**Human B7- H1/PD- L1 APC-conjugated Antibody**

Monoclonal Mouse IgG, Clone # 130021

Catalog Number: FAB1561A

100 TESTS, 25 TESTS

**DESCRIPTION**

**Species Reactivity**: Human

**Specificity**: Detects human B7–H1/PD–L1 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) B7-1, -2, -H2, -H3, -H3b, -H4, rhPD-L2, recombinant mouse B7-H1, recombinant rat (r) B7-1, or rB7-2 is observed.

**Source**: Monoclonal Mouse IgG, Clone # 130021

**Purification**: Protein A or G purified from hybridoma culture supernatant

**Immunogen**: Mouse myeloma cell line NS0-derived recombinant human B7–H1/PD–L1

**Conjugate**: Allophycocyanin

**Stability & Storage**

- Protect from light.
- Do not freeze.

- 12 months from date of receipt, 2 to 8 °C as supplied.

**Formulation**

Supplied 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.

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<th>Recommended Concentration</th>
<th>Sample</th>
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<tr>
<td>10 µL/10⁶ cells</td>
<td>See Below</td>
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**DATA**

**Flow Cytometry**

Detection of B7–H1/PD–L1 in Human PBMCs by Flow Cytometry. Human peripheral blood mononuclear cells (PBMCs) (A) resting or (B) treated with 1 µg/mL LPS overnight were stained with Mouse Anti-Human CD14 PE-conjugated Monoclonal Antibody (Catalog # FAB8325P) and Mouse Anti-Human B7–H1/APC-conjugated Monoclonal Antibody (Catalog # FAB1561A). Quadrant markers were set based on control antibody staining (Catalog # IC002A). View our protocol for Staining Membrane-associated Proteins.

**PREPARATION AND STORAGE**

<table>
<thead>
<tr>
<th>Shipping</th>
<th>The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.</th>
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<tbody>
<tr>
<td>Stability &amp; Storage</td>
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**BACKGROUND**

Human B7 homolog 1 (B7-H1), also called programmed death ligand 1 (PD-L1) and programmed cell death 1 ligand 1 (PDCD1L1), is a member of the growing B7 family of immune proteins that provide signals for both stimulating and inhibiting T cell activation. Other family members include B7-1, B7-2, B7-H2, PDL2 and B7-H3. B7 proteins are members of the immunoglobulin (Ig) superfamily. Their extracellular domains contain 2 Ig-like domains and all members have short cytoplasmic domains. Among the family members, there is about 20-25% amino acid identity. Human and mouse B7-H1 share approximately 70% amino acid sequence identity. B7-H1 has been identified as one of two ligands for programmed death-1 (PD-1), a member of the CD28 family of immunoreceptors. The B7-H1 gene encodes a 291 amino acid (aa) type I membrane precursor protein with a putative 18 aa signal peptide, a 220 aa extracellular domain, a 21 aa transmembrane region, and a 31 aa cytoplasmic domain. Human B7-H1 is constitutively expressed in several organs such as heart, skeletal muscle, placenta and lung, and in lower amounts in thymus, spleen, kidney and liver. B7-H1 expression is upregulated in a small fraction of activated T and B cells and a much larger fraction of activated monocytes. B7-H1 expression is also induced in dendritic cells and keratinocytes after IFN-γ stimulation. Interaction of B7-H1 with PD-1 results in inhibition of TCR-mediated proliferation and cytokine production. The B7-H1:PD-1 pathway is involved in the negative regulation of some immune responses and may play an important role in the regulation of peripheral tolerance.

**References:**