

### DESCRIPTION

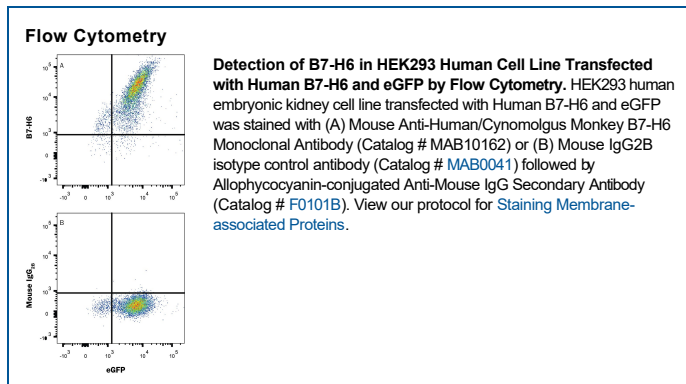
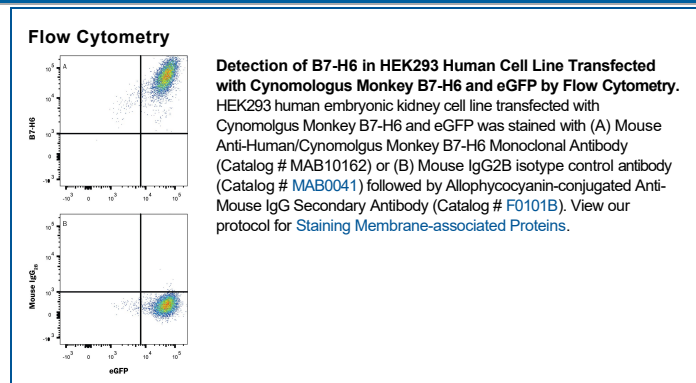
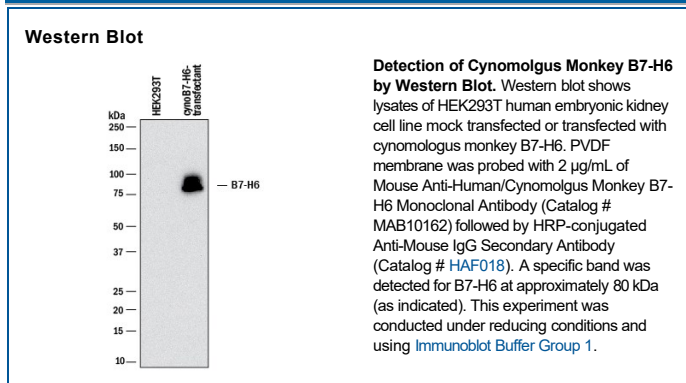
<b>Species Reactivity</b>	Human/Cynomolgus Monkey
<b>Specificity</b>	Detects human and cynomolgus monkey B7-H6 in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 1002910
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Human embryonic kidney cell, HEK293-derived Cynomolgus Monkey B7-H6 Asp25-Ser262
<b>Formulation</b>	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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	2 µg/mL	See Below
<b>Flow Cytometry</b>	0.25 µg/10 <sup>6</sup> cells	See Below
<b>CyTOF-ready</b>	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

### DATA



### PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</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). 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). 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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