



ELNE Rabbit mAb

Catalog No	YP-rAb-17472
Isotype	IgG
Reactivity	Human,Bovine
Applications	WB,IF,IP,ELISA
Gene Name	ELANE ELA2
Protein Name	Neutrophil elastase (Bone marrow serine protease) (Elastase-2) (Human leukocyte elastase) (HLE) (Medullasin) (PMN elastase)
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200;
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15° C to -25° C/1 year(Do not lower than -25° C)
Synonyms	
Observed Band	30kD
Calculated Molecular Weight	29kD
Cell Pathway	Cytoplasmic vesicle, phagosome . Localized in phagolysosomes following ingestion of E.coli by neutrophils. .
Tissue Specificity	Bone marrow cells. Neutrophil (PubMed:10947984).
Function	Catalytic activity:Hydrolysis of proteins, including elastin. Preferential cleavage: Val- -Xaa > Ala- -Xaa.,Disease:Defects in ELA2 are a cause of cyclic haematopoiesis (CH) [MIM:162800]; also known as cyclic neutropenia. CH is an autosomal dominant disease in which blood-cell production from the bone marrow oscillates with 21-day periodicity. Circulating neutrophils vary between almost normal numbers and zero. During intervals of neutropenia, affected individuals are at risk for opportunistic infection. Monocytes, platelets, lymphocytes and reticulocytes also cycle with the same frequency.,Disease:Defects in ELA2 are the cause of autosomal dominant severe congenital neutropenia type 1 (SCN1) [MIM:202700]. Severe congenital neutropenia is a heterogeneous disorder of hematopoiesis characterized by a maturation arrest of granulopoiesis at the level of promyelocytes with peripheral blood absolute neutrophil counts below 0.5 x 10(9)/l and early onset of severe bacterial infections.,Function:Modifies the





functions of natural killer cells, monocytes and granulocytes. Inhibits C5a-dependent neutrophil enzyme release and chemotaxis.,online information:ELA2 mutation db,online information:Elastase entry,similarity:Belongs to the peptidase S1 family. Elastase subfamily.,similarity:Contains 1 peptidase S1 domain.,subunit:Interacts with NOTCH2NL.,tissue specificity:Bone marrow cells.,

Background

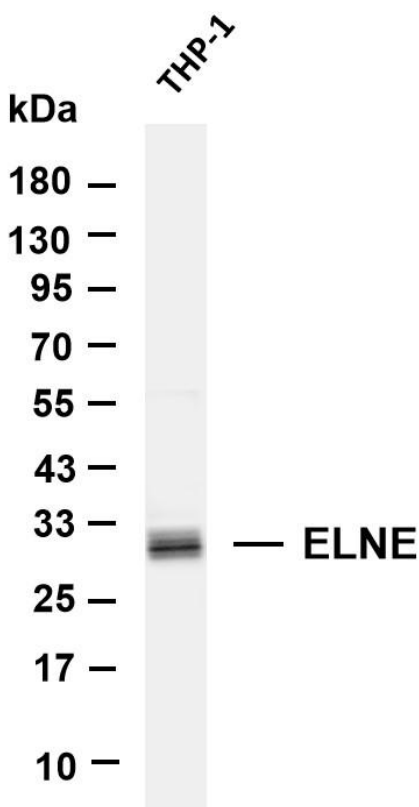
Elastases form a subfamily of serine proteases that hydrolyze many proteins in addition to elastin. Humans have six elastase genes which encode structurally similar proteins. The encoded preproprotein is proteolytically processed to generate the active protease. Following activation, this protease hydrolyzes proteins within specialized neutrophil lysosomes, called azurophil granules, as well as proteins of the extracellular matrix. The enzyme may play a role in degenerative and inflammatory diseases through proteolysis of collagen-IV and elastin. This protein also degrades the outer membrane protein A (OmpA) of *E. coli* as well as the virulence factors of such bacteria as *Shigella*, *Salmonella* and *Yersinia*. Mutations in this gene are associated with cyclic neutropenia and severe congenital neutropenia (SCN). This gene is present in a gene cluster on chromosome 19. [provided by RefSeq, Jan 2016]

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.



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-ELNE antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: THP-1 Predicted band size: 29kDa Observed band size: 30kDa

