

## Recombinant Protein Technical Manual

# Recombinant Human Mesothelin/MSLN Protein (aa 296-598, His Tag)

**RPES1670** 

**Product Data:** 

**Product SKU:** RPES1670 **Size:** 10μg

Species: Human Cells

**Uniprot:** Q13421-2

#### **Protein Information:**

Molecular Mass: 34.9 kDa

AP Molecular Mass: 38-45 kDa

Tag: C-6His

**Bio-activity:** 

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

**Endotoxin:**  $< 1.0 \text{ EU per } \mu\text{g}$  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 a 0.2 μm filtered solution of PBS, pH7.4.

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

**Application:** 

**Synonyms:** Megakaryocyte potentiating factor; mesothelin; Pre-pro-megakaryocyte-

potentiating factor; soluble MPF mesothelin related protein; CAK1; MPF; MSLN;

SMR; CAK1; CAK1 antigen

## Immunogen Information:

Sequence: Glu296-Ser598

## Background:

Mesothelin is a cell surface glycoprotein whose expression is limited to mesothelial cells of the serosa (pleura, pericardium, and peritoneum) and epithelial cells of the trachea, tonsils, fallopian tube, and kidneys. Mesothelin plays an important role in cell survival, proliferation, migration, invasion, tumor progression, and resistance to chemotherapy. The overexpression of mesothelin can activate NF- $\kappa$ B and signal transducer and activator of transcription 3 (Stat3), inhibit apoptotic signaling and TNF- $\alpha$ -induced apoptosis, and accelerate the G1–S transition. Mesothelin is also found overexpressed in various cancers, including malignant mesothelioma, pancreatic or ovarian carcinoma, sarcomas and in some gastrointestinal or pulmonary carcinomas. As a result of its limited expression in normal tissues, mesothelin has been reported as an ideal tumor-associated marker for the development of targeted therapy.