## For Research Use Only

## Recombinant Human TMIGD2/CD28H protein (rFc Tag)



Catalog Number: Eg2264

**Basic Information** 

Species: Human

Purity: >90 %, SDS-PAGE

Tag: rFc Tag

**Technical Specifications** 

Purity: >90 %, SDS-PAGE

**Endotoxin Level:** 

<0.1 EU/ µ g protein, LAL method

HEK293-derived Human TMIGD2 protein Leu23-Gly150 (Accession# Q96BF3-1) with a rabbit IgG Fc tag at the Cterminus.

GeneID:

126259

**Accession:** Q96BF3-1

**Predicted Molecular Mass:** 

40.3 kDa

**SDS-PAGE:** 

46-60 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** 

Not tested

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

Transmembrane and immunoglobulin domain-containing protein 2 (TMIGD2, also known as CD28H and IGPR1), plays a role in cell-cell interaction, migration, and angiogenesis. Through interaction with HHLA2, it costimulates T-cells in the context of TCR-mediated activation and enhances T-cell proliferation and cytokine production via an AKT-dependent signaling cascade. TMIGD2 has been associated with several diseases, particularly in the context of cancer. It is aberrantly expressed by human AML cells and can be used to identify and enrich functional LSCs. The predicted molecular weight of the TMIGD2 protein is 31 kDa. The higher molecular weight of TMIGD2 could be associated with its potential glycosylation at its extracellular region.

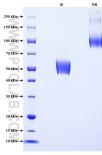
References

- 1. Nader Rahimi, et al.(2012) Mol Biol Cell. 23(9):1646-56. 2. Yuwen Zhu, et al.(2013) Nat Commun. 4:2043. 3. Hao Wang, et al.(2024) Nat Commun. 15(1):11 4. Nader Rahimi, et al. (2012) Mol Biol Cell. 23(9):1646-56

**Synonyms** 

TMIGD2/CD28, TMIGD2/CD28H, CD28 homolog, CD28H, IGPR1

## **Selected Validation Data**



Purity of Recombinant Human TMIGD2 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.