



Recombinant Protein Technical Manual

Recombinant Human Dectin/CLEC7A Protein

RPES0195

Product Data:

Product SKU: RPES0195

Size: 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_072092.2

Protein Information:

Molecular Mass: 15.5 kDa

AP Molecular Mass: 15 kDa

Tag:

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 sterile PBS, pH 7.4

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

Application:

Synonyms: Beta-glucan receptor; BGR; CD369; CLEC7A; CLECSF12; CLECSF12DC-associated C-type lectin 1; Dectin1; Dectin; DECTIN1CANDF4; CANDF4; DECTIN1

Immunogen Information:

Sequence: Thr66-Met201

Background:

Dectin was recently identified as the most important receptor for beta-glucan. It is a type II transmembrane protein which binds beta,3 and beta,6 glucans, and is expressed on most cells of the innate immune system and has been implicated in phagocytosis as well as killing of fungi by macrophages, neutrophils and dendritic cells. Recognition of beta-glucan by dectin triggers effective immune response, including phagocytosis and proinflammatory factor production, to eliminate infecting fungi, which especially benefits immunocompromised patients against opportunistic fungal infection. In addition, dectin is involved in the adaptive immune response as well as autoimmune diseases and immune tolerance. Dectin can recognize and respond to live fungal pathogens and is being increasingly appreciated as having a key role in the innate responses to these pathogens. In addition to its exogenous ligands, Dectin can recognize an unidentified endogenous ligand on T cells and may act as a co-stimulatory molecule. Recent studies have highlighted the importance of Dectin in anti-fungal immunity, in both mice and humans, and have suggested a possible involvement of this receptor in the control of mycobacterial infections.