

10-4172: Monoclonal antibody to B7-H4 (Clone: ABM53A6)

Clonality :	Monoclonal
Application :	IHC,FACS,WB
Reactivity :	Human
Conjugate :	Unconjugated
Gene :	VTCN1
Gene ID :	79679
Uniprot ID :	Q7Z7D3
Format :	Purified
Alternative Name :	V-set domain-containing T-cell activation inhibitor 1, B7 homolog 4, B7h.5, Immune costimulatory protein B7-H4, Protein B7S1
Isotype :	Mouse IgG2a, k
Immunogen Information :	A partial length recombinant protein (a.a 23-220) of B7-H4 was used as the immunogen for this antibody.

Description

B7-H4, a member of B7 family, is a transmembrane protein that has been shown to inhibit T cell responses and neutrophil expansion during bacterial infections. B7-H4 mRNA is widely distributed in mouse and human peripheral tissues and can be induced in monocytes, macrophages, and dendritic cells upon IL-6 and IL-10 stimulation. However, in a variety of tumor cells, B7-H4 is predominantly present in intracellular compartments with unknown mechanism and functions. Cell surface expression of B7-H4 protein is limited and shows an inducible pattern on hematopoietic cells. The overexpression of B7-H4 has been found in various types of human tumors, such as breast cancer, renal cell carcinoma (RCC), ovarian cancer, esophageal squamous cell carcinoma, gastric cancer, pancreatic cancer and melanoma etc, where its expression level is positively correlated with disease progression. By arresting cell cycle, B7-H4 ligation of T cells has a profound inhibitory effect on the growth, cytokine secretion, and development of cytotoxicity.

Product Info

Amount :	25 µg / 100 µg
Purification :	Protein G Chromatography
Content :	25 µg in 50 µl/100 µg in 200 µl PBS containing 0.05% BSA and 0.05% sodium azide. Sodium azide is highly toxic.
Storage condition :	Store the antibody at 4°C; stable for 6 months. For long-term storage; store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

FACS: 0.5-1 µg/10⁶ cells; Immunohistochemical analysis: 5 µg/ml; Western blot analysis: 2-4 µg/ml

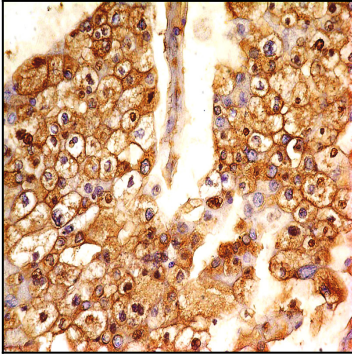


Fig-1: Immunohistochemical analysis of B7-H4 antibody in Renal cell carcinoma using anti-B7-H4 antibody (Clone: ABM53A6) at 5 $\mu\text{g/ml}$

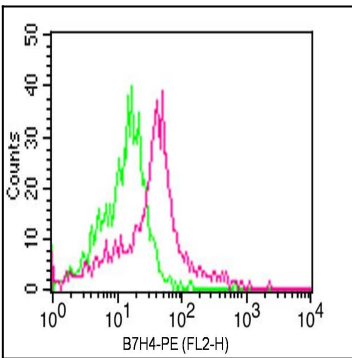


Fig-2: Cell surface Flow analysis of B7-H4 antibody in human PBMC (Monocytes) cells using 0.5 $\mu\text{g}/10^6$ cells of anti-B7-H4 antibody (ABM53A6). Green represents isotype control; red represents anti-B7H4 antibody. Goat anti-mouse PE conjugate was used as secondary antibody.

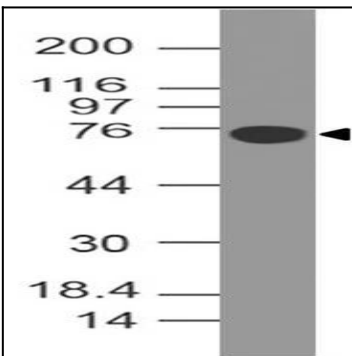


Fig-3: Western blot analysis of B7H4. Anti-B7H4 antibody (Clone: ABM53A6) was used at 4 $\mu\text{g/ml}$ on human B7H4-FC fusion protein Lysate.