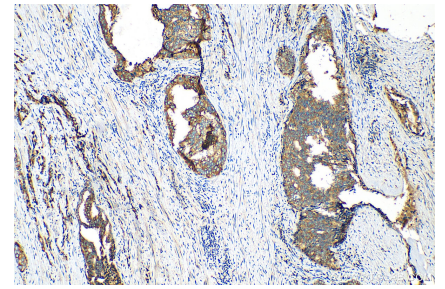
## Selected Validation Data



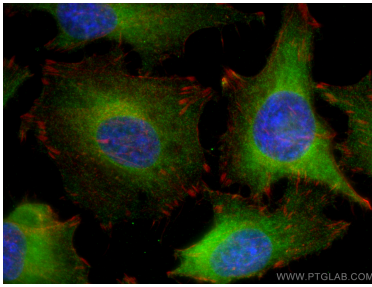
SH-SY5Y cells were subjected to SDS PAGE followed by western blot with 15518-1-AP (GLB1 antibody) at dilution of 1:400 incubated at room temperature for 1.5 hours.



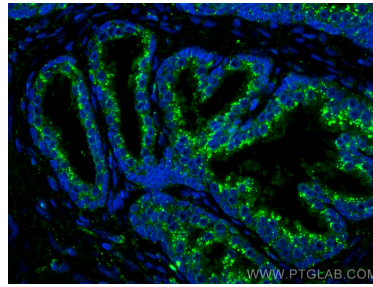
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 15518-1-AP (Beta Galactosidase antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



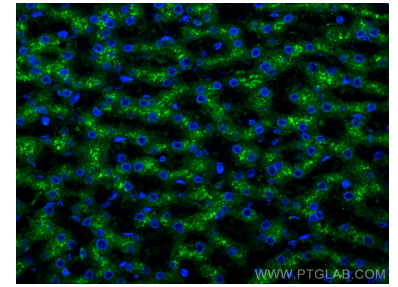
Immunohistochemical analysis of paraffin-embedded human prostate cancer tissue slide using 15518-1-AP (Beta Galactosidase antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).