## **Neutrophil elastase**

CONTACT INFORMATION: University of Oxford marketed by Ximbio.com

TYPE: mouse anti human

CLONE NAME: NP57

PROTEIN: Neutrophil elastase

PROTEIN WEB: https://www.omim.org/entry/130130

ANTIGEN USED: Neutrophil granule proteins

FUSION PARTNER: P3/NS1/1-Ag4.1

ISOTYPE: IgG1 kappa

SPECIES REACTIVITY: Human

PREPARATION AND STORAGE: Aliquot and store at 4C. Do not freeze

COMMERCIALIZED BY: Ximbio.com
APP RECOMMENDED: IHC IF IP WB

## **DESCRIPTION**

Human Neutrophil Elastase (HNE) belongs to the chymotrypsin family of serine proteases able to solubilize fibrous elastin, an important extracellular matrix protein that has the unique property of elastic recoil, and plays a major structural function in lungs, arteries, skin and ligaments. HNE is primarily located in the azurophil granules of polymorphonuclear leukocytes, but has also been detected in nuclear membrane, Golgi complex, ER and the mitochondria of these cells. The enzyme is involved in the tissue destruction and inflammation and implicated in numerous diseases, including emphysema, chronic obstructive pulmonary disease, cystic fibrosis, ischemic-reperfusion injury and rheumatoid arthritis.

NP57 is useful for the differential diagnosis of acute leukaemia by APAAP labeling of cell smears. It may also be of value for the histopathological diagnosis of tumour deposits in myeloid leukaemia and for the detection of neutrophils in paraffin sections

## PUBLICATION DESCRIBING ANTIBODY CHARACTERIZATION/VALIDATION

J Clin Pathol. 1988 Aug;41(8):853-60.

Use of monoclonal antibody against human neutrophil elastase in normal and leukaemic myeloid cells.

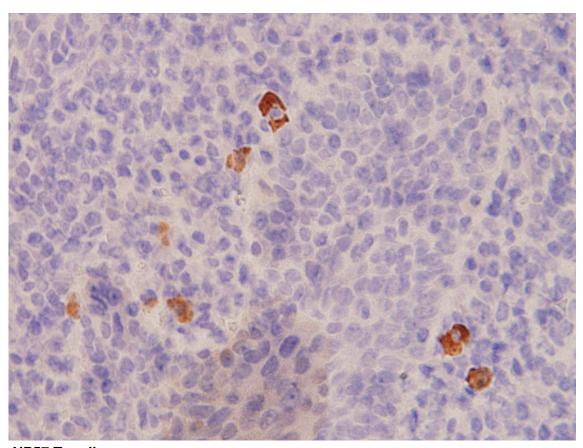
Pulford KA1, Erber WN, Crick JA, Olsson I, Micklem KJ, Gatter KC, Mason DY.

PMID: 2844860

https://www.ncbi.nlm.nih.gov/pubmed/2844860

## **APPLICATIONS**

IHC Techniques	Clone	Dilution	Antibody concentration	Antigen retrieval method	Visualization kit	Positive control	Negative control	Protein localization	Positivity in other species
Frozen tissue and cytospins									
Paraffin tissue									
	NP57	neat	supernatant	Citrate	Dako Envision	Tonsil			
Immunofluorescence									



NP57 Tonsil
Tonsil stained with neat supernatant from NP57 hybridoma, detection using Dako Envision kit, 40x power image