

## 32-20652: Recombinant Human TMIGD2/CD28H Fc(Discontinued)

**Alternative Name :** Transmembrane and immunoglobulin domain-containing protein 2, CD28 homolog, Immunoglobulin and proline-rich receptor 1 (IGPR-1)

### Description

#### Source:CHO cells

Transmembrane and immunoglobulin domain-containing protein 2 (TMIGD2), or CD28H, is a type I costimulatory transmembrane receptor of the CD28 receptor family that functions as both an adhesion molecule and regulator of T cell function. TMIGD2 is constitutively expressed on na<sup>+</sup>ve T cells and NK cells, although expression is rapidly lost upon stimulation. Interaction with its ligand, B7-H7/HLA2, co-stimulates T cell proliferation and differentiation, as well as increases cytokine production through the Akt pathway. TMIGD2 is also widely expressed on cells of epithelial and endothelial origin where it regulates cell morphology and cell-cell interaction, reduces cell migration and promotes angiogenesis. The cytoplasmic tail of TMIGD2 interacts with SH3-containing signaling molecules, such as SPIN90, CACNB2, BPAG1 and MIA, to modulate angiogenesis. A CHO cell-derived Recombinant Human TMIGD2/CD28H Fc is a glycosylated, disulfide-linked homodimer of 361-amino-acid-residues whose monomer consists of the 128-amino-acid extracellular domain fused to the 231-amino-acid length Fc portion of human IgG1 by two glycine residues. The calculated molecular weight of monomeric Recombinant TMIGD2/CD28H Fc is 40.1kDa; however, due to glycosylation, it migrates at an apparent molecular weight of approximately 55-60 kDa by SDS-PAGE analysis under reducing conditions.

### Product Info

**Amount :** 10 µg / 50 µg

**Purification :** Purity:>= 95% by SDS-PAGE gel and HPLC analyses.

**Content :** This recombinant protein is supplied in lyophilized form.

**Amino Acid :** LSVQQGPNLL QVRQGSQATL VCQVDQATAW ERLRVKWT KD GAILCQPYIT NGSLSLGVCG  
PQGRLSWQAP SHLTQLQDPV SLNHSGAYVC WAAVEIPELE EAEGNITRLF VDPDDPTQNR NRIASFPGGG  
PKSCDKTHTC PPCPAPELLG GPSVFLFPPK PKDTLMISRT PEVTCVVVDV SHEDPEVKFN WYVDGVEVHN  
AKTKPREEQY NSTYRVVSVL TVLHQDWLNG KEYKCKVSNK ALPAPIEKTI SKAKGQPREP QVYTLPPSRD  
ELTKNQVSLT CLVKGFYPSD IAVEWESNGQ PENNYKTPP VLDS DGSFFL YSKLTVDKSR WQQGNVFSCS  
VMHEALHNHY TQKSLSLSPG K

### Application Note

Determined by its ability to bind recombinant human B7-H7 protein in a functional ELISA.