

**Recombinant Human PI3 / Elafin / WFDC14 Protein (His tag)**

**Cat.NO.: TP07845**

3th Edition

**Synonyms:**cementoin;ESI;MGC13613;SKALP;WAP3;WFDC14

**Description:**Elafin, also known as Elastase-specific inhibitor, Peptidase inhibitor 3, Protease inhibitor WAP3, Skin-derived antileukoproteinase, WAP four-disulfide core domain protein 14, PI3, WAP3 and WFDC14, is a secreted protein which contains one WAP domain. Elafin / PI3 consists of two domains: the transglutaminase substrate domain (cementoin moiety) and the elastase inhibitor domain. The transglutaminase substrate domain at the N-terminus serves as an anchor to localize elafin covalently to specific sites on extracellular matrix proteins. The serine anti-protease Elafin / PI3 is expressed by monocytes, alveolar macrophages, neutrophils, and at mucosal surfaces and possesses antimicrobial activity. It is also known to reduce lipopolysaccharide-induced neutrophil influx into murine alveoli as well as to abrogate lipopolysaccharide-induced production of matrix metalloprotease 9, macrophage inhibitory protein 2, and tumor necrosis factor-alpha by as-yet unidentified mechanisms. Elafin / PI3 is a neutrophil serine protease inhibitor expressed in lung and displaying anti-inflammatory and anti-bacterial properties. Elafin / PI3 is a neutrophil and pancreatic elastase-specific inhibitor of skin. It may prevent elastase-mediated tissue proteolysis. Elafin / PI3 will regulate proteolytic enzymes during menstruation and will contribute to the innate defense against uterine infection.

**Form:**PBS

**Molecular Weight:**11.3 kDa

**Sequences:**Met 1-Gln 117

**Purity:**> 95% by HPLC

**Concentration:**

**Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.