

## Recombinant Mouse SLAMF3/CD229 Protein (His Tag)

**Catalog No.** PKSM041214

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

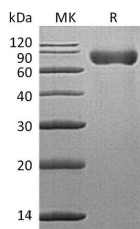
### Description

<b>Synonyms</b>	T-lymphocyte surface antigen Ly-9;Cell surface molecule Ly-9;Lymphocyte antigen 9;SLAM family member 3;SLAMF3;Signaling lymphocytic activation molecule 3;CD229;Ly9;Ly-9;AI893573;Lgp100;T100
<b>Species</b>	Mouse
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Lys48-Phe454
<b>Accession</b>	Q4VBG4
<b>Calculated Molecular Weight</b>	47.0 kDa
<b>Observed molecular weight</b>	65-75 kDa
<b>Tag</b>	C-His
<b>Bioactivity</b>	Not validated for activity

### 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

#### For Research Use Only

CD229(SLAMF3) is a type I transmembrane glycoprotein in the SLAM subgroup of the CD2 family. Mature mouse CD229 consists of a 406 aa extracellular domain (ECD) with two Ig-like V-set and two Ig-like truncated C2-set domains, a 21 aa transmembrane segment, and a 180 aa cytoplasmic domain with two immunoreceptor tyrosinebased switch motifs ITSMs. Within the first two Ig-like domains that are common to all SLAM proteins, mouse CD229 shares 22%-36% aa sequence identity with mouse 2B4, BLAME, CD2F10, CD84, CRACC, NTBA, and SLAM. CD229 is expressed on T, B, and NK cells, thymocytes and monocytes. Homophilic binding between CD229 molecules is mediated by the N-terminal Ig-like domain. Human and mouse CD229 exhibit crossspecies binding. Antigen stimulation of lymphocytes induces CD229 clustering to sites of T cell-B cell contact. Antibody ligation of CD229 can inhibit T cell activation, but CD229 knockout mice show impaired T cell immune responses, suggesting a potential role for CD229 in T cell activation or costimulation.