

Recombinant Human Langerin/CD207 Protein (His Tag)

Catalog No. PKSH033707

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

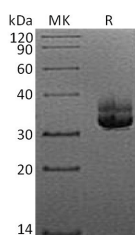
Description

Synonyms	CD207 antigen;langerin;CD207;C-type lectin domain family 4 member K;C-type lectin domainfamily 4;member K
Species	Human
Expression Host	HEK293 Cells
Sequence	Tyr64-Pro328
Accession	AAH22278.1
Calculated Molecular Weight	31.5 kDa
Observed molecular weight	30-40 kDa
Tag	N-His
Bioactivity	Not validated for activity

Properties

Purity	> 95 % 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 a 0.2 µm filtered solution of 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



> 95 % as determined by reducing SDS-PAGE.

Background

Langerin (CD207) is a type II transmembrane glycoprotein which is member K of the C-type lectin domain family.

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Langerin is used as a marker for Langerhans cells (LCs) which represent the immature dendritic cells in the epidermis. Langerin is necessary and sufficient for Birbeck granule formation. Human langerin sequence contains a 43 aa cytoplasmic domain, a 21 aa transmembrane domain and a 264 aa extracellular domain (ECD) that contains a coiled-coil domain and a single C-type lectin domain. Human langerin shares 68%, 62%, 71% aa identity with mouse, rat and bovine langerin ECD, respectively. Trimerization greatly increases the lectin binding affinity. Langerin internalizes endogenous proteins such as type I procollagen. Internalization by LC is thought to lead to suppression of self reactions. Langerin also mediates endocytosis of non-peptide antigens containing mannose, N-acetyl glucosamine and fucose that are expressed by mycobacteria and fungi.