

#### 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<br>Phe33-Ala191<br>Accession # Q9D659                                                                  |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 750<br>Excitation Wavelength: 749 nm<br>Emission Wavelength: 775 nm                                                                                                |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                                                                                                                   |
| *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>CyTOF-ready</b>         | Optimal dilution of this antibody should be experimentally determined. |
| <b>Western Blot</b>        | Optimal dilution of this antibody should be experimentally determined. |
| <b>Flow Cytometry</b>      | Optimal dilution of this antibody should be experimentally determined. |
| <b>Immunocytochemistry</b> | Optimal dilution of this antibody should be experimentally determined. |

#### 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> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

#### BACKGROUND

Platelet Receptor Gi24 (also known as VISTA, B7-H5, SISP1, C10orf54 and , Dies1 [Differentiation of ESC-1]) 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, Gi24 appears to positively interact with BMP4, potentiating BMP signaling and the transition from an undifferentiated to a differentiated state. On tumor cells, Gi24 both promotes MT1-MMP expression and activity, and serves as a substrate for MT1-MMP. This increases the potential for cell motility. Mature mouse Gi24 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 Gi24, 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 Gi24/Dies1 shares 78% and 70% aa identity with rat and human Gi24, respectively.

#### PRODUCT SPECIFIC NOTICES

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