

Basic Information

Product Name	Anti-Beta Galactosidase/GLB1 Antibody	
Gene Name	GLB1	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	mouse, rat	
Tested Application	WB, IHC, FCM, ICC/IF, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived rat GLB1/Beta-galactosidase recombinant protein (Position: R103-I646).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	65-85 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	Immunocytochemistry/Immunofluorescence (ICC/IF):	1:50-400
	Flow Cytometry (Fixed):	1:50-200
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000
	(Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

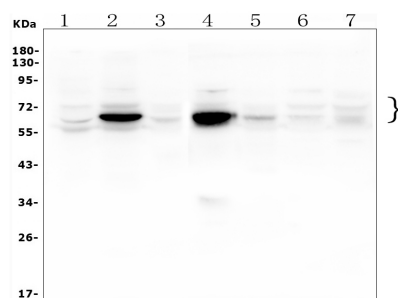
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

Galactosidase, beta 1, also known as GLB1, is a protein which in humans is encoded by the GLB1 gene. It is mapped to 3p22.3. This gene encodes a member of the glycosyl hydrolase 35 family of proteins. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate the mature lysosomal enzyme. This enzyme catalyzes the hydrolysis of a terminal beta-linked galactose residue from ganglioside substrates and other glycoconjugates. Mutations in this gene may result in GM1-gangliosidosis and Morquio B syndrome.

Selected Validation Data



Western blot analysis of Beta Galactosidase/GLB1 using anti-Beta Galactosidase/GLB1 antibody (A01829-3). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: rat lung tissue lysates,

Lane 2: rat liver tissue lysates,

Lane 3: rat testis tissue lysates,

Lane 4: mouse liver tissue lysates,

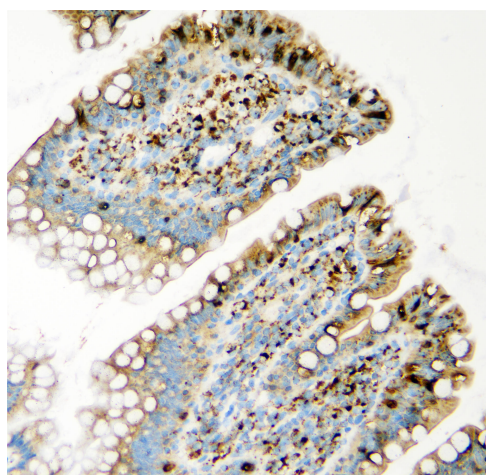
Lane 5: mouse testis tissue lysates,

Lane 6: mouse HEPA1-6 whole cell lysates,

Lane 7: mouse Neuro-2a whole cell lysates.

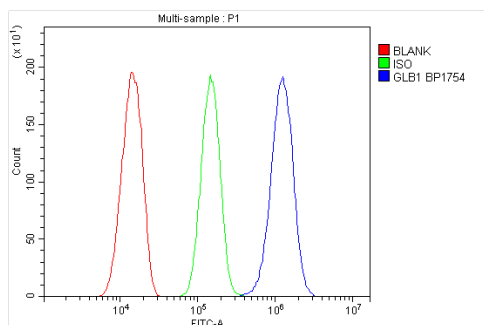
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-Beta Galactosidase/GLB1 antigen affinity purified polyclonal antibody (A01829-3) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Beta Galactosidase/GLB1 at approximately 65-85 kDa. The expected band size for Beta Galactosidase/GLB1 is at 73 kDa.



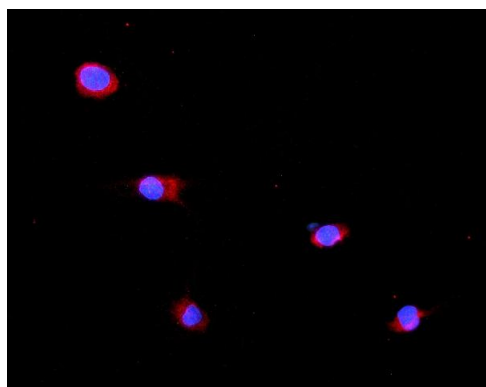
IHC analysis of Beta Galactosidase/GLB1 using anti-Beta Galactosidase/GLB1 antibody (A01829-3).

Beta Galactosidase/GLB1 was detected in a paraffin-embedded section of rat intestine tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-Beta Galactosidase/GLB1 Antibody (A01829-3) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



Flow Cytometry analysis of Hepa1-6 cells using anti-Beta Galactosidase/GLB1 antibody (A01829-3).

Overlay histogram showing Hepa1-6 cells stained with A01829-3 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Beta Galactosidase/GLB1 Antibody (A01829-3) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



ICC/IF analysis of Beta Galactosidase/GLB1 using anti-Beta Galactosidase/GLB1 antibody (A01829-3).

Beta Galactosidase/GLB1 was detected in an immunocytochemical section of NRK cells. Fluoro550-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog#BA1135) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).