Recombinant Cynomolgus Monkey BLAME/SLAMF8 Fc Chimera

Catalog Number: 11100-BL

DESCRIPTION

Source

Chinese Hamster Ovary cell line, CHO-derived cynomolgus monkey BLAME/SLAMF8 protein

Cynomolgus Monkey BLAME/SLAMF8 (Ala23-Asp233) Accession # XP_005541356.1	IEGRMD	Human IgG_1 (Pro100-Lys330)

N-terminus C-terminus

N-terminal Sequence Analysis	Ala23
Structure / Form	Disulfide-linked homodimer
Predicted Molecular Mass	50 kDa

SPECIFICATIONS

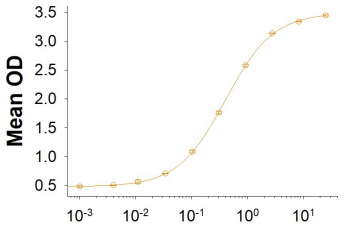
SDS-PAGE	55-70 kDa, under reducing conditions.
Activity	Measured by its binding ability in a functional ELISA. When Recombinant Cynomolgus Monkey BLAME/SLAMF8 Fc Chimera (Catalog #11100-BL) is immobilized at 1.0 µg/mL (100 µL/well), the concentration of Recombinant Cynomolgus Monkey BLAME/SLAMF8 Fc Chimera Biotinylated Protein that produces 50% of the optimal binding response is 0.200-2.00 µg/mL.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>95%, 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 200 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.

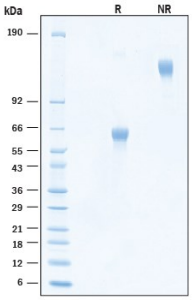
DATA

Binding Activity



Recombinant Cynomolgus Monkey BLAME/SLAMF8 Fc Chimera Protein Binding Activity. When Recombinant Cynomolgus Monkey BLAME/SLAMF8 Fc Chimera Protein (Catalog # 11100-BL) is immobilized at 1.0 µg/mL (100 µL/well), the concentration of Recombinant Cynomolgus Monkey BLAME/SLAMF8 Fc Chimera Biotinylated Protein that produces 50% of the optimal binding response is 0.200-2.00 µg/mL.

SDS-PAGE



Recombinant Cynomolgus Monkey BLAME/SLAMF8 Fc Chimera Protein SDS-PAGE. 2 µg/lane of Recombinant Cynomolgus Monkey BLAME/SLAMF8 Fc Chimera Protein (Catalog # 11100-BL) was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing bands at 55-70 kDa and 110-140 kDa, respectively.

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BACKGROUND

B-lymphocyte activator macrophage expressed (BLAME), also known as SLAMF8, is a type I transmembrane protein that belongs to the CD2 subset of immunoglobulin superfamily cell receptors. The SLAM family is comprised of nine surface receptors, expressed mainly on hematopoietic cells, and they have been shown to function as adhesion molecules and modulators of immune responses (1). BLAME, along with SLAMF2 and SLAMF9, are considered atypical SLAM family members due to the low homology in their cytoplasmic domains compared to the rest of the SLAM family (2). Mature cynomologus BLAME consists of an extracellular domain (ECD) with an IgV and an IgC2 domain, a transmembrane segment, and a short cytoplasmic domain. Within the ECD, cynomologus BLAME shares 96% amino acid sequence identity with human BLAME. BLAME is expressed by various myeloid cells, such as neutrophils, macrophages, and dendritic cells (3). BLAME suppresses macrophage function but enhances the growth of neoplastic mast cells via SHP-2 (4). BLAME negatively regulates the activity of PKC-δ, which phosphorylates the p40phox subunit of the NOX2 complex (5). BLAME is abundantly expressed in T cells in pediatric cancers and Epstein-Barr virus-positive gastric cancers and is a potential immunotherapy target for several diseases (6-8). Higher SLAMF8 expression may predict better anti-PD1 immunotherapy efficacy in GI cancer (9).

References:

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3. Wang, G. *et al.* (2015) PloS one, **10**:e0121968.
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9. Zhang Q. *et al.* (2021) Clin. Transl. Immunology. **10**:1347.

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