

**CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

<b>Product name</b>	Elastase, Human, pAb		
<b>Catalog number</b>	HP9027		
<b>Lot number</b>	-	<b>Expiry date</b>	-
<b>Volume</b>	1 ml	<b>Amount</b>	100 µg
<b>Formulation</b>	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	<b>Concentration</b>	100 µg/ml
<b>Host Species</b>	Rabbit IgG	<b>Conjugate</b>	None
<b>Endotoxin</b>	N.A.	<b>Purification</b>	Protein G
<b>Storage</b>	4°C		

**Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								
Yes						•		
No	•	•						
N.D.			•	•	•		•	•

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:10.

**General Information**

**Description** Leukocyte elastase, a major serine proteinase in man, is predominantly present in the azurophilic granules of neutrophils and monocytes. Elastase has a broad range of extracellular matrix substrates including elastin, proteoglycans, collagen and fibronectin. The action of elastase is controlled by serine proteinase inhibitors. Elastase, when released during inflammation, is rapidly bound by its two main inhibitors, alpha1-PI and alpha2-macroglobuline to form elastase-inhibitor complexes. In addition mucosa secretions may contain the locally secreted elastase inhibitors elafin/SKALP and SLPI. When secreted at sites of inflammation elastase can cause severe tissue damage. An important role has been suggested for human elastase in various inflammatory disorders, including pulmonary emphysema, sepsis, arthritis, nephritis and certain skin diseases. Elastase induces the production of IL-8 in human bronchial epithelial, a proces that occurs in part through TLR4.

- References**
1. Dentener, M et al; Bacterial/permiability-increasing protein release in whole blood ex vivo: strong induction by lipopolysaccharide and tumor necrosis factor-alpha. J Infect Dis 1996, 175: 108
  2. Hiltermann, J et al; Ozone-induced inflammation assessed in sputum and bronchial lavage fluid from asthmatics: a new noninvasive tool in epidemiologic studies on air pollution and asthma. Free Radic Biol Med 1999, 27: 1448

**Storage&stability** Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

**Precautions** For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC  
Robbert Zwinkels

Date  
13/03/2018

Do you have any questions or comments regarding this product? Please contact us via [support@hycultbiotech.com](mailto:support@hycultbiotech.com).