

Product datasheet for **AP00714PU-N**

Neutrophil Elastase (ELANE) Sheep Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Recommended Dilution:	Suitable for use in Western blotting . It has been evaluated using reducing conditions and a 10-20% SDS gel. Suitability for use in Immunohistochemical procedures and enzyme-linked immunoasorbent assays has not been assessed but use in such assays should not necessarily be excluded. The following dilutions are for guidance only: Antigen: 6 µg Elastase. Antibody: 1/100. Secondary Antibody: 1/1000 DK-a. Sheep/Goat immunoglobulins-peroxidase.
Reactivity:	Human
Host:	Sheep
Clonality:	Polyclonal
Immunogen:	Human Elastase: Purified from neutrophils
Specificity:	This antibody is shown to be specific for Human Elastase by Western blotting and Gel Diffusion techniques.
Formulation:	Glycine Buffered Saline, pH 7.4 containing 0.09% Sodium Azide, 0.1% E-Amino-n-Caproic Acid, 0.01% Benzamidine, 1 mM EDTA State: Purified State: Liquid purified Ig fraction
Concentration:	lot specific
Purification:	Delipidated and if necessary adsorbed to monospecificity by use of solid-phase adsorbants. Following Adsorption an Immunoglobulin fraction is produced by Ion-Exchange Chromatography and preservatives added.
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C.
Stability:	Shelf life: one year from despatch.
Gene Name:	elastase, neutrophil expressed



[View online »](#)

Database Link: [Entrez Gene 1991 Human P08246](#)

Background: Elastases form a subfamily of serine proteases that hydrolyse many proteins in addition to elastin. Neutrophil elastase (elastase 2) hydrolyses proteins within specialized neutrophil lysosomes, called azurophil granules, as well as proteins of the extracellular matrix following the protein's release from activated neutrophils. Elastase 2 may play a role in degenerative and inflammatory diseases by its proteolysis of collagen IV and elastin of the extracellular matrix. This protein degrades the outer membrane protein A (OmpA) of *E. coli* as well as the virulence factors of such bacteria as *Shigella*, *Salmonella* and *Yersinia*. Elastase is a serine protease which exhibits endopeptidase activity on many proteins, its principal substrate, however, is elastin and it is unique among proteases in its ability to hydrolyze native elastin. It is present in the pancreas, leukocytes and serum. Elastase consists of single polypeptide chain with a molecular weight of 29.5kDa

Synonyms: ELANE, ELA2, Neutrophil elastase, Elastase-2, PMN elastase, Bone marrow serine protease, Medullasin, Human leukocyte elastase, HLE