



Recombinant Human CD207 (N-6His)

Catalog #	EPT060
Expression Host	Human Cells
DESCRIPTION	Recombinant Human C-type Lectin Domain Family 4 Member K is produced by our Mammalian expression system and the target gene encoding Tyr64-Pro328 is expressed with a 6His tag at the N-terminus.
Accession	AAH22278.1
Synonyms	CD207 antigen; langerin; CD207; C-type lectin domain family 4 member K
Mol Mass	31.5 KDa
AP Mol Mass	30-40 KDa, reducing conditions
Purity	Greater than 95% as determined by reducing SDS-PAGE.
Endotoxin	Less than 0.1 ng/ μ g (1 EU/ μ g) as determined by LAL test.
FORMULATION	Lyophilized from a 0.2 μ m filtered solution of PBS, pH 7.4.





RECONSTITUTION

Always centrifuge tubes before opening. Do not mix by vortex or pipetting.

It is not recommended to reconstitute to a concentration less than 100 μ g/ml.

Dissolve the lyophilized protein in distilled water.

Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

SHIPPING

The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

STORAGE

Lyophilized protein should be stored at $< -20^{\circ}\text{C}$, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at $4-7^{\circ}\text{C}$ for 2-7 days.

Aliquots of reconstituted samples are stable at $< -20^{\circ}\text{C}$ for 3 months.

BACKGROUND

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

SDS-PAGE

