

β-Galactosidase (PTR1393) Mouse mAb

CatalogNo: YM4724 **Recombinant** 

Key Features

Host Species

- Mouse

Reactivity

- Human, Mouse, Rat

Applications

- WB, IF, ELISA

MW

- 76kD (Calculated)
65kD (Observed)

Storage

Storage* -15°C to -25°C/1 year (Do not lower than -25°C)

Formulation PBS, 50% glycerol, 0.05% Proclin 300, 0.05% BSA

Recommended Dilution Ratios

WB 1:500-2000

IF 1:100-500

ELISA 1:1000-5000

Basic Information

Clonality Monoclonal

Clone Number PTR1393

Immunogen Information

Immunogen AA range: 1-100

Specificity This antibody detects endogenous levels of Beta Galactosidase protein.

| Target Information

Gene name GLB1

Protein Name Beta-galactosidase

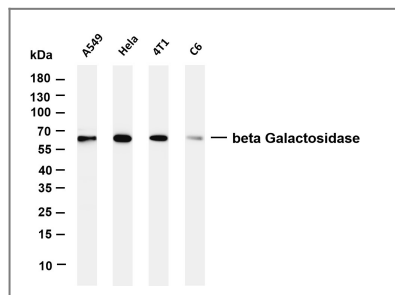
Organism	Gene ID	UniProt ID
Human	2720 ;	P16278 ;
Mouse		P23780 ;

Cellular Localization Lysosome

Tissue specificity Detected in placenta (at protein level) (PubMed:8383699). Detected in fibroblasts and testis (PubMed:2511208).

Function Catalytic activity:Hydrolysis of terminal non-reducing beta-D-galactose residues in beta-D-galactosides.,Disease:Defects in GLB1 are the cause of GM1-gangliosidosis type 1 (GM1G1) [MIM:230500]; also known as infantile GM1-gangliosidosis. GM1-gangliosidosis is an autosomal recessive lysosomal storage disease marked by the accumulation of GM1 gangliosides, glycoproteins and keratan sulfate primarily in neurons of the central nervous system. GM1G1 is characterized by onset within the first three months of life, central nervous system degeneration, coarse facial features, hepatosplenomegaly, skeletal dysmorphology reminiscent of Hurler syndrome, and rapidly progressive psychomotor deterioration. Urinary oligosaccharide levels are high. It leads to death usually between the first and second year of life.,Disease:Defects in GLB1 are the cause of GM1-gangliosidosis type 2 (GM1G2) [MIM:230600]; also known as late infantile/juvenile GM1-gangliosidosis. GM1G2 is characterized by onset between ages 1 and 5. The main symptom is locomotor ataxia, ultimately leading to a state of decerebration with epileptic seizures. Patients do not display the skeletal changes associated with the infantile form, but they nonetheless excrete elevated amounts of beta-linked galactose-terminal oligosaccharides. Inheritance is autosomal recessive.,Disease:Defects in GLB1 are the cause of GM1-gangliosidosis type 3 (GM1G3) [MIM:230650]; also known as adult or chronic GM1-gangliosidosis. GM1G3 is characterized by a variable phenotype. Patients show mild skeletal abnormalities, dysarthria, gait disturbance, dystonia and visual impairment. Visceromegaly is absent. Intellectual deficit can initially be mild or absent but progresses over time. Inheritance is autosomal recessive.,Disease:Defects in GLB1 are the cause of mucopolysaccharidosis type 4B (MPS4B) [MIM:253010]; also known as Morquio syndrome B. MPS4B is a form of mucopolysaccharidosis type 4, an autosomal recessive lysosomal storage disease characterized by intracellular accumulation of keratan sulfate and chondroitin-6-sulfate. Key clinical features include short stature, skeletal dysplasia, dental anomalies, and corneal clouding. Intelligence is normal and there is no direct central nervous system involvement, although the skeletal changes may result in neurologic complications. There is variable severity, but patients with the severe phenotype usually do not survive past the second or third decade of life.,Function:Cleaves beta-linked terminal galactosyl residues from gangliosides, glycoproteins, and glycosaminoglycans.,Function:Isoform 2 has no beta-galactosidase catalytic activity, but plays functional roles in the formation of extracellular elastic fibers (elastogenesis) and in the development of connective tissue. Seems to be identical to the elastin-binding protein (EBP), a major component of the non-integrin cell surface receptor expressed on fibroblasts, smooth muscle cells, chondroblasts, leukocytes, and certain cancer cell types. In elastin producing cells, associates with tropoelastin intracellularly and functions as a recycling molecular chaperone which facilitates the secretions of tropoelastin and its assembly into elastic fibers.,online information:Beta-galactosidase entry,similarity:Belongs to the glycosyl hydrolase 35 family.,subcellular location:Localized to the perinuclear area of the cytoplasm but not to lysosomes.,

Validation Data



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-beta Galactosidase (PTR1393) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: A549 Lane 2: HeLa Lane 3: 4T1 Lane 4: C6 Predicted band size: 65kDa Observed band size: 65kDa

Contact information

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Please scan the QR code to access additional product information:
β-Galactosidase (PTR1393) Mouse mAb

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