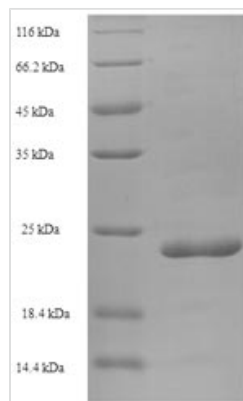




# Recombinant Human Elafin (PI3)

<b>Product Code</b>	CSB-EP017952HU
<b>Relevance</b>	Neutrophil and pancreatic elastase-specific inhibitor of skin. It may prevent elastase-mediated tissue proteolysis.
<b>Abbreviation</b>	Recombinant Human PI3 protein
<b>Storage</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
<b>Uniprot No.</b>	P19957
<b>Alias</b>	Elastase-specific inhibitor ;ESI Peptidase inhibitor 3 ;PI-3; Protease inhibitor WAP3 Skin-derived antileukoproteinase ;SKALP WAP four-disulfide core domain protein 14
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	Greater than 90% as determined by SDS-PAGE.
<b>Sequence</b>	AQEPVKGPVSTKPGSCPIILIRCAMLNPPNRCLKDTC PGIKKCCEGSCGMAC FVPQ
<b>Research Area</b>	Signal Transduction
<b>Source</b>	E.coli
<b>Target Names</b>	PI3
<b>Protein Names</b>	Recommended name: Elafin Alternative name(s): Elastase-specific inhibitor Short name= ESI Peptidase inhibitor 3 Short name= PI-3 Protease inhibitor WAP3 Skin-derived antileukoproteinase Short name= SKALP WAP fo
<b>Expression Region</b>	61-117aa
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	N-terminal 6xHis-SUMO-tagged
<b>Mol. Weight</b>	22.0kDa
<b>Protein Length</b>	Full Length of Mature Protein
<b>Image</b>	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

## Description

CUSABIO team inserts the gene coding for the Human PI3 protein (61-117aa) into a plasmid vector to form recombinant plasmid, which is then introduced into e.coli cells. e.coli cells demonstrating successful uptake of the recombinant plasmid are selected based on their ability to survive in the presence of a specific antibiotic. The positive e.coli cells are cultured under conditions that promote the expression of the gene of interest. A N-terminal 6xHis-SUMO tag is linked to the protein. Following expression, affinity purification is used to isolate and purify the recombinant Human PI3 protein from the cell lysate. Denaturing SDS-PAGE is then applied to resolve the resulting recombinant Human PI3 protein, demonstrating a purity greater than 90%.

## Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

## Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.