



Chitotriosidase Monoclonal Antibody

Catalog No	BYab-13814
Isotype	IgG
Reactivity	Human
Applications	WB;ELISA
Gene Name	CHIT1
Protein Name	Chitotriosidase-1
Immunogen	Purified recombinant fragment of Chitotriosidase (aa22-137) expressed in E. Coli.
Specificity	Chitotriosidase Monoclonal Antibody detects endogenous levels of Chitotriosidase protein.
Formulation	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CHIT1; Chitotriosidase-1; Chitinase-1
Observed Band	
Cell Pathway	Secreted. Lysosome. A small proportion is lysosomal.
Tissue Specificity	Detected in spleen. Secreted by cultured macrophages.
Function	catalytic activity:Random hydrolysis of N-acetyl-beta-D-glucosaminide (1->4)-beta-linkages in chitin and chitodextrins.,disease:Very high plasma levels of CHIT1 are found in patients with Gaucher disease type 1 (GD I). This can be used as diagnostic aid and to evaluate the success of treatment. Successful therapy brings the CHIT1 activity levels back to normal.,function:Degrades chitin and chitotriose. May participate in the defense against nematodes and other pathogens. Isoform 3 has no enzymatic activity.,polymorphism:A 24 bp duplication in exon 10 leads to the activation of an alternative splice site and the production of an inactive protein. About 6% of the population are deficient for CHIT1 activity, while 35% are carriers and show reduced enzyme levels. People with CHIT1 deficiency appear perfectly healthy.,similarity:Belongs to the glycosyl hydrolase 18 family.,similarity:Belongs

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Background

Chitotriosidase is secreted by activated human macrophages and is markedly elevated in plasma of Gaucher disease patients. The expression of chitotriosidase occurs only at a late stage of differentiation of monocytes to activated macrophages in culture. Human macrophages can synthesize a functional chitotriosidase, a highly conserved enzyme with a strongly regulated expression. This enzyme may play a role in the degradation of chitin-containing pathogens. Several alternatively spliced transcript variants have been described for this gene. [provided by RefSeq, Jan 2012],

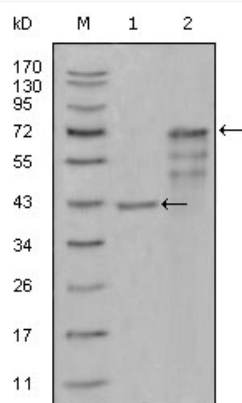
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis using Chitotriosidase Monoclonal Antibody against truncated Trx-CHIT1 recombinant protein (1) and truncated CHIT1 (aa22-466)-hIgGFc transfected CHO-K1 cell lysate (2).