

DESCRIPTION

Source	Mouse myeloma cell line, NS0-derived		
	Mouse VSIG10 (Leu25-Asn426) Accession # D3YX43	IEGRMDP	Mouse IgG _{2a} (Glu98-Lys330)
	N-terminus		C-terminus

N-terminal Sequence Analysis	Leu25
Structure / Form	Disulfide-linked homodimer
Predicted Molecular Mass	71 kDa

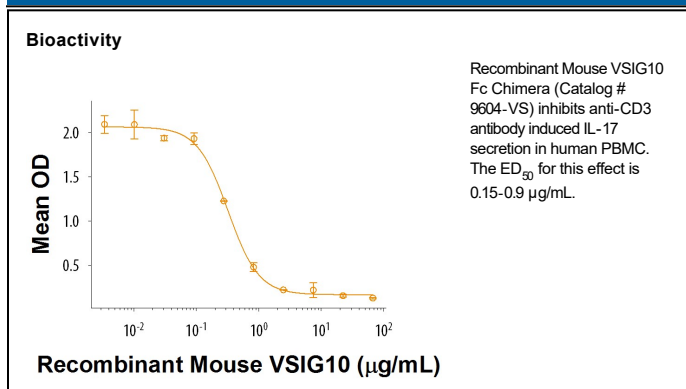
SPECIFICATIONS

SDS-PAGE	97-118 kDa, reducing conditions
Activity	Measured by its ability to inhibit anti-CD3 antibody induced IL-17 secretion by human peripheral blood mononuclear cells (PBMC). The ED ₅₀ for this effect is 0.15-0.9 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. <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

VSIG10 (V-set and immunoglobulin domain-containing protein 10) is a single-pass type I membrane protein of the Ig superfamily. Mouse VSIG10 cDNA encodes a 558 amino acid (aa) precursor that contains a 20 aa signal sequence, a 406 aa extracellular domain (ECD), a 21 aa transmembrane sequence, and a 111 aa cytoplasmic domain (1). The ECD of mouse VSIG10 contains four Ig-like C2-type domains and shares 63% and 84% aa identity with human and rat VSIG10, respectively. The specific biological function of VSIG10L has yet to be elucidated, but there is evidence to suggest the molecule is involved in cell-cell adhesion. Ig-like C2-type domains are similar to antibody constant domains and can be found in T cell adhesion molecules, such as Cluster of Differentiation 2 (CD2) along with vascular and intercellular cell adhesion molecules (VCAM and ICAM, respectively) (2). VSIG10 is structurally related to the B7 family of immune regulatory proteins. Our studies at R&D Systems show that VSIG10 inhibits T cell activation, including IL-17 and Interferon gamma production.

References:

1. SwissProt Accession # D3YX43.
2. Yang H. and E. L. Reinherz (2001) J. Biol. Chem. **276**:18775.