## Recombinant Human CD300LB/LMIR5 (C-Fc)

### Catalog Number: PKSH033897

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

Description	
Species	Human
Source	HEK293 Cells-derived Human CD300LB;LMIR5 protein Ile55-His187, with an C-
	terminal Fc
Calculated MW	42.2 kDa
Observed MW	50-60 kDa
Accession	AAH28091.1
Bio-activity	Not validated for activity
Properties	
Purity	> 95 % 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 $< -20^{\circ}$ 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



> 95 % as determined by reducing SDS-PAGE.

#### Background

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CD300LB, also known as CD300b, LMIR5, CLM-7, and IREM-3, is a glycoprotein member of the immunoglobulin superfamily. LMIR5 is expressed on the surface of myeloid lineage cells. It forms noncovalent cis-homodimers and cisheterodimers with other CD300 family proteins, and the composition of these dimers affects the cellular response. Antibody cross-linking of LMIR5 induces mast cell granule release and cytokine production as well as its tyrosine phosphorylation of LMIR5 (in human). LMIR5 interacts with TIM1 and TIM4 which regulate T cell activation and are themselves binding partners. TIM1 interactions with LMIR5 mediate mast cell activation and the accumulation of neutrophils at sites of TIM1 up regulation on damaged renal tubule epithelial cells. Acts as an activating immune receptor through its interaction with ITAM-bearing adapter TYROBP, and also independently by recruitment of GRB2.