

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

Catalog Number: PKSH033053

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

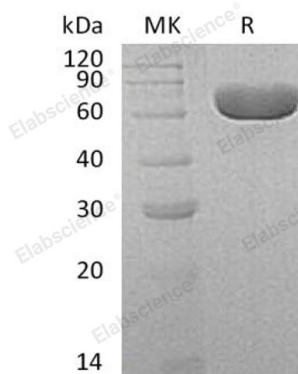
### Description

|               |                                                                              |
|---------------|------------------------------------------------------------------------------|
| Species       | Human                                                                        |
| Source        | HEK293 Cells-derived Human SIAE protein Ile24-Lys523, with an C-terminal His |
| Calculated MW | 57.0 kDa                                                                     |
| Observed MW   | 55-80 kDa                                                                    |
| Accession     | Q9HAT2                                                                       |
| Bio-activity  | Not validated for activity                                                   |

### Properties

|               |                                                                                                                                                 |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Purity        | > 95 % as determined by reducing SDS-PAGE.                                                                                                      |
| Concentration | Subject to label value.                                                                                                                         |
| Endotoxin     | < 1.0 EU per µg of the protein 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 Tris-HCl, 150mM NaCl, 10% Glycerol, pH 7.5.                                                      |

### Data



> 95 % as determined by reducing SDS-PAGE.

### 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.