

Synonym

TMIGD2,IGPR1

Source

Human CD28H, His Tag(CDH-H52H3) is expressed from human 293 cells (HEK293). It contains AA Leu 23 - Gly 150 (Accession # [Q96BF3-1](#)).

Predicted N-terminus: Leu 23

Molecular Characterization

CD28H(Leu 23 - Gly 150)
Q96BF3-1

Poly-his

This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 15.9 kDa. The protein migrates as 22-32 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

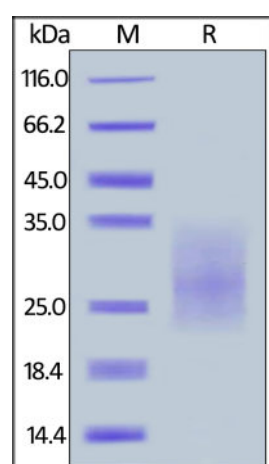
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

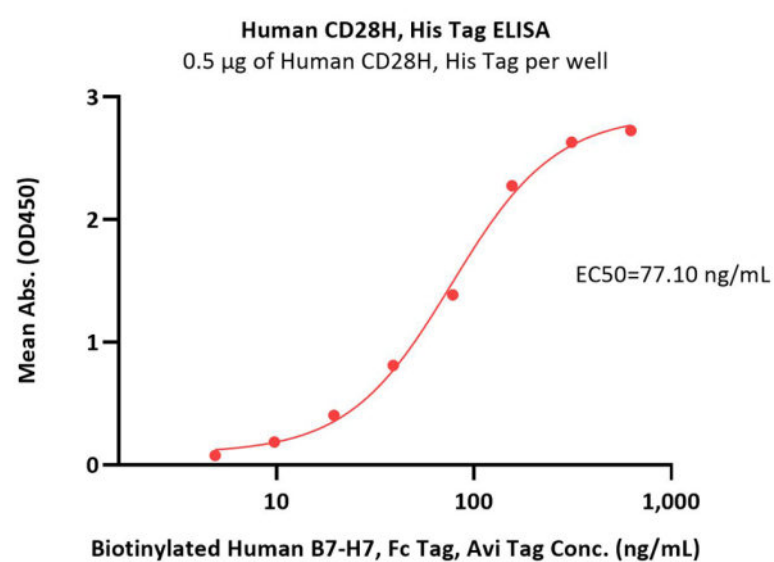
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

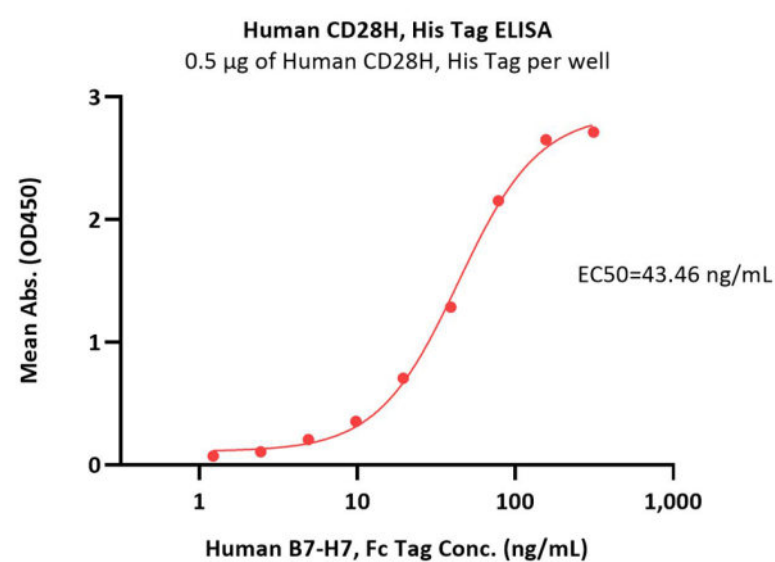
SDS-PAGE

Human CD28H, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA



Immobilized Human CD28H, His Tag (Cat. No. CDH-H52H3) at 5 µg/mL (100 µL/well) can bind Biotinylated Human B7-H7, Fc Tag, Avi Tag (Cat. No. B77-H82F5) with a linear range of 10-156 ng/mL (QC tested).



Immobilized Human CD28H, His Tag (Cat. No. CDH-H52H3) at 5 µg/mL (100 µL/well) can bind Human B7-H7, Fc Tag (Cat. No. B77-H5257) with a linear range of 1-78 ng/mL (Routinely tested).

Background

CD28 homolog (CD28H), also called transmembrane and immunoglobulin domain containing 2 (TMIGD2) and IGPR-1, is encoded by the TMIGD2 gene. CD28H is constitutively expressed on naive T and NK cells. After interaction of CD28 homolog with B7 homologue, the peripheral effector and memory T cells can be activated and proliferated by Akt-dependent signalling cascade. Plays a role in cell-cell interaction, cell migration, and angiogenesis. Through interaction with HHLA2, costimulates T-cells in the context of TCR-mediated activation. Enhances T-cell proliferation and cytokine production via an AKT-dependent signaling cascade.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.