

**DESCRIPTION**

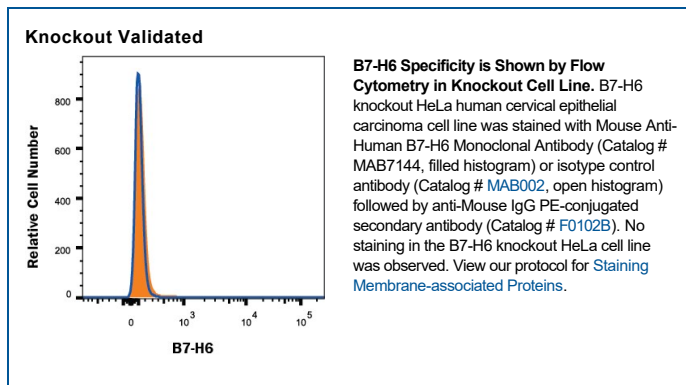
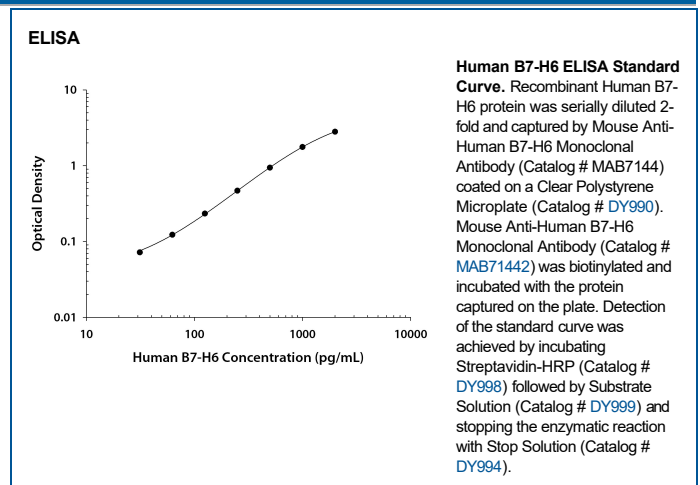
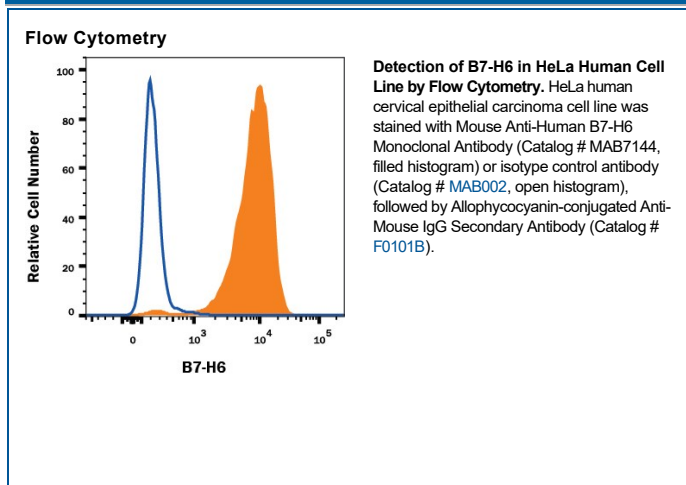
|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Human   |
| <b>Specificity</b>        | Detects human B7-H6 in ELISA.   |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>1</sub> Clone # 875001  |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant  |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant human B7-H6 Met1-Ser262<br>Accession # Q68D85   |
| <b>Formulation</b>        | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.<br>*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    |
|---------------------------|--|-----------|
| <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.   |           |
| <b>Knockout Validated</b> | B7-H6 is specifically detected in HeLa human cervical epithelial carcinoma parental cell line but is not detectable in B7-H6 knockout HeLa cell line.  |           |
| <b>ELISA</b>              | This antibody functions as an ELISA capture antibody when paired with Mouse Anti-Human B7-H6 Monoclonal Antibody (Catalog # MAB71442).<br><br><i>This product is intended for assay development on various assay platforms requiring antibody pairs. We recommend the Human B7-H6 DuoSet ELISA (Catalog # DY7144-05) for convenient development of a sandwich ELISA.</i> |           |

**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.<br>*Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C  |
| <b>Stability &amp; Storage</b> | <p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <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 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:**

1. Zou, W. and L. Chen (2008) Nat. Rev. Immunol. **8**:467.
2. Bour-Jordan, H. *et al.* (2011) Immunol. Rev. **241**:180.
3. Brandt, C.S. *et al.* (2009) J. Exp. Med. **206**:1495.
4. Li, Y. *et al.* (2011) J. Exp. Med. **208**:703.
5. Joyce, M.G. *et al.* (2011) Proc. Natl. Acad. Sci. **108**:6223.
6. Arnon, T.I. *et al.* (2006) Semin. Cancer Biol. **16**:348.
7. Byrd, A. *et al.* (2007) PLoS ONE **2**:e1339.