Active Recombinant Human VSIR protein, Fc/Avi-tagged, Biotinylated

Cat. No. VSIR-059H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Biotinylated Recombinant Human VSIR(Phe33-Ala194) protein, fused to Fc/Avi tag at the C-terminus, was expressed in HEK293 cells .
Species	Human
Source	HEK293
ProteinLength	Phe33-Ala194
Description	Platelet receptor Gi24, also known as Dies1, VISTA, SISP1 and B7-H5, is a 55-65 kDa transmembrane glycoprotein with homology to B7-like immune co-stimulatory molecules (1, 2). Mature human Gi24 contains a 162 amino acid (aa) extracellular domain (ECD) with one V-type Ig-like domain, a 21 aa transmembrane segment, and a 96 aa cytoplasmic domain. Within the ECD, human Gi24 shares 70% and 67% aa sequence identity with mouse and rat Gi24, respectively (3). The 30 kDa ECD can be shed by MT1-MMP, with a 25-30 kDa fragment remaining in the membrane (3). Gi24 promotes both MT1-MMP expression and the MT1-MMP mediated activation of MMP-2 (3). Gi24 supports the differentiation of embryonic stem cells (ESC) and enhances BMP-4 induced signaling in ESC, but is also down-regulated following BMP-4 exposure (4, 5). It binds to BMP-4 directly, and also associates with the type I BMP receptor Activin RIB/ALK-4 (4, 5). Gi24 is expressed on the surface of naïve CD4+ T cells and regulatory T cells (6). It is up-regulated in vivo on activated monocytes and

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	dendritic cells (5). Gi24 inhibits CD4+ and CD8+ T cell proliferation, and their production of IL-2 and IFN- gamma (6). Its expression on tumor cells attenuates the anti-tumor immune response and enables more rapid tumor progression (6). In contrast, Gi24 limits disease progression in the autoimmune disease model EAE (6).
Predicted N Terminal	Phe33
Form	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose.
Bio-activity	Measured by its binding ability in a functional ELISA. When Recombinant Human VSIG3 Fc Chimera is immobilized at 5 g/mL (100 μ/well), Biotinylated Recombinant Human VISIR Fc Chimera Avi-tag binds with an ED50 of 0.5-3 μg/mL.
Molecular Mass	64-75 kDa, under reducing conditions
Endotoxin	<0.10 EU per 1 μg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Applications	Bioactivity
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.12 months from date of receipt, -20 to -70 °C as supplied.1 month, 2 to 8 °C under sterile conditions after reconstitution.3 months, -20 to -70 °C under sterile conditions after reconstitution.
Reconstitution	Reconstitute at 500 μg/mL in PBS.

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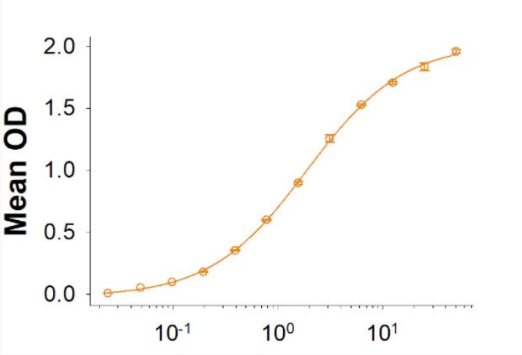
Conjugation	Biotin

GENE INFORMATION

Gene Name	VSIR V-set immunoregulatory receptor [Homo sapiens]
Official Symbol	VSIR
Synonyms	B7H5; GI24; B7-H5; PD-1H; SISP1; VISTA; PP2135; C10orf54; DD1alpha; V-domain Ig suppressor of T cell activation; V-set domain-containing immunoregulatory receptor; platelet receptor GI24; sisp-1
Gene ID	64115
mRNA Refseq	NM_022153
Protein Refseq	NP_071436
MIM	615608
UniProt ID	Q9H7M9
Binding Activity	

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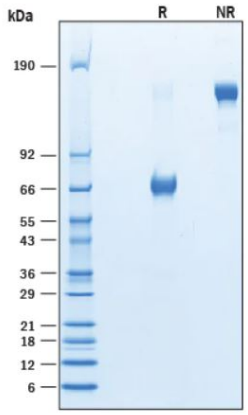
SDS-PAGE



2 μg/lane Protein was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining.

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