For Research Use Only

Recombinant Mouse TIGIT protein (His Tag)

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Catalog Number: Eg0925

Basic Information

Species:
Mouse

Purity:
>95 %, SDS-PAGE

Tag:
His Tag

EC50:
16-65 ng/mL

Technical Specifications

Purity:
>95 %, SDS-PAGE

Endotoxin Level:
<0.1 EU/μg protein, LAL method

Source:
HEK293-derived Mouse TIGIT protein Gly26-Thr143 (Accession# NP_001139797.1) with a His tag at the C-terminus.

GeneID:
100043314

Accession:
NP_001139797.1

Predicted Molecular Mass:
13.7 kDa

SDS-PAGE:
15-25 kDa, reducing (R) conditions

Formulation:
Lyophilized from 0.22 μm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

Biological Activity

Immobilized Mouse TIGIT (His tag) at 1 μg/mL (100 μL/well) can bind Mouse CD155 (hFc tag) with a linear range of 16-65 ng/mL.

Storage and Shipping

Storage:
It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20℃ to -80℃ as lyophilized proteins.
- 3 months, -20℃ to -80℃ under sterile conditions after reconstitution.

Shipping:
The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

Background

TIGIT (T-cell immunoreceptor with Ig and ITIM domains), also known as VSIG9 or VSTM3, is an immune receptor expressed on T cells, including Treg and memory subsets, as well as on NK cells. It contains an immunoglobulin variable domain, a transmembrane domain, and an immunoreceptor tyrosine-based inhibitory motif (ITIM). TIGIT binds to poliovirus receptor (PVR, also called CD155) with high affinity, and also to PVRL2 (CD112) with lower affinity. The interaction of TIGIT with PVR on dendritic cells increases the secretion of IL-10 and decreases the secretion of proinflammatory cytokine and suppresses T-cell activation by promoting the generation of mature immunoregulatory dendritic cells. TIGIT can inhibit NK cytotoxicity directly through its ITIM.

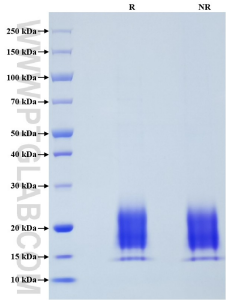
References

1.Xin Yu, et al. (2009). Nat Immunol. 10(1):48-57.
2.Noa Stanietsky, et al. (2009). Proc Natl Acad Sci U S A. 106(42):17858-63.
3.Joe-Marc Chauvin, et al. (2020). J Immunother Cancer. 8(2):e000957.

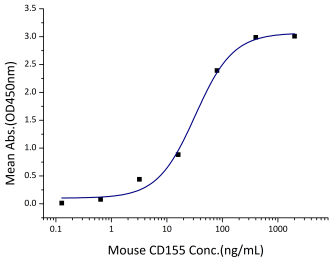
Synonyms

TIGIT, Vstm3

Selected Validation Data



Purity of Recombinant Mouse TIGIT was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.



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