

Anti-Human B7-H3 Antibody, clone 6B1

Catalog Number: A1035

SPECIFICATIONS

Catalog Number A1035

Product Name Anti-human B7-H3 antibody

Source Mouse hybridoma

Clone 6B

Species Reactivity Human and cynomolgus B7-H3, does not bind to mouse and hamster B7-H3

Isotype mouse IgG1

Formulation 1x PBS, pH7.0. Sterile

Stability & Storage 1 month at 4°C; 12 months at <-20°C; Avoid repeated freeze-thaw

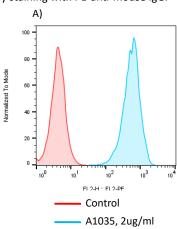
Purity >95%

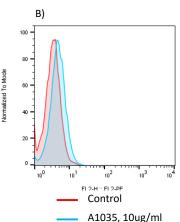
Protein Aggregation Not obvious on SDS-PAGE

Application Flow cytometry, ELISA, cell-based assay

DATA

Detection of human B7-H3 expression on A) a human B7-H3-CHO-K1 cell line (Cat. C3092) by flow cytometry. Anti-human B7-H3 mouse monoclonal antibody 6B1 (Cat. A1035) was incubated with A) human B7-H3-CHO-K1 cells (Cat. C3092) and B)vector control CHO-K1 cells (Cat. C3022), followed by staining with PE-anti-mouse IgG.





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

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.