

Anti-Elafin/Skalp PI3 Antibody Picoband™ (monoclonal, C7)

Catalog # ABO14342

Product Information

Application	IHC, E
Primary Accession	P19957
Host	Mouse
Isotype	Mouse IgG1
Reactivity	Human
Clonality	Monoclonal
Format	Lyophilized
Description	Anti-Elafin/Skalp PI3 Antibody Picoband™ (monoclonal, C7) . Tested in ELISA, IHC applications. This antibody reacts with Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	5266
Other Names	Elafin, Elastase-specific inhibitor, ESI, Peptidase inhibitor 3, PI-3, Protease inhibitor WAP3, Skin-derived antileukoproteinase, SKALP, WAP four-disulfide core domain protein 14, PI3, WAP3, WFDC14
Calculated MW	12270
Application Details	Immunohistochemistry (Paraffin-embedded Section), 0.5-1 µg/ml ELISA (Cap), 1-5 µg/ml
Subcellular Localization	Secreted.
Source	Eukaryota
Contents	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Clone Names	Clone: C7
Immunogen	E. coli-derived human Elafin/Skalp recombinant protein (Position: A61-Q117).
Cross Reactivity	No cross-reactivity with other proteins.
Storage	Store at -20 °C for one year from date of receipt. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for six months. Avoid repeated freeze-thaw cycles.

Protein Information

Name	PI3
Synonyms	WAP3, WFDC14
Function	Neutrophil and pancreatic elastase-specific inhibitor of skin. It may prevent elastase-mediated tissue proteolysis. Has been shown to inhibit the alpha-4-beta-2/CHRNA2-CHRNA2 nicotinic acetylcholine receptor and to produce a weak inhibition on Kv11.1/KCNH2/ERG1 and on the transient receptor potential cation channel subfamily V member 1 (TRPV1) (PubMed: 29483648).
Cellular Location	Secreted.

Background

Elafin, also known as peptidase inhibitor 3 or skin-derived antileukoprotease (SKALP), is a protein that in humans is encoded by the PI3 gene. This gene encodes an elastase-specific inhibitor that functions as an antimicrobial peptide against Gram-positive and Gram-negative bacteria, and fungal pathogens. The protein contains a WAP-type four-disulfide core (WFDC) domain, and is thus a member of the WFDC domain family. Most WFDC gene members are localized to chromosome 20q12-q13 in two clusters: centromeric and telomeric. And this gene belongs to the centromeric cluster. Expression of this gene is upregulated by bacterial lipopolysaccharides and cytokines.

Images

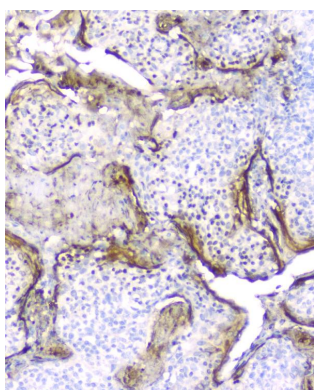


Figure 1. IHC analysis of Elafin using anti-Elafin antibody (M00364). Elafin was detected in paraffin-embedded section of human tonsil tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml mouse anti-Elafin Antibody (M00364) overnight at 4°C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1021) with DAB as the chromogen.

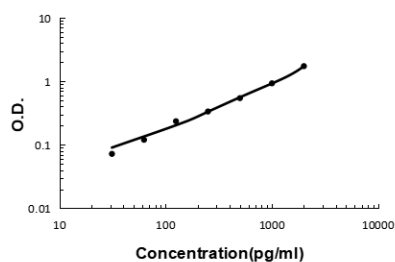


Figure 2. Sandwich ELISA - Recombinant human Elafin/Skalp protein standard curve. Use in combination with reagents from Human Elafin/Skalp ELISA Kit EZ-Set (DIY Antibody Pairs) (EZ1117).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.