

Product Datasheet VISTA Antibody / GI24 (orb607155)

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 V-type Ig-like domain and a 96aa cytoplasmic domain. Human Gi24 undergoes proteolytic cleavage by MT1-MMP, generating a soluble 30kDa extracellular fragment plus a 25-30kDa 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.
Species/Host	Mouse
Reactivity	Human
Conjugation	Unconjugated
Tested Applications	ELISA, IHC-P
Immunogen	A recombinant full-length human VISTA protein was used as the immunogen for the VISTA antibody.
Preservatives	0.2 mg/ml in 1X PBS with 0.1 mg/ml rAlbumin (US sourced) and 0.05% sodium azide
Storage	Store the VISTA antibody at 2-8°C (with azide) or aliquot and store at -20°C or colder (without azide).
Note	For research use only

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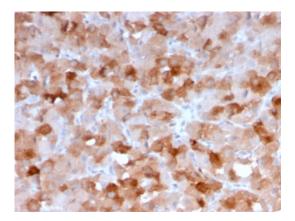
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Application notes	Optimal dilution of the VISTA antibody should be determined by the researcher.1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.
Formula	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide
lsotype	Mouse IgG2b, kappa
Clonality	Monoclonal
Clone Number	VISTA/3007
Antibody Type	Primary Antibody
Purity	Protein G affinity chromatography
Uniprot ID	Q9H7M9
Hazard Information	This VISTA antibody is available for research use only.
Dilution Range	ELISA (order BSA/sodium azide-free format for coating),Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT
Expiration Date	12 months from date of receipt.



IHC staining of FFPE human squamous cell carcinoma with VISTA antibody (clone VISTA/3007). HIER: boil tissue sections in pH9, 10mM Tris with 1mM EDTA, 10-20 min and allow to cool before testing.

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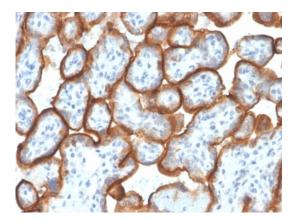
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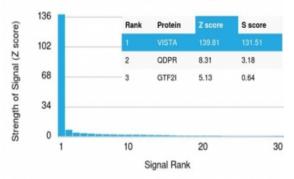


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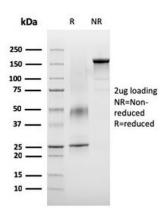


IHC staining of FFPE human placenta with VISTA antibody (clone VISTA/3007). HIER: boil tissue sections in pH9, 10mM Tris with 1mM EDTA, 10-20 min and allow to cool before testing.

Human Protein Microarray Specificity Validation



Analysis of HuProt (TM) microarray containing more than 19000 full-length human proteins using VISTA antibody (clone VISTA/3007). These results demonstrate the foremost specificity of the VISTA/3007 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt (TM) array. Zscores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt (TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



SDS-PAGE analysis of purified, BSA-free VISTA antibody (clone VISTA/3007) as confirmation of integrity and purity.

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