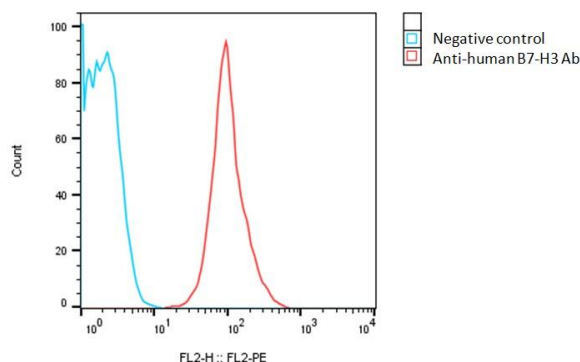


**SPECIFICATIONS**

<b>Catalog Number</b>	C3083
<b>Cell Line Name</b>	Human B7-H3 (2Ig)-CHO-K1 stable cell line
<b>Accession Number</b>	NM_025240.3
<b>Host Cell</b>	Adherent CHO-K1
<b>Quantity</b>	Two vials of frozen cells (2x10 <sup>6</sup> per vial)
<b>Culture Medium</b>	DMEM with 10% FBS, 4 µg/ml puromycin
<b>Freezing Medium</b>	90% FBS and 10% DMSO
<b>Storage</b>	Liquid nitrogen

**DATA**

Detection of human B7-H3 expression on human B7-H3 (2Ig)-CHO-K1 stable cells using a PE-anti-human B7-H3 antibody (BioLegend, #331606)


**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<sup>+</sup> and CD8<sup>+</sup> 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**

- Chapoval AI, Ni J, Lau JS, et al. B7-H3: a costimulatory molecule for T cell activation and IFN-gamma production. *Nat Immunol.*2:269-274. 2001.
- Zhou WT, Jin WL. B7-H3/CD276: An Emerging Cancer Immunotherapy. *Front Immunol.*12:701006. 2021.
- Picarda E, Ohaegbulam KC, Zang X. Molecular Pathways: Targeting B7-H3 (CD276) for Human Cancer Immunotherapy. *Clin Cancer Res.*22:3425-3431. 2016.

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