

## DESCRIPTION

<b>Source</b>	Chinese Hamster Ovary cell line, CHO-derived human VSIG8 protein		
	Human VSIG8 (Val22-Gly263) Accession # Q5VU13	IEGRMD	Human IgG <sub>1</sub> (Pro100-Lys330)
	N-terminus		C-terminus
<b>N-terminal Sequence</b>	Val22		
<b>Analysis</b>			
<b>Structure / Form</b>	Disulfide-linked homodimer		
<b>Predicted Molecular Mass</b>	54 kDa		

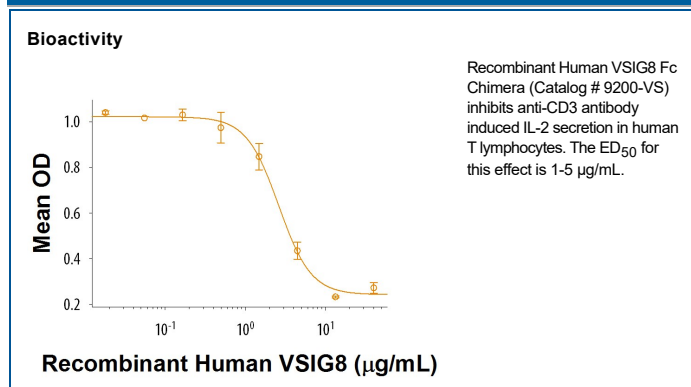
## SPECIFICATIONS

<b>SDS-PAGE</b>	56-64 kDa, reducing conditions
<b>Activity</b>	Measured by its ability to inhibit anti-CD3 antibody induced IL-2 secretion in human T lymphocytes. The ED <sub>50</sub> for this effect is 1-5 µg/mL.
<b>Endotoxin Level</b>	<0.10 EU per 1 µg of the protein by the LAL method.
<b>Purity</b>	>90%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in Sodium Acetate, Mannitol and Trehalose. See Certificate of Analysis for details.

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 200 µg/mL in Water.
<b>Shipping</b>	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>3 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## DATA



## BACKGROUND

VSIG8 (V-set and immunoglobulin domain containing 8), also known as C1orf204, is an approximately 45 kDa type I transmembrane protein of the B7 family within the Ig superfamily. Mature human VSIG8 consists of a 242 amino acid (aa) extracellular domain (ECD) containing two V-type Ig-like domains, a 21 aa transmembrane domain, and a 130 aa cytoplasmic domain. Within the ECD, human VSIG8 shares 88% and 89% aa identity with mouse and rat VSIG8, respectively. Alternative splicing generates a long isoform of human VSIG8 with a substitution in the cytoplasmic juxtamembrane region and a 124 aa extension at the C-terminus. VSIG8 was identified from proteomic analysis of human hair shafts (1, 2). It is expressed in the hair follicle and shaft, superficial layers of the nail matrix, and superficial layers of oral epithelium (3). R&D Systems in-house testing indicates that VSIG8 inhibits the production of IL-2 by activated T cells.

## References:

1. Rice, R.H. *et al.* (2010) J. Proteome Res. **9**:6752.
2. Lee, Y.J. *et al.* (2006) Mol. Cell. Proteomics **5**:789.
3. Rice, R.H. *et al.* (2011) J. Invest. Dermatol. **131**:1936.