

## DESCRIPTION

<b>Species Reactivity</b>	Human/Cynomolgus Monkey
<b>Specificity</b>	Detects human and cynomolgus monkey B7-H6 in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 1002910
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Human embryonic kidney cell, HEK293-derived Cynomolgus Monkey B7-H6 Asp25-Ser262
<b>Conjugate</b>	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
<b>Formulation</b>	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.  *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.

	Recommended Concentration	Sample
<b>Flow Cytometry</b>	0.25-1 µg/10 <sup>6</sup> cells	HEK293 Human Cell Line Transfected with Cynomolgus Monkey or Human B7-H6 and eGFP

## PREPARATION AND STORAGE

<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Protect from light. Do not freeze.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul>

## BACKGROUND

B7-H6 is a 55 kDa glycosylated member of the B7 family of immune costimulatory proteins (1, 2). Mature B7-H6 consists of an extracellular domain (ECD) that with one Ig-like V domain and one Ig-like C1 domain, a transmembrane segment, and a 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, cynomolgous B7-H6 shares 81%, 81%, 77% and 80% amino acid sequence identity with chimpanzee, orangutan, gibbon, and human B7-H6, respectively. 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). Ligand 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). B7-H6 is up-regulated on inflammatory monocytes and neutrophils, and a 30 kDa soluble fragment can be released by ADAM-10 or ADAM-17 mediated shedding (8, 9). The expression of B7-H6 on tumor cells correlates with cancer progression and patient's survival in human ovarian cancer (10).

### References:

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