## 36-3149: Anti-VISTA / B7-H5 / VSIR (Negative Regulator of Immune Response) Monoclonal Antibody(Clone: VISTA/3007)

| Clonality : | Monoclonal |
| :--- | :--- |
| Clone Name : | VISTA/3007 |
| Application : | ELISA,IHC |
| Reactivity : | Human |
| Gene: | VSIR |
| Gene ID : | 64115 |
| Uniprot ID : | Q9H7M9 |
|  | B7H5; DD1alpha; GI24; PD-1H; PDCD1 homolog; Platelet receptor Gi24; PP2135; Stress- |
| Alternative Name : | induced secreted protein 1 (SISP1); V domain Ig suppressor of T cell activation (VISTA); Vet <br>  <br> Immuno-Regulatory Receptor |
| Isotype : | Mouse IgG2b, kappa |
| Immunogen Information $:$ | Recombinant full-length human VISTA protein |

## Description

VISTA / GI24 is a transmembrane protein expressed in bone, on embryonic stem cells (ESCs), and on tumor cell surfaces. On ESC s, 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 162aa extracellular region with one Vtype Ig-like domain and a 96aa cytoplasmic domain. Human Gi24 undergoes proteolytic cleavage by MT1-MMP, generating a soluble 30 kDa extracellular fragment plus a $25-30 \mathrm{kDa}$ membrane-bound fragment. VISTA is a negative checkpoint regulator and is expressed on myeloid cells, T-cells and human TILs (tumor infiltrating lymphocytes) on MDSCs (myeloid-derived suppressor cells) in the TME (tumor microenvironment). It is very likely both a ligand and receptor and is a promising target for cancer immunotherapy.

## Product Info

| Amount : | $20 \mu \mathrm{~g} / 100 \mu \mathrm{~g}$ |
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| Content : | $200 \mu \mathrm{~g} / \mathrm{ml}$ of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10 mM PBS |
| with $0.05 \%$ BSA \& $0.05 \%$ azide. Also available WITHOUT BSA \& azide at $1.0 \mathrm{mg} / \mathrm{ml}$. |  |

## Application Note

ELISA (For coating, order antibody without BSA);,Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires heating tissue sections in 10 mM Tris with 1 mM EDTA, pH 9.0 , for 45 min at 95\&degC followed by cooling at RT for 20 minutes),


Fig. 2: Formalin-fixed, paraffin-embedded human SqCC stained with VISTA Monospecific Mouse Monoclonal Antibody (VISTA/3007).


Fig. 1: Formalin-fixed, paraffin-embedded human Placenta stained with VISTA Monospecific Mouse Monoclonal Antibody (VISTA/3007).

Fig. 3: SDS-PAGE Analysis Purified VISTA Monospecific Mouse Monoclonal Antibody (VISTA/3007). Confirmation of Integrity and Purity of Antibody.

Fig. 4: Analysis of Protein Array containing more than 19,000 full-length human proteins using VISTA Monospecific Mouse Monoclonal Antibody (VISTA/3007). Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-lgG secondary antibody) produces when binding to a particular protein on the HuProtTM array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProtTM are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an Sscore of at least 2.5. For example, if a MAb binds to protein $X$ with a $Z$-score of 43 and to protein $Y$ with a $Z$-score of 14 , then the $S$-score for the binding of that MAb to protein X is equal to 29 .

