

For Research Use Only

# Beta galactosidase Recombinant antibody

Catalog Number:83706-6-RR



## Basic Information

<b>Catalog Number:</b> 83706-6-RR	<b>GenBank Accession Number:</b> BC007493	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 2720	<b>CloneNo.:</b> 240788F1
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P16278	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IF/ICC 1:125-1:500
<b>Isotype:</b> IgG	<b>Full Name:</b> galactosidase, beta 1	
<b>Immunogen Catalog Number:</b> AG7792	<b>Calculated MW:</b> 76 kDa	
	<b>Observed MW:</b> 62-67 kDa	

## Applications

**Tested Applications:**  
WB, IF/ICC, FC (Intra), ELISA

**Species Specificity:**  
human

**Positive Controls:**  
WB : A549 cells, HepG2 cells, SH-SY5Y cells, HEK-293 cells, K-562 cells  
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). 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.

## 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.

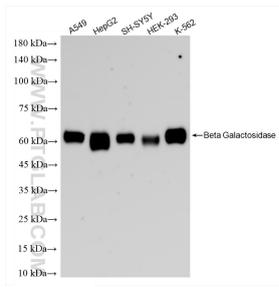
**Aliquoting is unnecessary for -20°C storage**

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

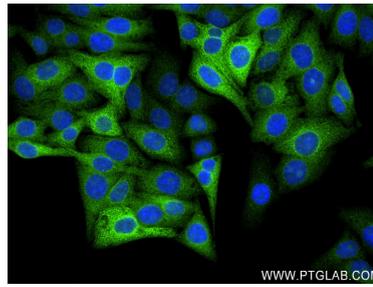
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

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

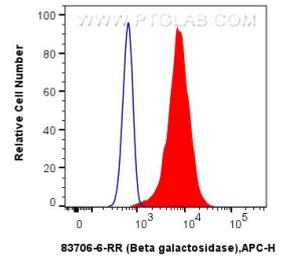
## Selected Validation Data



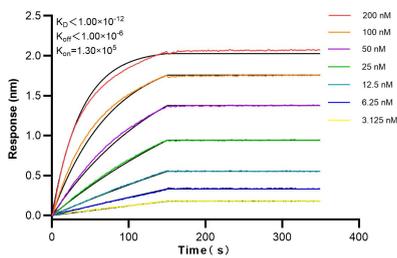
Various lysates were subjected to SDS PAGE followed by western blot with 83706-6-RR (Beta galactosidase antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using Beta galactosidase antibody (83706-6-RR, Clone: 240788F1) at dilution of 1:250 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



$1 \times 10^6$  A549 cells were intracellularly stained with 0.25 ug Beta galactosidase Recombinant antibody (83706-6-RR, Clone:240788F1) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Bi-layer interferometry (BLI) kinetic assays of 83706-6-RR against Human Beta galactosidase were performed. The affinity constant is below 1 pM.