

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 ED₅₀ = 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.

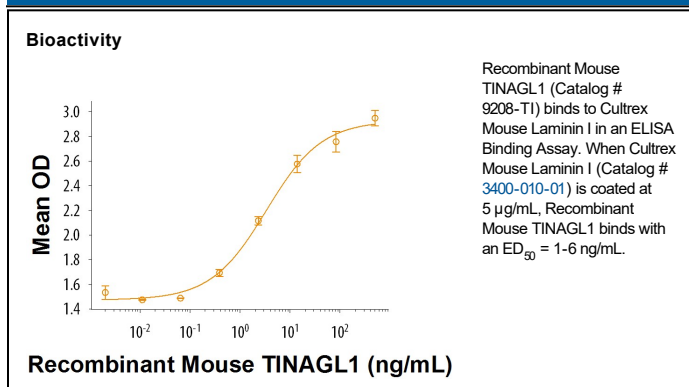
PREPARATION AND STORAGE

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



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 α5 and β1, 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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2. Wex, T. *et al.* (2001) *Biochemistry* **40**:1350.
3. Li, D. *et al.* (2007) *FEBS Lett.* **274**:2506.
4. Tajiri, Y. *et al.* (2010) *Biol. Reprod.* **82**:263.
5. Igarashi, T. *et al.* (2009) *Biol. Reprod.* **81**:948.
6. Brown, L.J. *et al.* (2010) *PLoS One* **5**:e13905.
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