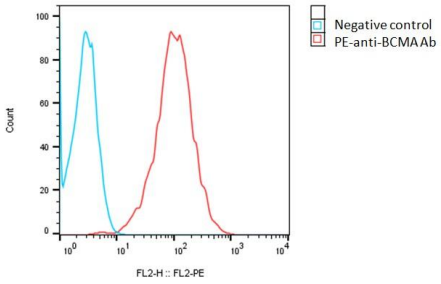
Human BCMA-CHO-K1 Stable Cell Line
Catalog Number: C3009

SPECIFICATIONS

Catalog Number	C3009
Cell Line Name	Human BCMA-CHO-K1 stable cell line
Accession Number	AAH58291.1
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 BCMA expression on human BCMA-CHO-K1 stable cells using a monoclonal antibody specific for human BCMA (BioLegend Cat #357504)



BACKGROUND

B-cell maturation antigen (BCMA), also known as TNFRSF17 (Tumor Necrosis Factor Receptor Superfamily Member 17), is a transmembrane glycoprotein belonging to the TNF receptor superfamily. It is primarily expressed on the surface of mature B cells, particularly plasma cells, and plays a crucial role in B cell maturation and survival. BCMA is involved in the regulation of B cell development, survival, and differentiation, especially in the context of antibody-secreting plasma cells. Its interaction with its ligands, B-cell activating factor (BAFF) and a proliferation-inducing ligand (APRIL), activates downstream signaling pathways such as NF-κB, promoting B cell proliferation, survival, and antibody production. BCMA expression is up-regulated in certain hematological malignancies, particularly multiple myeloma (MM). In MM, malignant plasma cells overexpress BCMA, making it a promising target for therapeutic interventions aimed at treating this disease. Various strategies have been developed to target BCMA, including monoclonal antibodies, antibody-drug conjugates, and chimeric antigen receptor (CAR) T-cell therapies. These approaches aim to specifically target BCMA-expressing cells, inducing cytotoxicity and immune-mediated destruction of malignant plasma cells.

References

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Cohen AD, Garfall AL, Stadtmauer EA, et al. B cell maturation antigen-specific CAR T cells are clinically active in multiple myeloma. *J Clin Invest.* **129(6)**:2210-2221. 2019.

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