Recombinant Human SLAM/CD150 Fc Chimera

Catalog Number: 11480-SL

DESCRIPTION

Source

Human embryonic kidney cell, HEK293-derived human SLAM/CD150 protein

Human SLAM (Ala21-Lys236) Accession # Q13291.1	IEGRMD	Human IgG_1 (Pro100-Lys330)

N-terminus C-terminus

N-terminal Sequence Analysis	Ala21,Tyr23,Thr25
Predicted Molecular Mass	51 kDa

SPECIFICATIONS

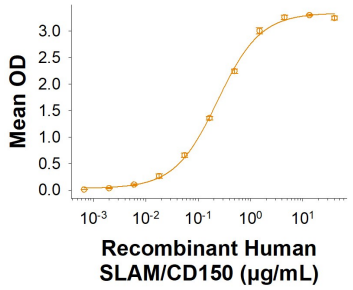
SDS-PAGE	60-80 kDa, under reducing conditions.
Activity	Measured by its binding ability in a functional ELISA. Recombinant Human SLAM/CD150 Fc Chimera binds to Biotinylated SLAM/CD150 protein with an ED_{50} of 0.100-1.00 µg/mL.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>90%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 500 µg/mL in PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 3 months, -20 to -70 °C under sterile conditions after reconstitution.

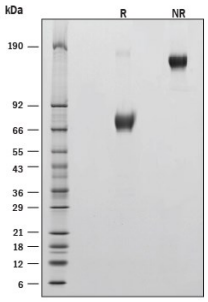
DATA

Binding Activity



Recombinant Human SLAM/CD150 Fc Chimera Protein Binding Activity. Recombinant Human SLAM/CD150 Fc Chimera Protein (Catalog # 11480-SL) binds to Biotinylated SLAM/CD150 protein with an ED_{50} of 0.100-1.00 µg/mL.

SDS-PAGE



Recombinant Human SLAM/CD150 Fc Chimera Protein SDS-PAGE. 2 µg/lane of Recombinant Human SLAM/CD150 Fc Chimera Protein (Catalog # 11480-SL) was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing bands at 60-80 kDa and 120-160 kDa, respectively.

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BACKGROUND

Signaling lymphocytic activation molecule (SLAM), also known as SLAMF1 and CD150, is the founding member of the SLAM subfamily of the CD2 protein family (1, 2). SLAM is a single-pass type I membrane glycoprotein that functions as an adhesion molecule and plays an active role in the regulation of innate and adaptive immunity (1, 2, 4). Mature SLAM consists of an extracellular domain (ECD) containing an Ig-like V-type domain and an Ig-like C2-type domain, a helical transmembrane domain, and a cytoplasmic tail containing 2 immunoreceptor tyrosine-based switch motifs (ITSM) (3, 4). The ECD of human SLAM shares human SLAM shares 58% and 56% amino acid sequence identity with mouse and rat SLAM, respectively.. In human, several isoforms resulting from alternative splicing have been identified with functional diversity (4). SLAM is expressed on T cells, B cells, thymocytes, macrophages, dendritic cells, platelets, and hematopoietic stem cells, and it is up-regulated on activated B cells and CD4+ and CD8+ T cells (4 – 6). SLAM interacts homophilically with low affinity, and this interaction induces a Th0/Th1 phenotype in CD8+ T cells that is characterized by clonal expansion, production of IFN-gamma, and increased cytolytic activity (7, 8). SLAM also plays a role in activation of the PI3K-Akt signaling pathway through its association with the adapter molecule SAP (9). In humans, SLAM functions as a cellular entry receptor for measles virus (10, 11). SLAM deregulation is associated with genomic complexity and independently predicts a worse outcome in chronic lymphocytic leukemia (CLL) (12).

References:

1. Yurchenko, M. *et al.* (2018) J. Cell. Biol. **217**:1411.
2. Pellegrini, J. *et al.* (2021) Autophagy. **17**:2629.
3. Wang, N. *et al.* (2015) Front. Immunol. **6**:158.
4. Gordiienko, I. (2019) Clinical Immunol. **204**:14.
5. Calpe, S. *et al.* (2008) Adv Immunol. **97**:177.
6. Wang, N. *et al.* (2004) J. Exp. Med. **199**:1255.
7. Mavaddat, N. *et al.* (2000) J. Biol. Chem. **275**:28100.
8. Mehrle, S. *et al.* (2008) Mol. Immunol. **45**:796.
9. Yurchenko, M.Y. *et al.* (2005) Exp Oncol. **27**:24.
10. Hsu, E.C. *et al.* (2001) Virology **279**:9.
11. Gonçalves-Carneiro, D. *et al.* (2017) J Virol. **91**:e02255.
12. Gian, M.R. *et al.* (2021) Br. J. Haematol. **192**:1068.

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