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VISTA Antibody

Catalog # ASC12122

Product Information

Application	WB, IHC, IF, ICC, E
Primary Accession	Q9H7M9
Other Accession	NP_071436
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Clone Names	VSIR
Calculated MW	33908

Additional Information

Gene ID	64115
Alias Symbol	VSIR
Other Names	VISTA Antibody: VISTA molecule, VSIR, B7-H5, B7H5, GI24, PP2135, SISP1, DD1alpha, VISTA, C10orf54, chromosome 10 open reading frame 54, PD-1H, V-set immunoregulatory receptor, V-Type Immunoglobulin Domain-Containing Suppressor Of T-Cell Activation, Chromosome 10 Open Reading Frame 54
Reconstitution & Storage	VISTA antibody can be stored at 4˚C for three months and -20˚C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	VISTA Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	VSIR (HGNC:30085)
Function	Immunoregulatory receptor which inhibits the T-cell response (PubMed:24691993). May promote differentiation of embryonic stem cells, by inhibiting BMP4 signaling (By similarity). May stimulate MMP14- mediated MMP2 activation (PubMed:20666777).
Cellular Location	Cell membrane; Single-pass type I membrane protein
Tissue Location	Expressed in spleen. Detected on a number of myeloid cells including CD11b monocytes, CD66b+ neutrophils, at low levels on CD4+ and CD8+ T-cells, and in a subset of NK cells. Not detected on B cells (at protein level). Expressed at high levels in placenta, spleen, plasma blood leukocytes, and lung. Expressed at moderate levels in lymph node, bone marrow, fat, uterus, and trachea Has

low expression levels in other tissues

Background

The lymphocyte activation gene-3 (LAG3) is a member of the immunoglobulin superfamily and binds MHC class II with high affinity (1), negatively regulating T-cell function and homeostasis (2). It is expressed in B, T, and NK cells, monocytes, and dendritic cells (3), and acts to regulate T cell expansion (4). LAG3 is also an important immune checkpoint protein, with anti-LAG3 antibodies activating T effector cells and affecting regulatory T cell functions. Furthermore LAG3 appears to act in a synergistic fashion with PD-1/PD-L1, suggesting that a dual antibody approach may prove useful in cancer immunotherapy (5).

References

Mayya V., et al . Quantitative phosphoproteomic analysis of T cell receptor signaling reveals system-wide modulation of protein-protein interactions. 2009, Sci. Signal. 2:RA46-RA46.Sakr M.A., et al.,GI24 enhances tumor invasiveness by regulating cell surface membrane-type 1 matrix metalloproteinase. 2010, Cancer Sci. 101:2368-2374.