

Technical Data Sheet

Biotinylated Human Vista (C-Fc-Avi)

Catalog Number: 814003, 814004
Size: 25 ug, 100 ug
Target Name: B7-H5, SISP1, Gi24, VISTA
Regulatory Status: RUO

Product Details

Application: ELISA, BLI

Format: Liquid, Biotinylated

Expression Host: CHO

Species: Human

Sources: Recombinant Human Vista (Phe33-Ala194) with C-terminus Fc-Avi-tag is expressed in CHO cell. This protein was site-specifically labeled with Biotin by BirA ligase.

Accession Number: Q9H7M9

Molecular Weight: The protein has a predicted molecular weight of 47 kDa. Under DTT-reducing conditions, it migrates at approximately 55-65 kDa on SDS-PAGE.

Affinity Tag: C-Fc-Avi

Purity: >95% based on SDS-PAGE under reducing condition

Formulation: 1xPBS buffer, pH7.4, 0.22 µm filtered

Endotoxin level: Not tested

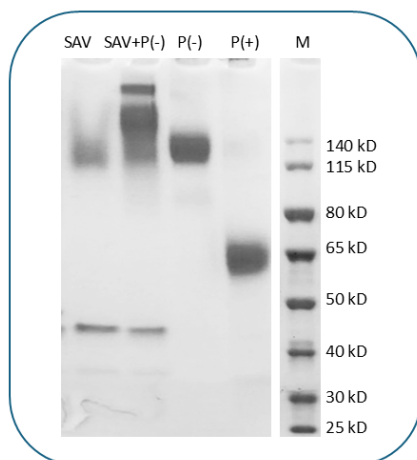
Protein Concentration: 25µg size is bottled at 0.2mg/mL concentration. 100 µg size is supplied at a lot-specific concentration.

Storage and Handling: Briefly centrifuge the vial upon receipt. An unopened vial can be stored at 4°C for up to 2 weeks, or at -20°C or below for up to six months. The protein may be further diluted to 0.1 mg/mL using 0.22 µm-filtered PBS buffer (pH 7.4). For long-term storage, the diluted stock solution should be aliquoted and stored at ≤ -70°C to minimize freeze-thaw cycles. If additional dilution is required, carrier proteins such as FBS or BSA should be added to maintain protein stability.

Background Information

VISTA (V-domain Ig suppressor of T cell activation), also known as VSIR, PD-1H, or C10orf54, is a type I transmembrane protein with a single IgV-like extracellular domain and functions as an inhibitory immune checkpoint molecule. It is broadly expressed on myeloid cells, T cells, dendritic cells, and in tissues such as spleen and bone marrow. VISTA suppresses CD4+ and CD8+ T cell activation and cytokine production, contributing to immune tolerance and regulation. It may also play a role in embryonic stem cell differentiation by modulating BMP4 signaling. VISTA undergoes proteolytic cleavage, generating both soluble and membrane-bound fragments, and its interaction with PSGL1 in low-pH tumor microenvironments has been reported. Due to its immunosuppressive properties, VISTA is considered a promising target for cancer immunotherapy and may be involved in inflammatory conditions such as chronic rhinosinusitis with nasal polyps.

Product Data



Human Vista (C-Fc-Avi) was biotinylated in vitro using BirA ligase. SDS-PAGE analysis under reducing (P+) and non-reducing (P-) conditions shows the protein has a purity greater than 95%. A gel shift assay using co-incubation with streptavidin indicates that the biotinylation efficiency of the Vista protein exceeds 80%.