For Research Use Only

Beta Galactosidase Monoclonal antibody

Catalog Number:66586-1-Ig Featured Product 6 Publications

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
66586-1-Ig

Size:
150ul , Concentration: 1000 ug/ml by Nanodrop and 471 ug/ml by Bradford method using BSA as the standard;

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG8069

GenBank Accession Number:
BC007493

GeneID (NCBI):
2720

UNIPROT ID:
P16278

Full Name:
galactosidase, beta 1

Calculated MW:
76 kDa

Observed MW:
64-66 kDa, 76-85 kDa

Purification Method:
Protein G purification

CloneNo.:
4F4F4

Recommended Dilutions:
WB: 1:5000-1:50000
IHC: 1:250-1:1000
IF/ICC: 1:200-1:800

Applications

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

Cited Applications:
WB, IHC, IF

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse, rat, rabbit, 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/ICC : 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). GBL1 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
Zheng Wang	40036248	J Gerontol A Biol Sci Med Sci	IF
Jinpeng Wang	39983821	Life Sci	WB
Joseph R Schell	39824446	Free Radic Biol Med	WB,IHC

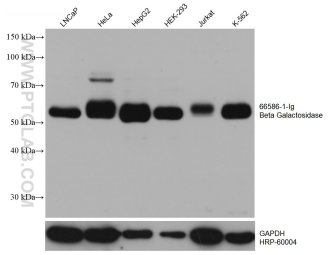
Storage

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

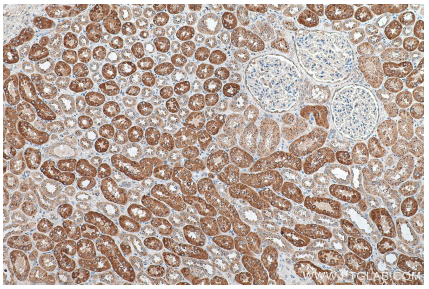
*** 20ul sizes contain 0.1% BSA

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

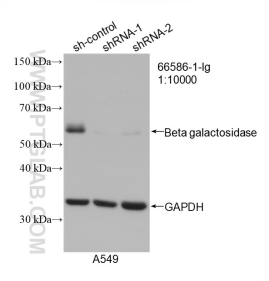
Selected Validation Data



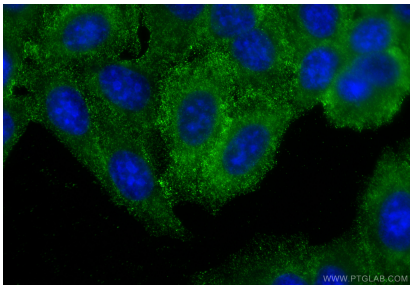
Various lysates were subjected to SDS PAGE followed by western blot with 66586-1-Ig (Beta Galactosidase antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



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.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using Beta Galactosidase antibody (66586-1-Ig, Clone: 4F4F4) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L) (SA00013-1).