

For Research Use Only

Beta Galactosidase Monoclonal antibody



Catalog Number: 66586-1-Ig

Featured Product

1 Publications

Basic Information

| | | |
|--|--|---|
| Catalog Number: 66586-1-Ig | GenBank Accession Number: BC007493 | Purification Method: Protein G purification |
| Size: 1000 µg/ml | GeneID (NCBI): 2720 | CloneNo.: 4F4F4 |
| Source: Mouse | UNIPROT ID: P16278 | Recommended Dilutions: WB 1:5000-1:50000 IHC 1:250-1:1000 IF 1:50-1:500 |
| Isotype: IgG1 | Full Name: galactosidase, beta 1 | |
| Immunogen Catalog Number: AG8069 | Calculated MW: 76 kDa | |
| | Observed MW: 64-66 kDa, 76-85 kDa | |

Applications

Tested Applications:
IF/ICC, IHC, WB, ELISA

Cited Applications:
IF

Species Specificity:
Human, mouse, rat

Cited Species:
sheep

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: LNCaP cells, A549 cells, HepG2 cells, HeLa cells, HEK-293 cells, Jurkat cells, K-562 cells

IHC: human kidney tissue,

IF: HepG2 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). GLB1 has 3 isoforms with MW of 76 kDa, 73 kDa and 61 kDa.

Notable Publications

| Author | Pubmed ID | Journal | Application |
|-----------------|-----------|----------------------|-------------|
| Charles A Huard | 37627641 | Antioxidants (Basel) | IF |

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

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

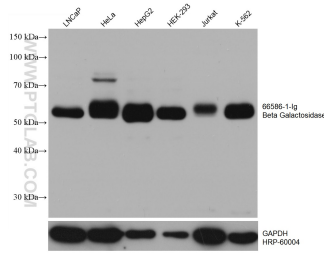
T: 4006900926

E: Proteintech-CN@ptglab.com

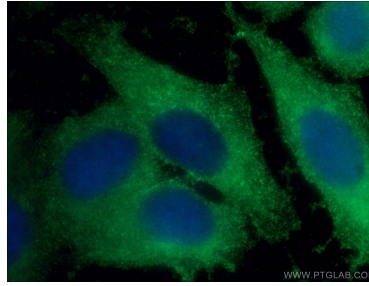
W: ptgcn.com

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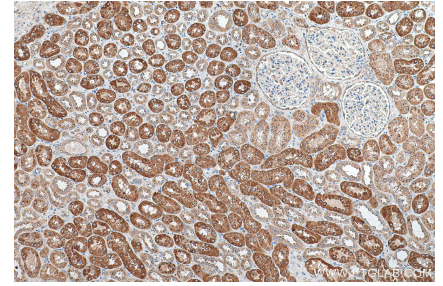
Selected Validation Data



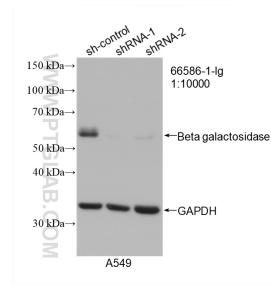
Various lysates were subjected to SDS PAGE followed by western blot with 66586-1-Ig (Beta Galactosidase antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using 66586-1-Ig (Beta galactosidase antibody) at dilution of 1:100 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunohistochemical analysis of paraffin-embedded human kidney tissue slide using 66586-1-Ig (Beta Galactosidase antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



WB result of Beta Galactosidase antibody (66586-1-Ig; 1:10000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Beta Galactosidase transfected A549 cells.