



# Recombinant Protein Technical Manual

## Recombinant Human CLEC10A/CD301 Protein (His Tag)

RPES0644

### Product Data:

**Product SKU:** RPES0644

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** Q8IUN9

### Protein Information:

**Molecular Mass:** 29.8 kDa

**AP Molecular Mass:** 40 kDa

**Tag:** C-6His

**Bio-activity:**

**Purity:** > 90 % 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 a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.

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

**Application:**

**Synonyms:** C-Type Lectin Domain Family 10 Member A; C-Type Lectin Superfamily Member 14; Macrophage Lectin 2; CD301; CLEC10A; CLECSF13; CLECSF14; HML

## Immunogen Information:

**Sequence:** Gln61-His316

## Background:

C-Type Lectin Domain Family 10 Member A (CLEC10A) is a type II transmembrane C-type lectin that is expressed on immature myeloid dendritic cells and alternatively activated (tolerogenic) macrophages. CLEC10A/MGL binds and internalizes molecules with terminal nonsialylated GalNAc carbohydrates such as the Tn carcinoma antigen. CLEC10A/MGL also binds the GP envelope glycoprotein on Marburg and Ebola viruses and enhances viral entry and infectivity. It constitute a unique class of C-type lectins because of their specificity for galactose and its structural homologues. CLEC10A is thought to participate in the recognition of molecules from both altered self and pathogens due to its monosaccharide specificity for Gal and N-acetylgalactosamine (GalNAc). Human and rat carry a single gene for CLEC10A/MGL, while mouse has two closely related MGL1 and MGL2 genes.