



Recombinant Protein Technical Manual  
Recombinant Mouse CLEC6A/Dectin-2 Protein (His  
Tag)(Active)  
RPES3319

### Product Data:

**Product SKU:** RPES3319

**Size:** 50µg

**Species:** Mouse

**Expression host:** HEK293 Cells

**Uniprot:** NP\_064385.1

### Protein Information:

**Molecular Mass:** 20.9 kDa

**AP Molecular Mass:** 23 kDa

**Tag:** C-His

**Bio-activity:** Measured by its ability to agglutinate human red blood cells. Mouse CLEC4N at 25 µg/ml could agglutinate 1 % HRBC.

**Purity:** > 97 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg of the protein 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:** Clec4n;Clecsf10;Nkcl

## Immunogen Information:

**Sequence:** Ile 44-Leu 209

## Background:

C-type lectin domain family 4 member N (CLEC4N), also known as Dectin-2, is a C-type lectin expressed by dendritic cells (DCs) and macrophages. Members of the C-type lectin domain (CTLD) superfamily are metazoan proteins functionally important in glycoprotein metabolism, mechanisms of multicellular integration and immunity. They share a common fold and are involved in a variety of functions, such as generalized defense mechanisms against foreign agents, discrimination between healthy and pathogen-infected cells, and endocytosis and blood coagulation. Genome-level studies on human, *elegans* and *melanogaster* demonstrated almost complete divergence among invertebrate and mammalian families of CTLD-containing proteins (CTLDcps). The vertebrate CTLDcp family was essentially formed early in vertebrate evolution and is completely different from the invertebrate families. The composition of the CTLDcp superfamily in fish and mammals suggests that large scale duplication events played an important role in the evolution of vertebrates. Dectin-2 is important in host defense against *C. albicans* by inducing Th17 cell differentiation. Dectin-2 constitutes a major fungal pattern recognition receptor (PRR) that can couple to the Syk-CARD9 innate signaling pathway to activate DCs and regulate adaptive immune responses to fungal infection.