

Recombinant Mouse CLEC6A/Dectin-2 Protein (His Tag)

Catalog No. PKSM040769

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

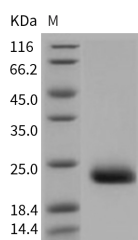
Description

Synonyms	Clec4n;Clecsf10;Nkcl
Species	Mouse
Expression Host	HEK293 Cells
Sequence	Ile 44-Leu 209
Accession	NP_064385.1
Calculated Molecular Weight	20.9 kDa
Observed molecular weight	23 kDa
Tag	C-His
Bioactivity	Measured by its ability to agglutinate human red blood cells. Mouse CLEC4N at 25 µg/ml could agglutinate 1 % HRBC.

Properties

Purity	> 97 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, 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 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 97 % as determined by reducing SDS-PAGE.

Background

C-type lectin domain family 4 member N (CLEC4N), also known as Dectin-2, is a C-type lectin expressed by dendritic

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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.