



Recombinant Protein Technical Manual
Recombinant Human CLEC12A/CLL/DCAL2 Protein
(His Tag)
RPES4856

Product Data:

Product SKU: RPES4856

Size: 10µg

Species: Human

Expression host: HEK293 Cells

Uniprot: EAW96132.1

Protein Information:

Molecular Mass: 26 kDa

AP Molecular Mass: 40-45 kDa

Tag: N-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: BDCA2;CD303;CLECSF11;CLECSF7;CLL;CLL1;DCAL-2;DLEC;HECL;MICL;PRO34150

Immunogen Information:

Sequence: His 75-Ala 275

Background:

CLEC12A is a member of the C-type lectin/C-type lectin-like domain (CTL/CTLD) superfamily. Members of this family share a common protein fold and have diverse functions, such as cell adhesion, cell-cell signaling, glycoprotein turnover, and roles in inflammation and immune response. CLEC12A is a negative regulator of granulocyte and monocyte function. Several alternatively spliced transcript variants of this gene have been described, but the full-length nature of some of these variants has not been determined. C-type lectins are the most diverse and prevalent lectin family in immunity. Using a novel CLEC12A -specific monoclonal antibody, experiments had shown that human CLEC12A was expressed primarily on myeloid cells, including granulocytes, monocytes, macrophages, and dendritic cells. Although CLEC12A was highly N-glycosylated in primary cells, the level of glycosylation was found to vary between cell types. CLEC12A surface expression was down-regulated during inflammatory/activation conditions *in vitro*, as well as during an *in vivo* model of acute inflammation. This suggests that CLEC12A may be involved in the control of myeloid cell activation during inflammation.