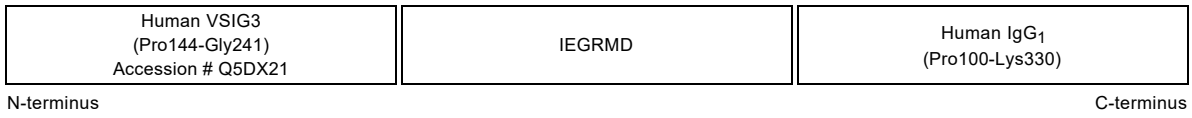
Recombinant Human VSIG3 C-Terminal Fragment Fc Chimera

Catalog Number: 10075-VS

DESCRIPTION

Source

Chinese Hamster Ovary cell line, CHO-derived human VSIG3 protein



N-terminal Sequence Analysis	Pro144
Structure / Form	Disulfide-linked homodimer
Predicted Molecular Mass	37 kDa

SPECIFICATIONS

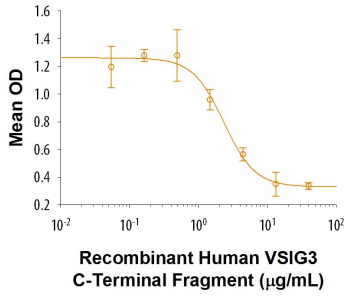
SDS-PAGE	41-51 kDa, reducing conditions
Activity	Measured by its ability to inhibit anti-CD3 antibody induced IL-17 or IFN-gamma secretion by human peripheral blood mononuclear cells (PBMC). The ED_{50} for this effect is 1-6 µg/mL.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 200 µg/mL in PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & 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.

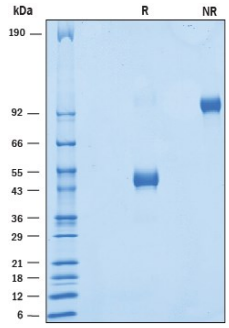
DATA

Bioactivity



Recombinant Human VSIG3 C-Terminal Fragment Fc Chimera (Catalog # 10075-VS) inhibits anti-CD3 antibody induced IFN-gamma secretion by human peripheral blood mononuclear cells. The ED_{50} for this effect is 1-6 µg/mL.

SDS-PAGE



2 µg/lane of Recombinant Human VSIG3 C-Terminal Fragment was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing bands at 41-51 kDa and 80-100 kDa, respectively.

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Recombinant Human VSIG3 C-Terminal Fragment Fc Chimera

Catalog Number: 10075-VS

BACKGROUND

VSIG3, also known as IGSF11, BT-IgSF, and CLMP, is an approximately 50 kDa transmembrane adhesion protein (1). Mature human VSIG3 consists of a 219 amino acid (aa) extracellular domain (ECD), a 21 aa transmembrane segment, and a 169 aa cytoplasmic domain (2). Within the ECD, human VSIG3 shares 95% aa sequence identity with mouse and rat VSIG3. Human ECD contains two tandem Ig-like domains, and this product includes only the C-terminal Ig-like domain (aa 144-241). Alternative splicing generates additional isoforms with a substituted signal peptide that may also have a deletion in the second Ig-like domain (3). VSIG3 is expressed on epithelial and endothelial cells, neurons and glial cells, and platelets (2-4). It localizes to epithelial tight junctions and mediates homophilic in trans cell adhesion (3-5). VSIG3 also localizes to neuronal postsynaptic densities where it recruits the GluA1 and GluA2 subunits of AMPA receptors and supports excitatory synaptic transmission (6). The short isoform can be up-regulated in gastric cancer (7). In zebrafish, VSIG3 is expressed in melanophores and plays a role in the development and patterning of pigment cells (8).

References:

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