



# Recombinant Protein Technical Manual

## Recombinant Human STING/TMEM173 Protein (Sumo & His Tag) RPES4727

### Product Data:

**Product SKU:** RPES4727

**Size:** 10µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** Q86WV6

### Protein Information:

**Molecular Mass:** 33.8 kDa

**AP Molecular Mass:** 35 kDa

**Tag:** N-Sumo-6His

**Bio-activity:**

**Purity:** > 95% as determined by reducing SDS-PAGE.

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

**Storage:** Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

**Shipping:** This product is provided as liquid. It is shipped at frozen temperature with blue ice. Upon receipt, store it immediately at < -20°C.

**Formulation:** Supplied as a 0.2 µm filtered solution of PBS, pH7.4.

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

**Application:**

**Synonyms:** Stimulator of interferon genes protein;TMEM173;Mediator of IRF3 activation;sting;

## Immunogen Information:

**Sequence:** Val155-Val341

## Background:

Stimulator of Interferon Gene (Sting, TMEM173) belongs to the TMEM173 family. STING is 379 amino acids (aa) in length. It contains an N-terminal cytoplasmic region (aa 1-20), four transmembrane segments (aa 21-73), and a C-terminal cytoplasmic domain (aa 174-379). It is ubiquitously expressed in skin endothelial cells, alveolar type 2 pneumocytes, bronchial epithelium and alveolar macrophages. Its subunit structure is associated with the MHC-II complex and interacts with DDX58/RIG-I, MAVS and SSR2, RNF5 and TRIM56 along with TBK1. This type of protein often acts as a facilitator of innate immune signaling that acts as a sensor of cytosolic DNA from bacteria and viruses and promotes the production of type I interferon.