

**DESCRIPTION**

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse VISTA/B7-H5/PD-1H in direct ELISAs and Western blots. In direct ELISAs, approximately 25% cross-reactivity with recombinant human VISTA/B7-H5/PD-1H is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse VISTA/B7-H5/PD-1H Phe33-Ala191 Accession # Q9D659
<b>Conjugate</b>	Allophycocyanin Excitation Wavelength: 620-650 nm Emission Wavelength: 660-670 nm
<b>Formulation</b>	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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	10 $\mu$ L/10 <sup>6</sup> cells	See Below

**DATA**

**Flow Cytometry**

**Detection of VISTA/B7-H5/PD-1H in Mouse Splenocytes by Flow Cytometry.** Mouse splenocytes were stained with Rat Anti-Mouse CD4 PE-conjugated Monoclonal Antibody (Catalog # FAB554P) and either (A) Sheep Anti-Mouse VISTA/B7-H5/PD-1H APC-conjugated Antigen Affinity-purified Polyclonal Antibody (Catalog # FAB7005A) or (B) Normal Sheep IgG Allophycocyanin Control (Catalog # IC016A). View our protocol for [Staining Membrane-associated Proteins](#).

**Flow Cytometry**

**Detection of VISTA/B7-H5/PD-1H in HEK293 Human Cell Line Transfected with Mouse VISTA and eGFP by Flow Cytometry.** HEK293 human embryonic kidney cell line transfected with either (A) mouse VISTA or (B) irrelevant transfectants and eGFP was stained with Sheep Anti-Mouse VISTA/B7-H5/PD-1H APC-conjugated Antigen Affinity-purified Polyclonal Antibody (Catalog # FAB7005A). Quadrant markers were set based on control antibody staining (Catalog # IC016A). View our protocol for [Staining Membrane-associated Proteins](#).

**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**

VISTA, also known as B7-H5, PD-1H, Platelet Receptor Gi24, Dies1 (Differentiation of ESC-1), SISP1 and C10orf54, is a 55-65 kDa member of the Ig superfamily. It is a transmembrane molecule expressed in bone, on embryonic stem cells (ESCs), and on tumor cell surfaces. On ESCs, VISTA appears to positively interact with BMP4, potentiating BMP signaling and the transition from an undifferentiated to a differentiated state. On tumor cells, VISTA both promotes MT1-MMP expression and activity, and serves as a substrate for MT1-MMP. This increases the potential for cell motility. Mature mouse VISTA is a 277 amino acid (aa) type I transmembrane glycoprotein (aa 33-309). It contains a 149 aa extracellular region (aa 33-191) with one V-type Ig-like domain (aa 33-161) and a 97 aa cytoplasmic domain. Based on human VISTA, mouse Gi24 will likely undergo proteolytic cleavage by MT1-MMP, generating a soluble 30 kDa extracellular fragment, plus a 25-30 kDa membrane-bound fragment. There are two potential isoform variants. One contains a deletion of aa 127-187, while another shows an alternative start site at Met82. Over aa 33-191, mouse VISTA/Dies1 shares 78% and 70% aa sequence identity with rat and human VISTA, respectively.