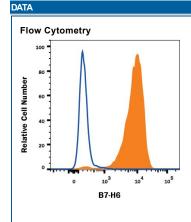


Human B7-H6 Antibody

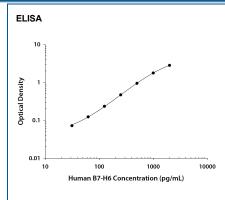
Monoclonal Mouse IgG₁ Clone # 875001 Catalog Number: MAB7144

DESCRIPTION		
Species Reactivity	Human	
Specificity	Detects human B7-H6 in ELISA.	
Source	Monoclonal Mouse IgG ₁ Clone # 875001	
Purification	Protein A or G purified from hybridoma culture supernatant	
Immunogen	Mouse myeloma cell line NS0-derived recombinant human B7-H6 Met1-Ser262 Accession # Q68D85	
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.	

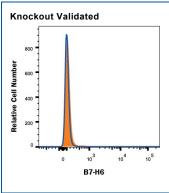
APPLICATIONS				
Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.				
	Recommended Concentration	Sample		
Flow Cytometry	0.25 μg/10 ⁶ cells	See Below		
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.			
Knockout Validated	B7-H6 is specifically detected in HeLa human cervical epithelial carcinoma parental cell line but is not detectable ir B7-H6 knockout HeLa cell line.			
ELISA	This antibody functio Antibody (Catalog #	ns as an ELISA capture antibody when paired with Mouse Anti-Human B7-H6 Monoclonal MAB71442).		
	•	ded for assay development on various assay platforms requiring antibody pairs. We recommend ioSet ELISA (Catalog # DY7144-05) for convenient development of a sandwich ELISA.		



Detection of B7-H6 in HeLa Human Cell Line by Flow Cytometry. HeLa human cervical epithelial carcinoma cell line was stained with Mouse Anti-Human B7-H6 Monoclonal Antibody (Catalog # MAB7144, filled histogram) or isotype control antibody (Catalog # MAB002, open histogram), followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B).



Human B7-H6 ELISA Standard Curve. Recombinant Human B7-H6 protein was serially diluted 2fold and captured by Mouse Anti-Human B7-H6 Monoclonal Antibody (Catalog # MAB7144) coated on a Clear Polystyrene Microplate (Catalog # DY990). Mouse Anti-Human B7-H6 Monoclonal Antibody (Catalog # MAB71442) was biotinylated and incubated with the protein captured on the plate. Detection of the standard curve was achieved by incubating Streptavidin-HRP (Catalog # DY998) followed by Substrate Solution (Catalog # DY999) and stopping the enzymatic reaction with Stop Solution (Catalog # DY994).



B7-H6 Specificity is Shown by Flow Cytometry in Knockout Cell Line. B7-H6 knockout HeLa human cervical epithelial carcinoma cell line was stained with Mouse Anti-Human B7-H6 Monoclonal Antibody (Catalog # MAB7144, filled histogram) or isotype control antibody (Catalog # MAB002, open histogram) followed by anti-Mouse IgG PE-conjugated secondary antibody (Catalog # F0102B). No staining in the B7-H6 knockout HeLa cell line was observed. View our protocol for Staining Membrane-associated Proteins.

Rev. 8/15/2019 Page 1 of 2





Human B7-H6 Antibody

Monoclonal Mouse IgG₁ Clone # 875001 Catalog Number: MAB7144

PREPARATION AND STORAGE			
Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.		
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C		
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.		

BACKGROUND

B7-H6 is a glycosylated member of the B7 family of immune co-stimulatory proteins (1, 2). Mature human B7-H6 consists of a 238 amino acid (aa) extracellular domain (ECD) that contains one Ig-like V domain and one Ig-like C1 domain, a 21 aa transmembrane segment, and a 171 aa cytoplasmic domain that contains one ITIM, one SH2, and one SH3 motif (3). Both of the Ig-like domains carry N-linked glycosylation (4). Within the ECD, human B7-H6 shares 99%, 94%, and 87% aa sequence identity with chimpanzee, orangutan, and gibbon B7-H6, respectively, and 53% - 56% with bovine, canine, and equine B7-H6. Orthologs in mouse and rat have not been identified. The Ig-like V domain mediates 1:1 stoichiometric binding of B7-H6 to NKp30 expressed on NK cells (4, 5). It does not show binding to NKp44, NKp46, or NKG2D (3, 6). Ligation of NKp30 by B7-H6 induces NK cell activation and target cell cytolysis (3). B7-H6 is expressed on a wide range of hematopoietic, carcinoma, and melanoma tumor cells, which is consistent with the detection of NKp30 binding sites on many tumors (3, 7). The expression of NKp30 ligands on tumor cells correlates with tumor cell sensitivity to NKp30-dependent cell lysis (7).

References

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