

DESCRIPTION

Source	Mouse myeloma cell line, NS0-derived mouse VSTM5 protein		
	<div>Mouse VSTM5 (Leu28-His146) Accession # Q9D806</div>	IEGRMDP	<div>Mouse IgG_{2a} (Glu98-Lys330)</div>
	N-terminus		C-terminus
N-terminal Sequence Analysis	Leu28		
Structure / Form	Disulfide-linked homodimer		
Predicted Molecular Mass	41 kDa		

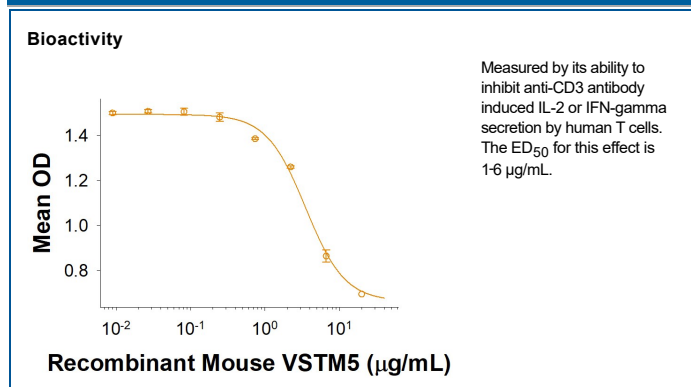
SPECIFICATIONS

SDS-PAGE	51-64 kDa, under reducing conditions
Activity	Measured by its ability to inhibit anti-CD3 antibody induced IL-2 or IFN-gamma secretion by human T cells. The ED ₅₀ for his effect is 1-6 µg/mL.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>90%, 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	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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

V-set and transmembrane domain-containing protein 5 (VSTM5) is a cell-adhesion-like molecule found in the nervous system. It belongs to the VSTM family, a group of membrane proteins with an extracellular V-set domain and a single membrane-spanning region (1). Mouse VSTM5 is synthesized as a 199 amino acid (aa) precursor that contains a 27 aa signal sequence, a 119 aa extracellular domain (ECD), a 21 aa transmembrane segment, and a 32 aa cytoplasmic tail. Within the ECD, mouse VSTM5 shares 79% and 92% aa sequence identity with human and rat VSTM5, respectively. VSTM5 regulates morphology of the neurons during development by promotion of developing dendrites and forming synapse, and it guides both the positional migration of neuron cells and their dendritic morphology (1). N-linked glycosylation at multiple sites plays important roles for the expression, targeting, and function of VSTM5 (2).

References:

1. Lee, A.R. *et al.* (2016) J. Neurosci. **36**:10181.
2. Lee, A.R. *et al.* (2017) PLoS One **12**:e0181257.