

Recombinant Rat CLEC14A/EGFR-5 Protein (Fc Tag)

Catalog Number: PKSR030316

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

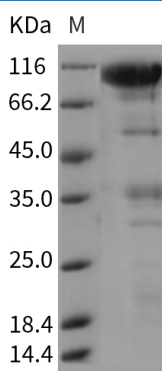
Description

Species	Rat
Source	HEK293 Cells-derived Rat CLEC14A/EGFR-5 protein Met1-Thr398, with an C-terminal hFc
Calculated MW	67.6 kDa
Observed MW	110&37 kDa
Accession	NP_001014099.1
Bio-activity	Not validated for activity

Properties

Purity	> 85 % 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% Tween 80 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



> 85 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

C-type lectin domain family 14 member A, also known as Epidermal growth factor receptor 5 and CLEC14A, is a member of the C-type lectin domain (CTLD) family that contains one c-type lectin domain and one EGF-like domain. Mouse CLEC14A is a 459 amino acid single-pass type I membrane protein. The superfamily of proteins containing C-type lectin-like domains (CTLDs) is a large group of extracellular Metazoan proteins with diverse functions. The CTLD structure has a characteristic double-loop ('loop-in-a-loop') stabilized by two highly conserved disulfide bridges located at the bases of the loops, as well as a set of conserved hydrophobic and polar interactions. Members of the C-type lectin/C-type lectin-like domain (CTL/CTLD) superfamily 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 families were essentially formed early in vertebrate evolution and are 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.