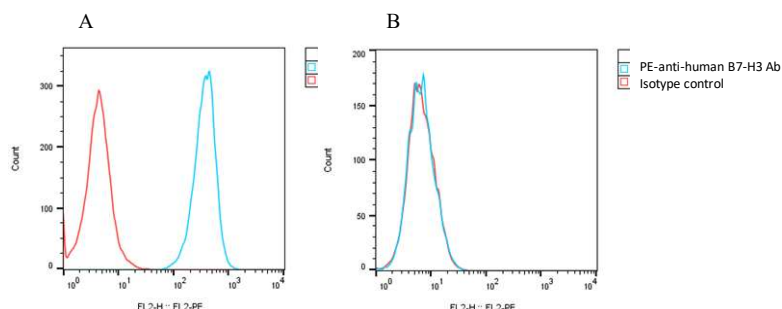


SPECIFICATIONS

Catalog Number	C3092
Cell Line Name	Human B7-H3 (4Ig)-CHO-K1 stable cell line
Accession Number	NP_001019907.1
Host Cell	Adherent CHO-K1
Quantity	Two vials of frozen cells (1x10 ⁶ per vial)
Culture Medium	DMEM with 10% FBS, 4 µg/ml puromycin
Freezing Medium	90% FBS and 10% DMSO
Storage	Liquid nitrogen

DATA

Detection of Human B7-H3 expression on Human B7-H3 (4Ig)-CHO-K1 stable cells (A) and Vector control-CHO-K1 stable cells (B) using a PE-anti-human B7-H3 antibody (BioLegend, #351004).



THAWING AND CULTURING

- Remove the cell vial from liquid nitrogen tank and thaw cells quickly in a 37°C water bath
- Transfer the cells to a 15 ml centrifuge tube and slowly add 5 ml of pre-warmed complete growth medium
- Centrifuge the cells at 200x g for 5 min
- Remove the supernatant
- Resuspend cell pellet with 7 ml of complete growth medium and transfer cells to a T25 flask
- Incubate cells in an incubator with 5% CO₂ at 37°C
- Split the cells twice a week or as needed.

BACKGROUND

B7-H3, also known as CD276, is a cell surface protein that belongs to the B7 family of immune regulatory molecules. B7-H3 has two isoforms determined by its extracellular domain. In mice, the extracellular domain consists of a single pair of immunoglobulin variable (IgV)-like and immunoglobulin constant (IgC)-like domains, whereas in humans it consists of one pair (2Ig-B7-H3) or two identical pairs (4Ig-B7-H3) due to exon duplication. B7-H3 mRNA is expressed in most normal tissues. Flow cytometric analysis demonstrated inducible expression of B7H3 on monocytes, dendritic cells, and T cells after stimulation with selected cytokines and mitogens. B7-H3 protein is expressed at high frequency on many different cancer types (60% of all cancers). B7-H3 has both costimulatory and coinhibitory properties that can affect the proliferation of CD4⁺ and CD8⁺ T cells, production of cytokines, and activity of T cells and NK cells depending on the microenvironment. B7-H3 also exhibits nonimmunological pro-tumorigenic functions such as migration and invasion, apoptosis, cell viability and chemoresistance.

References

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