

DESCRIPTION

Source	Mouse myeloma cell line, NS0-derived		
	Mouse VSIG8 (Val22-Gly262) Accession # Q6P3A4	IEGRMDP	Mouse IgG _{2a} (Glu98-Lys330)
	N-terminus		C-terminus
N-terminal Sequence Analysis	Val22		
Structure / Form	Disulfide-linked homodimer		
Predicted Molecular Mass	54 kDa		

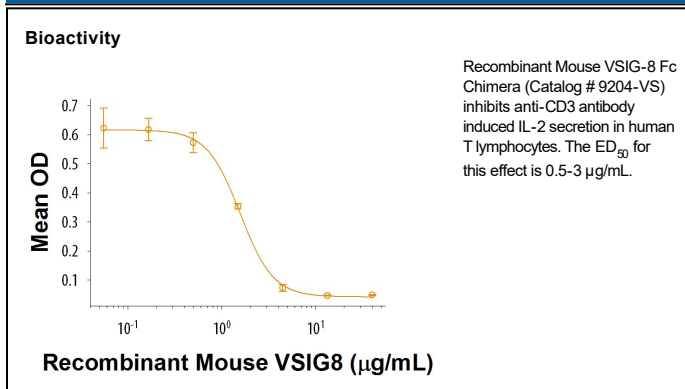
SPECIFICATIONS

SDS-PAGE	56-66 kDa, reducing conditions
Activity	Measured by its ability to inhibit anti-CD3 antibody induced IL-2 secretion in human T lymphocytes. The ED ₅₀ for this effect is 0.5-3 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 100 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. <ul style="list-style-type: none"> ● 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



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 mouse VSIG8 consists of a 241 amino acid (aa) extracellular domain (ECD) containing two V-type Ig-like domains, a 21 aa transmembrane domain, and a 134 aa cytoplasmic domain. Within the ECD, mouse VSIG8 shares 88% and 95% aa identity with human and rat VSIG8, respectively. Alternative splicing generates an isoform of mouse VSIG8 that lacks most of the first Ig-like domain. 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.