



Recombinant Protein Technical Manual  
Recombinant Human EDEM2/C20orf31 Protein (His  
Tag)  
RPES3474

#### Product Data:

**Product SKU:** RPES3474

**Size:** 20µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** AAH01371.1

#### Protein Information:

**Molecular Mass:** 54 kDa

**AP Molecular Mass:** 53-58 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 95 % 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 PBS, pH 7.4

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

**Application:**

**Synonyms:** bA4204.1;C20orf31;C20orf49;UNQ573/PRO1135

## Immunogen Information:

**Sequence:** Met 1-Lys492

## Background:

EDEM2, also known as C20orf31, belongs to a family of proteins involved in ER-associated degradation (ERAD) of glycoproteins. In the endoplasmic reticulum (ER), misfolded proteins are retrotranslocated to the cytosol and degraded by the proteasome. Early in this pathway, a proposed luminal ER lectin, EDEM, recognizes misfolded glycoproteins in the ER, disengages the nascent molecules from the folding pathway, and facilitates their targeting for disposal. In humans there are a total of three EDEM homologs. The amino acid sequences of these proteins are different from other lectins but are closely related to the Class I mannosidases (family 47 glycosidases). EDEM2 is one of the EDEM homologs. Overexpression of EDEM2 accelerates the degradation of misfolded alpha1-antitrypsin, indicating that the protein is involved in ERAD.