

## Product datasheet for **TP728134L**

### TMIGD2 (23-150, hIgG-Tag) Human Recombinant Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant human TMIGD2/CD28H protein
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	LSVQQGPNLL QVRQGSQATL VCQVDQATAW ERLRVKWKTD GAILCQPYIT NGSLSLGVCG PQGRLSWQAP SHLTLQLDPV SLNHSGAYVC WAAVEIPELE EAEGNITRLF VDPDDPTQNR NRIASFPG
Tag:	hIgG-Tag
Predicted MW:	40.1kDa (361aa)
Concentration:	1mg/ml (determined by Absorbance at 280nm)
Purity:	95% by SDS - PAGE
Buffer:	Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol
Bioactivity:	Measured by its binding ability in a functional ELISA with Human HHLA2. The ED50 range $\leq$ 200 ng/ml.
Endotoxin:	<1 EU per 1ug of protein (determined by LAL method)
Applications:	SDS-PAGE, Bioactivity
Storage:	Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.
RefSeq:	<a href="#">NP_653216.2</a>



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**Summary:**

TMIGD2, also known as IGPR-1, is a member of the Immunoglobulin family. This protein shares approximately 10% amino acid sequence identity with CD28, CTLA4, ICOS, and PD1. The immunoglobulin domain of TMIGD2 was predicted to be Ig V fold and was found to be highly similar to the Ig domain of myelin-associated glycoprotein. It plays a role in cell-cell interaction, cell migration, and angiogenesis. Through interaction with HHLA2, co-stimulates T-cells in the context of TCR-mediated activation. Enhances T-cell proliferation and cytokine production via an AKT-dependent signaling cascade. It is constitutively expressed on naive T and NK cells. Similar to the interaction of B7 with CD28, the interaction of TMIGD2 with B7H7 activates the Akt-dependent signaling cascade and promotes the proliferation and activation of newly generated peripheral effector and memory T cells. Also, it interacts with multiple cytoskeletal proteins. Recombinant human TMIGD2, fused to hIgG-tag at C-terminus, was expressed in HEK293 cell and purified by using conventional chromatography techniques.

**Product images:**