Recombinant TMIG2 protein (His tag)

Catalog Number	545641
Synonyms	CD28 homolog; Immunoglobulin and proline-rich receptor 1; IGPR-1
Species	Human
Expression System	E. coli
Accession	Q96BF3
Molecular Weight	Predictes a molecular mass of 14.42 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 14 kDa band.

Product Information

Sequence Region	23-139
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 23-139 aa (Q96BF3) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human TMIGD2 (CD28 homolog) Fragment (aa 23-139) – a high-purity protein fragment encompassing the Ig-like domain, ideal for studying cell-cell interactions, T-cell costimulation, and angiogenesis in immunological and cancer research. TMIGD2, also known as CD28 homolog or IGPR-1, is a single-pass type I membrane protein located on the cell surface in humans. It plays a critical role in cell-cell interactions, migration, and angiogenesis. Through binding to HHLA2, it costimulates T-cells during TCR-mediated activation, enhancing T-cell proliferation and cytokine production via an AKT-dependent signaling pathway. This positions TMIGD2 as a key regulator in immune responses and vascular biology, with implications for therapeutic development.