

DESCRIPTION

Source Chinese Hamster Ovary cell line, CHO-derived cynomolgus monkey BLAME/SLAMF8 protein
Ala23-Asp233, with a C-terminal 6-His tag
Accession # XP_005541356.1

N-terminal Sequence Analysis Ala23

Predicted Molecular Mass 24 kDa

SPECIFICATIONS

SDS-PAGE 31-39 kDa, under reducing conditions.

Activity Measured by its binding ability in a functional ELISA.
Recombinant Cynomolgus Monkey BLAME/SLAMF8 His-tag (Catalog # 11395-BL) binds Biotinylated Recombinant Cynomolgus Monkey BLAME/SLAMF8 Fc Chimera with an ED₅₀ of 60.0-720 ng/mL.

Endotoxin Level <1.0 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. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 250 µg/mL in PBS.

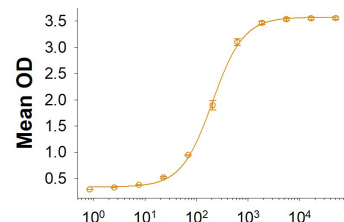
Shipping The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

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

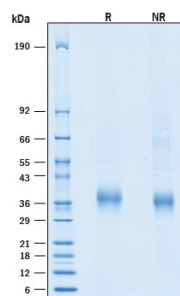
Binding Activity



Biotinylated Recombinant Cynomolgus Monkey BLAME/SLAMF8 (ng/mL)

Recombinant Cynomolgus Monkey BLAME/SLAMF8 His-tag Protein Binding Activity. Recombinant Cynomolgus Monkey BLAME/SLAMF8 His-tag (Catalog # 11395-BL) binds Biotinylated Recombinant Cynomolgus Monkey BLAME/SLAMF8 Fc Chimera with an ED₅₀ of 60.0-720 ng/mL.

SDS-PAGE



Recombinant Cynomolgus Monkey BLAME/SLAMF8 His-tag Protein SDS-PAGE. 2 µg/lane of Recombinant Cynomolgus Monkey BLAME/SLAMF8 His-tag Protein (Catalog # 11395-BL) was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing bands at 31-39 kDa, under reducing conditions.

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 cynomolgus 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, cynomolgus 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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2. Dragovich, M.A. and Mor, A. (2018) Autoimmunity reviews, **17**:674.
3. Wang, G. *et al.* (2015) PloS one, **10**:e0121968.
4. Sugimoto, A. *et al.* (2018) Exp. Dermatol. **27**:641.
5. Wang, G. *et al.* (2012) J. Immunol. **188**:5829.
6. Orentas, R.J. *et al.* (2012) Front Oncol. **2**:194.
7. Sugimoto, A. *et al.* (2020) Sci. Rep. **10**:2505.
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9. Zhang Q. *et al.* (2021) Clin. Transl. Immunology. **10**:1347.