

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

**Catalog No.** PKSH033897

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

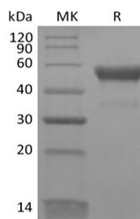
### Description

<b>Synonyms</b>	CD300b;CLM-7;CLM-7;CMRF35-A2;IREM-3;IREM3;TREM-5;TREM5;CD300LB
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Ile55-His187
<b>Accession</b>	AAH28091.1
<b>Calculated Molecular Weight</b>	42.2 kDa
<b>Observed molecular weight</b>	50-60 kDa
<b>Tag</b>	C-Fc

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

CD300LB, also known as CD300b, LMIR5, CLM-7, and IREM<sup>?</sup>3, is a glycoprotein member of the immunoglobulin superfamily. LMIR5 is expressed on the surface of myeloid lineage cells. It forms noncovalent cis<sup>?</sup>homodimers and cis-

### For Research Use Only

heterodimers 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.