



# Recombinant Protein Technical Manual

## Recombinant Human SIAE Protein (Human Cells, His Tag)

RPES4927

### Product Data:

**Product SKU:** RPES4927

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** Q9HAT2

### Protein Information:

**Molecular Mass:** 57.0 kDa

**AP Molecular Mass:** 60 kDa

**Tag:** C-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/gel packs. Upon receipt, store it immediately at < -20°C.

**Formulation:** Supplied as a 0.2 µm filtered solution of 20mM TrisHCl, 150mM NaCl, 10% Glycerol, pH 7.5.

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

**Application:**

**Synonyms:** Sialate O-Acetyltransferase; H-Lse; Sialic Acid-Specific 9-O-Acetyltransferase; SIAE; YSG2; AIS6; CSE-C; CSEC

## Immunogen Information:

**Sequence:** Ile24-Lys523

## Background:

Sialate O-Acetyltransferase (SIAE) belongs to the family of hydrolases, specifically those acting on carboxylic ester bonds. SIAE is widely expressed with high expression levels in the testis, prostate, and colon. SIAE catalyzes N-acetyl-O-acetylneuraminate and H<sub>2</sub>O to N-acetylneuraminate and acetate. SIAE removes O-acetyl ester groups from position 9 of the parent sialic acid, N-acetylneuraminic acid. SIAE down-regulates B lymphocyte antigen receptor signaling (involving CD22), and is required for immunological tolerance. Loss of function mutations in SIAE are much more frequently found in humans with autoimmune diseases especially rheumatoid arthritis and type 1 diabetes.