



# Recombinant Protein Technical Manual

**Recombinant Human SLPI Protein (aa 132, His Tag)(Active)**  
**RPES4128**

## Product Data:

**Product SKU:** RPES4128

**Size:** 100µg

**Species:** Human

**Expression host:** Baculovirus-Insect Cells

**Uniprot:** P03973

## Protein Information:

**Molecular Mass:** 13.1 kDa

**AP Molecular Mass:** 15 kDa

**Tag:** C-His

**Bio-activity:** Measured by its ability to inhibit trypsin cleavage of a fluorogenic peptide substrate, Mca-RPKPVE-Nval-WRK (Dnp)-NH<sub>2</sub> (Catalog # ES002). The IC<sub>50</sub> value is < 1 Nm.

**Purity:** > 90 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile 20mM Tris, 500mM NaCl, 10% gly, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** ALK1;ALP;BLPI;HUSI;HUSI-I;MPI;WAP4;WFDC4

## Immunogen Information:

**Sequence:** Met 1-Ala132

## Background:

Secretory leukoprotease inhibitor (SLPI), also called antileukoprotease (ALP), is a 12-kDa, nonglycosylated serine protease inhibitor present in mucous secretions. It is thought to play a role in protecting the mucosae from injury associated with inflammation. SLPI is locally produced by serous cells, including bronchial submucosal glands. Elafin and SLPI are members of larger families of proteins secreted predominantly at mucosal sites, and have been shown to be modulated in multiple pathological conditions. Elafin and SLPI are structurally related in that both have a fold with a four-disulfide core or whey acidic protein (WAP) domain responsible for inhibiting proteases. SLPI is a prominent innate immune protein of the respiratory tract, possessing serine protease inhibitor activity, antibacterial activity, and anti-inflammatory/immunomodulatory activity.