Data Sheet (Cat.No.TMPK-01312)

TargetMol

LILRB4/CD85k/ILT3 Protein, Cynomolgus, Recombinant (His)

General Information

Synonyms:	LIR5;CD85K;HM18;LILRB4;ILT3;ILT-3
Protein Construction:	Gln22-Glu259
Species:	Cynomolgus
Expression Host:	HEK293 Cells
Accession:	XP_015297198.1
Molecular Weight:	27.2 kDa (predicted). Due to glycosylation, the protein migrates to 35-42 kDa based on Tris-Bis PAGE result.

QC Testing

Biological Activity:	Immobilized Cynomolgus LILRB4, His Tag at 5μg/ml (100μl/well) on the plate. Dose response curve for Anti-LILRB4 Antibody, hFc Tag with the EC50 of 0.38μg/ml determined by ELISA.
Purity:	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS (pH 7.4). Typically, 8% trehalose is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

Reconstitute the lyophilized protein in distilled water. The product concentration should not be less than 100 μg/ml. Before opening, centrifuge the tube to collect powder at the bottom. After adding the reconstitution buffer, avoid vortexing or pipetting for mixing.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

LILRB4,also known as CD85k and LIR-5, ILT3, is an approximately 60 kDa transmembrane glycoprotein that negatively regulates immune cell activation. Mature human ILT3 consists of a 238 amino acid (aa) extracellular domain with two Ig-like domains, a 21 aa transmembrane segment, and a 168 aa cytoplasmic domain with 3 immunoreceptor tyrosine-based inhibitory motifs (ITIM).LILRB4 is receptor for class I MHC antigens. Recognizes a broad spectrum of HLA-A, HLA-B, HLA-C and HLA-G alleles.

Reference

Samuel J, et al. A Novel Anti-LILRB4 CAR-T Cell for the Treatment of Monocytic AML[J]. Molecular Therapy, 2018: S1525001618303721-.