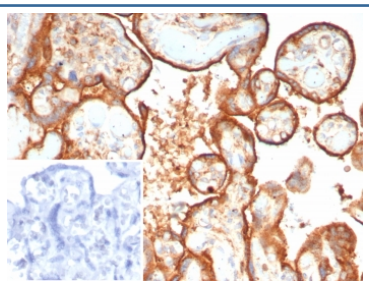
Hexosaminidase B Antibody HEXB/7762 / Lysosomal Beta-Hexosaminidase Antibody [clone HEXB/7762] (V5089)

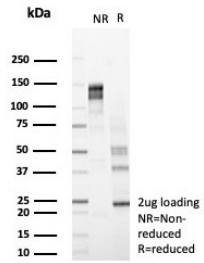
Catalog No.	Formulation	Size
V5089-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V5089-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V5089SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2, kappa
Clone Name	HEXB/7762
Purity	Protein A/G affinity
UniProt	P07686
Localization	Lysosome
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Limitations	This Hexosaminidase B Antibody HEXB/7762 / Lysosomal Beta-Hexosaminidase Antibody is available for research use only.



Hexosaminidase B Antibody HEXB/7762 in Human Placenta IHC. Immunohistochemistry testing of clone HEXB/7762 in FFPE human placenta tissue shows strong granular cytoplasmic staining in trophoblast cells, consistent with the intracellular lysosomal localization of beta-hexosaminidase. The secondary-only control inset shows minimal background staining.



Purified Hexosaminidase B Antibody HEXB/7762 SDS-PAGE. Electrophoretic analysis of 2 ug of purified, BSA-free clone HEXB/7762 under non-reducing (NR) and reducing (R) conditions. The non-reduced sample shows predominantly intact antibody, while reduction produces the expected immunoglobulin heavy and light chain bands at approximately 50 and 25 kDa, respectively, demonstrating the purified antibody preparation.

Description

Hexosaminidase B Antibody HEXB/7762 / Lysosomal Beta-Hexosaminidase Antibody recognizes the beta subunit of beta-hexosaminidase, encoded by the HEXB gene. HEXB is synthesized as a precursor protein that undergoes processing within the endosomal-lysosomal system to form a mature lysosomal enzyme subunit. The beta subunit can associate with another beta subunit to form beta-hexosaminidase B (Hex B), or with the alpha subunit encoded by HEXA to form beta-hexosaminidase A (Hex A).

Hex A and Hex B are lysosomal glycosidases that participate in the degradation of glycosphingolipids and other glycoconjugates. Hex A, composed of alpha and beta subunits, works with the GM2 activator protein to degrade GM2 ganglioside. Hex B is a beta-beta homodimer with overlapping but distinct substrate specificity. Through its participation in both enzyme complexes, the HEXB beta subunit is an important component of normal lysosomal catabolism.

Pathogenic variants in HEXB cause Sandhoff disease, a GM2 gangliosidosis characterized by deficient activity of both Hex A and Hex B. Loss of beta-hexosaminidase function results in progressive accumulation of GM2 ganglioside and related substrates, with particularly severe consequences in the nervous system. HEXB is therefore widely studied in lysosomal storage disease, sphingolipid metabolism, neurodegeneration and mechanisms governing lysosomal function.

Clone HEXB/7762 is a mouse monoclonal antibody generated against recombinant human HEXB protein. NSJ Bioreagents provides this Hexosaminidase B Antibody for research into beta-hexosaminidase expression, lysosomal biology and GM2 ganglioside metabolism. A Lysosomal Beta-Hexosaminidase Antibody can support investigation of the HEXB-containing enzyme complexes and their roles in cellular glycoconjugate degradation.

Explore our Neuroscience Antibodies page for additional reagents targeting proteins involved in neuronal function, neurodegeneration and neurological disease research.

Application Notes

Optimal dilution of the Hexosaminidase B Antibody HEXB/7762 / Lysosomal Beta-Hexosaminidase Antibody should be determined by the researcher.

Immunogen

A recombinant fragment of the human protein was used as the immunogen for the Hexosaminidase B antibody.

Storage

Aliquot the Hexosaminidase B antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Hexosaminidase B antibody, HEXB antibody, beta-hexosaminidase beta subunit antibody, beta-hexosaminidase subunit beta antibody, Hex B antibody

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