

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human B7-H6 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 1018457
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human embryonic kidney cell HEK293-derived human B7-H6 Asp25-Ser262 Accession # Q68D85
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Blockade of Receptor-ligand Interaction Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

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 cytotoxicity (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).

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