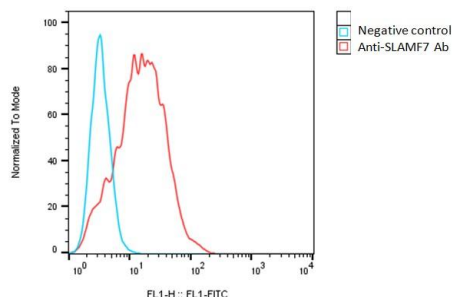


SPECIFICATIONS

Catalog Number	C3021
Cell Line Name	Human SLAMF7-CHO-K1 stable cell line
Accession Number	NM_021181.5
Host Cell	Adherent CHO-K1
Quantity	Two vials of frozen cells (2x10 ⁶ per vial)
Culture Medium	DMEM with 10% FBS, 4µg/ml puromycin
Freezing Medium	90% FBS and 10% DMSO
Storage	Liquid nitrogen

DATA

Detection of human SLAMF7 expression on human SLAMF7-CHO-K1 stable cells using a monoclonal antibody specific for human SLAMF7 (BioLegend, Cat #331817)


BACKGROUND

SLAMF7 (Signaling Lymphocytic Activation Molecule Family member 7), also known as CS1 (CRACC-specific antigen 1) or CD319, is a cell surface receptor protein belonging to the signaling lymphocytic activation molecule (SLAM) family. SLAMF7 is encoded by the SLAMF7 gene and is expressed on a variety of immune cells, including natural killer (NK) cells, activated B cells, monocytes, and dendritic cells. It plays a critical role in regulating immune cell activation, differentiation, and effector function. Specifically, it serves as an activating receptor on NK cells, enhancing their ability to recognize and kill cancer cells. SLAMF7 is expressed at high levels in the bone marrow, spleen, and peripheral blood cells, particularly NK cells. It is also expressed at lower levels in other tissues, including lung, liver, and kidney. SLAMF7 is highly expressed on multiple myeloma cells, a type of cancer that arises from plasma cells in the bone marrow. In addition, SLAMF7 expression has been reported in other hematological malignancies, such as acute myeloid leukemia, chronic lymphocytic leukemia, and non-Hodgkin's lymphoma. Given its role in promoting NK cell-mediated cytotoxicity against cancer cells, SLAMF7 has emerged as a potential therapeutic target in these malignancies.

References

- Cruz-Munoz ME, Dong Z, Shi X, Zhang S, Veillette A. Influence of CRACC, a SLAM family receptor coupled to the adaptor EAT-2, on natural killer cell function. *Nat Immunol.* **10**(3):297-305. 2009.
- Claus M, Urlaub D, Fasbender F, Watzl C. SLAM family receptors in natural killer cells - Mediators of adhesion, activation and inhibition via cis and trans interactions. *Clin Immunol.* **204**:37-42. 2018.

Disclaimer: For research use only. Not for use in humans.