

Recombinant Protein Technical Manual Recombinant Human CD300a/LMIR1 Protein (Fc Tag) RPES5064

## Product Data:

Product	SKU:	RPES5064
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**Size:** 50µg

Species: Human

Expression host: HEK293 Cells

Uniprot: Q9UGN4

Protein Information:		
Molecular Mass:	44.5 kDa	
AP Molecular Mass:	58-66 kDa	
Tag:	C-Fc	
Bio-activity:		
Purity:	(97.9+1.1) % as determined by reducing SDS-PAGE.	
Endotoxin:	< 1.0 EU per $\mu g$ 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:	CMRF35-Like Molecule 8; CLM-8; CD300 Antigen-Like Family Member A; CMRF-35- H9; CMRF35-H9; CMRF35-H; IRC1/IRC2; Immunoglobulin Superfamily Member 12; IgSF12; Inhibitory Receptor Protein 60; IRp60; NK Inhibitory Receptor; CD300a; CD300A; CMRF35H; IGSF12	

## Sequence: Met 1-Gln178

## Background:

CMRF35-like molecule 8, also known as CD300 antigen-like family member A, CMRF35-H9, Immunoglobulin superfamily member 12, Inhibitory receptor protein 60, NK inhibitory receptor, CD300a and CMRF35H, is a single-pass type I membrane protein which belongs to the CD300 family. The CD300 family of myeloid immunoglobulin receptors includes activating (CD300b, CD300e) and inhibitory members (CD300a, CD300f), as well as molecules presenting a negative charge within their transmembrane domain (CD300c, CD300d). CD300A / IGSF12 is expressed not only by natural killer (NK) cells but also by T-cell subsets, B-cells, dendritic cells, mast cells, granulocytes and monocytes. It contains one Ig-like V-type (immunoglobulin-like) domain. CD300A / IGSF12 is an inhibitory receptor which may contribute to the down-regulation of cytolytic activity in natural killer (NK) cells, and to the down-regulation of mast cell degranulation. CD300c is a functional immune receptor able to deliver activating signals upon ligation in RBL-2H3 mast cells. CD300c signaling is partially mediated by a direct association with the immune receptor tyrosine-based activation motif-bearing adaptor FccRy. CD300a and CD300c play an important role in the cross-regulation of TNF-alpha and IFN-alpha secretion from plasmacytoid dendritic cells (pDCs).