



# Chitotriosidase Monoclonal Antibody

<b>Catalog No</b>	YP-Ab-13814
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human
<b>Applications</b>	WB;ELISA
<b>Gene Name</b>	CHIT1
<b>Protein Name</b>	Chitotriosidase-1
<b>Immunogen</b>	Purified recombinant fragment of Chitotriosidase (aa22-137) expressed in E. Coli.
<b>Specificity</b>	Chitotriosidase Monoclonal Antibody detects endogenous levels of Chitotriosidase protein.
<b>Formulation</b>	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
<b>Source</b>	Monoclonal, Mouse
<b>Purification</b>	Affinity purification
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	CHIT1; Chitotriosidase-1; Chitinase-1
<b>Observed Band</b>	
<b>Cell Pathway</b>	Secreted. Lysosome. A small proportion is lysosomal.
<b>Tissue Specificity</b>	Detected in spleen. Secreted by cultured macrophages.
<b>Function</b>	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
<b>Background</b>	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],

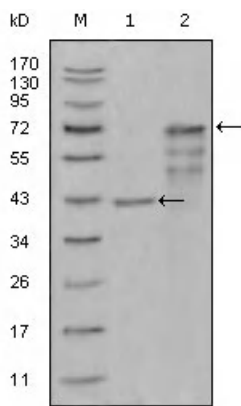
**matters needing attention**

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)-hlgGfc transfected CHO-K1 cell lysate (2).