

# **Human Gi24/VISTA/B7-H5 Antibody**

Monoclonal Mouse  $IgG_{2B}$  Clone # 730804

Catalog Number: MAB71261

DESCRIPTION			
Species Reactivity	Human		
Specificity	Detects human Gi24/VISTA/B7-H5 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant mouse Gi24/VISTA/observed.		
Source	Monoclonal Mouse IgG <sub>2B</sub> Clone # 730804		
Purification	Protein A or G purified from hybridoma culture supernatant		
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Gi24/VISTA/B7-H5 Phe33-Ala194 Accession # Q9H7M9		
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.		

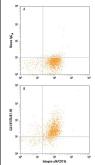
# **APPLICATIONS**

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
Flow Cytometry	2.5 μg/10 <sup>6</sup> cells	See Below
Immunocytochemistry	8-25 μg/mL	See Below

### DATA

# Flow Cytometry



Detection of Gi24/VISTA/B7-H5 in Human Blood Monocytes by Flow Cytometry. Human peripheral blood monocytes were stained with Mouse Anti-Human Integrin aM/CD11b PE-conjugated Monoclonal Antibody (Catalog # FAB16991P) and either (A) Mouse IgG<sub>2B</sub> Isotype Control (Catalog # MAB0041) or (B) Mouse Anti-Human Gi24/VISTA/B7-H5 Monoclonal Antibody (Catalog # MAB71261) followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B).

# Immunocytochemistry

Gi24/VISTA/B7-H5 in BG01V Human Embryonic Stem Cells. Gi24/VISTA/B7-H5 was detected in immersion fixed BG01V human embryonic stem cells using Mouse Anti-Human Gi24/VISTA/B7-H5 Monoclonal Antibody (Catalog # MAB71261) at 10 μg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red, upper panel; Catalog # NL007) and counterstained with DAPI (blue, lower panel). Specific staining was localized to cell surfaces and cytoplasm. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

### PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.		
Shipping	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

- - 12 months from date of receipt, -20 to -70 °C as supplied.
     1 month, 2 to 8 °C under sterile conditions after reconstitution.
  - 6 months, -20 to -70 °C under sterile conditions after reconstitution.

## BACKGROUND

Platelet Receptor Gi24, also known as VISTA (V-domain Ig suppressor of T cell activation), B7-H5, B7H5, 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, Gi24 appears to positively interact with BMP-4, 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 human Gi24 contains a 162 aa extracellular region with one V-type Ig-like domain and a 96 aa cytoplasmic domain. Human Gi24 undergoes proteolytic cleavage by MT1-MMP, generating a soluble 30 kDa extracellular fragment plus a 25-30 kDa membrane-bound fragment. Over aa 33-194, human Gi24 shares 70% and 67% aa identity with mouse and rat Gi24, respectively.

