



Recombinant Protein Technical Manual
Recombinant Mouse CLEC14A/EGFR-5 Protein (His
Tag)
RPES3019

Product Data:

Product SKU: RPES3019

Size: 20µg

Species: Mouse

Expression host: HEK293 Cells

Uniprot: NP_080085.3

Protein Information:

Molecular Mass: 40.6 kDa

AP Molecular Mass: 75 kDa

Tag: C-His

Bio-activity:

Purity: > 95 % as determined by SDS-PAGE

Endotoxin: < 1.0 EU per µg of the protein 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: 1200003C23Rik;AI642649

Immunogen Information:

Sequence: Met 1-Thr 386

Background:

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.