

DESCRIPTION

Source	Mouse myeloma cell line, NS0-derived mouse OLT-2/TARM1 protein		
	Mouse TARM-1 (Gln17-Ile257) Accession # B6A8R8	IEGRMDP	Mouse IgG _{2a} (Glu98-Lys330)
	N-terminus		C-terminus
N-terminal Sequence Analysis	No results obtained: Gln17 predicted.		
Structure / Form	Disulfide-linked homodimer		
Predicted Molecular Mass	53 kDa		

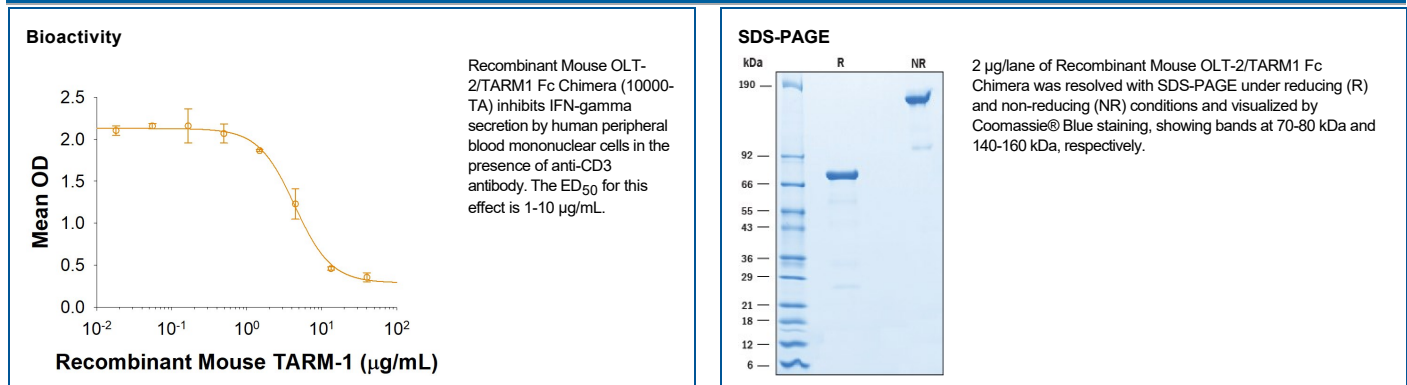
SPECIFICATIONS

SDS-PAGE	70-80 kDa, reducing conditions
Activity	Measured by its ability to inhibit anti-CD3 antibody induced IFN-gamma secretion by human peripheral blood mononuclear cells (PBMC). The ED ₅₀ for this effect is 1-10 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 500 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 °C under sterile conditions after reconstitution.

DATA



BACKGROUND

TARM-1 (T cell interacting, activating receptor on myeloid cells-1), also name OLT-2 (OSCAR-like Transcript 2), is a type 1 membrane protein expressed by neutrophils, inflammatory monocytes, macrophages, and dendritic cells. Mature mouse TARM-1 contains a 242 amino acid (aa) long extracellular domain with two Ig-like C2 domains, a 21 aa long transmembrane domain and a 9 aa long cytoplasmic domain. The extracellular domain of mouse TARM-1 shares 81.6% and 46.5% aa identity with rat and human TARM-1 respectively. TARM-1 associates with the ITAM bearing adaptor FcRγ, but not with DAP10 or DAP12. TARM1 expression is also up-regulated by bone marrow-derived macrophages and dendritic cells following stimulation with TLR agonists *in vitro*. TARM1 receptor stimulation on macrophages and neutrophils co-stimulate the secretion of proinflammatory cytokines induced by TLR ligands, such as LPS. TARM1 Fc fusion protein inhibits anti-CD3 induced CD4⁺ cell activation, suggesting that TARM1 ectodomain interacts with an unidentified receptor on T cells to inhibit T cell activation (1).

References:

1. Radjabova, V. *et al.* (2015) J Immunol. **195**:3149.