# Recombinant Human LILRB4/CD85k/ILT3 Protein (aa 22-259, Fc Tag)

Catalog Number: PKSH033604



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

-					
- 1	00	cri	m	17	٦m
J			.,,	, T. U	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

 Species
 Human

 Mol\_Mass
 53.2 kDa

 Accession
 Q8NHJ6

**Bio-activity** Not validated for activity

### **Properties**

**Purity** > 90 % 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.

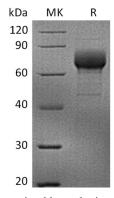
Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants

before lyophilization.

Please refer to the specific buffer information in the printed manual.

**Reconstitution** Please refer to the printed manual for detailed information.

# Data



> 90 % as determined by reducing SDS-PAGE.

#### Background

Mouse Leukocyte Immunoglobulin-like Receptor Subfamily B Member 4 (LILRB4/CD85k/ILT3) is an approximately transmembrane glycoprotein that negatively regulates immune cell activation. Mouse LILRB4 consists of a 215 amino acid (aa) extracellular domain with two Ig-like domains; a 22 aa transmembrane segment; and a 75 aa cytoplasmic domain with 3 immunoreceptor tyrosine-based inhibitory motifs (ITIM). Within the ECD; mouse LILRB4 shares 45% and 77% aa sequence identity with human and rat LILRB4; respectively. Alternative splicing of mouse LILRB4 generates a potentially soluble isoform that lacks the transmembrane segment. LILRB4 is expressed on dendritic cells (DC); monocytes; macrophages; and vascular endothelial cells (EC). Ligation of LILRB4 triggers ITIM-mediated inhibition of cellactivating signaling; leading to enhanced immune tolerance and reduced allogeneic graft rejection. Soluble LILRB4 induces the differentiation of CD8+ T suppressor cells (Ts) that can inhibit the effector functions of CD4+ Th cells and CD8+ CTL. In turn; CD8+ Ts cells induce LILRB4 up-regulation and a tolerogenic phenotype in monocytes; DC; and EC.

## For Research Use Only