Recombinant Mouse TINAGL1

Catalog Number: 9208-TI

DESCRIPTION

Source	Human embryonic kidney cell, HEK293-derived Asp41-His466, with a C-terminal 6-His tag Accession # Q99JR5
N-terminal Sequence Analysis	Asp41
Predicted Molecular Mass	49 kDa

SPECIFICATIONS

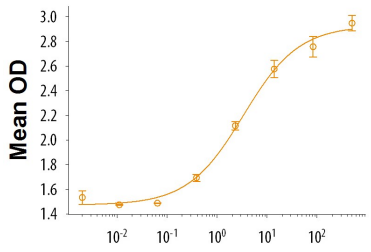
SDS-PAGE	49-58 kDa, reducing conditions
Activity	Measured by its binding ability in a functional ELISA. When Cultrex Mouse Laminin I (Catalog # 3400-010-01) is coated at 5 µg/mL, Recombinant Mouse TINAGL1 binds with an ED_{50} = 1-6 ng/mL.
Endotoxin Level	<1.0 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Formulation	Supplied as a 0.2 µm filtered solution in Tris and NaCl. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 6 months from date of receipt, -20 to -70 °C as supplied. ● 3 months, -20 to -70 °C under sterile conditions after opening.

DATA

Bioactivity



Recombinant Mouse TINAGL1 (Catalog # 9208-TI) binds to Cultrex Mouse Laminin I in an ELISA Binding Assay. When Cultrex Mouse Laminin I (Catalog # 3400-010-01) is coated at 5 µg/mL, Recombinant Mouse TINAGL1 binds with an ED_{50} = 1-6 ng/mL.

BACKGROUND

Tubulointerstitial Nephritis Antigen-like (TINAGL1), also known as Lipocalin-7, AZ-1, and Arg1, is an approximately 50 kDa matricellular protein that contains a Somatomedin-B like domain, a vWF-C domain, and a cysteine peptidase domain that lacks the critical active site Cys residue (1, 2). Mouse TINAGL1 shares 90% and 97% aa sequence identity with human and rat TINAGL1, respectively. It is a component of the extracellular matrix in basement membranes (3-5) where it binds to Collagens I and IV, Laminin, Integrins a5 and b1, and the Anastellin fragment of Fibronectin (3-5). TINAGL1 promotes cell adhesion and angiogenic sprouting from vascular endothelial cells (3, 6). It is expressed in the adrenal cortex and medulla, vascular smooth muscle cells, cardiac and skeletal muscle cells, and in blastocysts that are competent for implantation (2, 3, 5, 7).

References:

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