

**Recombinant Human Lacritin/LACRT Protein(N-6His)**

**Cat.NO.: TP05433**

3th Edition

**Synonyms:** Extracellular Glycoprotein Lacritin; LACRT

**Description:** Extracellular glycoprotein lacritin (Lacritin) is a secreted protein which consists of 119 amino acids after cleavage of the N-terminal signal peptide and displays several predicted alpha helices, mostly in the C-terminal half. Lacritin is highly expressed in the lacrimal gland, localizes primarily to secretory granules and secretory fluid. Lacritin modulates lacrimal acinar cell secretion, promotes ductal cell proliferation, and stimulates signaling through tyrosine phosphorylation and release of calcium. Lacritin is thus a multifunctional prosecretory mitogen with cell survival activity. Natural or bacterial cleavage of lacritin releases a C-terminal fragment that is bactericidal. Lacritin cell targeting is dependent on the cell surface heparan sulfate proteoglycan syndecan-1 (SDC1). Binding utilizes an enzyme-regulated 'off-on' switch in which active epithelial heparanase (HPSE) cleaves off heparan sulfate to expose a binding site in the N-terminal region of syndecan-1's core protein.

**Form:** PBS

**Molecular Weight:** 14.6 kDa

**Sequences:** Ala19-Ala138

**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.