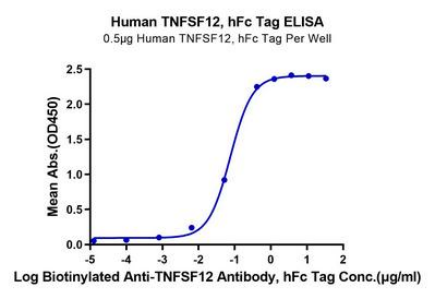
Bioactive HuPro®

TNFSF12 (Human) Recombinant Protein

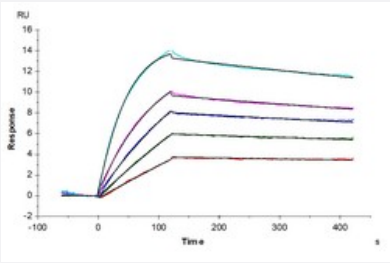
Catalog # P9729 Size 100 ug

Applications



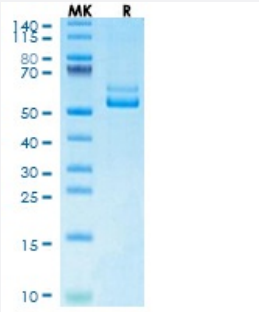
Enzyme-linked Immunoabsorbent Assay

Immobilized Human TNFSF12, hFc Tag at 5 ug/mL (100 uL/well) on the plate. Dose response curve for Biotinylated Anti-TNFSF12 Antibody, hFc Tag with the EC50 of 75.5 ng/mL determined by ELISA.



Surface Plasmon Resonance

Human TNFSF12, hFc Tag immobilized on CM5 Chip can bind Human TNFRSF12A, hFc Tag with an affinity constant of 0.24 nM as determined in SPR assay (Biacore T200).



SEC-HPLC

The purity of Human TNFSF12 Protein is greater than 95% as determined by SEC-HPLC.

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Tris-Bis PAGE

Human TNFSF12 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

Specification

Product Description	Human TNFSF12 (O43508-1, 43 a.a. - 249 a.a.) partial recombinant protein with hFc tag at C-terminus expressed in HEK293 cells.
Sequence	SLGSRASLSAQEPAQEELVAEEDQDPSELNPQTEESQDPAPFLNRLVRPRRSAPKGRKTRARR AIAAHYEVHPRPGQDGAQAGVDGTVSGWEEARINSSSPLRYNRQIGEFIVTRAGLYYLYCQVHFDE GKAVYLKLDLLVDGVLALRCLEEFSATAASSLGPQLRLCQVSGLLALRPGSSLRIRTLPWAHLKA APFLTYFGLFQVH
Host	Human
Theoretical MW (kDa)	49.62
Form	Liquid
Preparation Method	Mammalian cell (Expi293, high-yield transient HEK293) expression system
Purity	> 95% as determined by Tris-Bis PAGE; > 95% as determined by HPLC
Endotoxin Level	< 1 EU per 1 ug of protein (determined by LAL method)
Activity	The EC_{50} was 75.5 ng/mL, messured by ELISA at 5 ug/mL.
Quality Control Testing	SEC-HPLC and Tris-Bis PAGE SEC-HPLC The purity of Human TNFSF12 Protein is greater than 95% as determined by SEC-HPLC. Tris-Bis PAGE Human TNFSF12 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.
Recommend Usage	Biological Activity ELISA SDS-PAGE The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS pH 7.4
Storage Instruction	Store at -80°C for 12 Month. Aliquot to avoid repeated freezing and thawing.

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Note	Result of bioactivity analysis

Applications

- Functional Study
- Enzyme-linked Immunoabsorbent Assay

  Immobilized Human TNFSF12, hFc Tag at 5 ug/mL (100 uL/well) on the plate. Dose response curve for Biotinylated Anti-TNFSF12 Antibody, hFc Tag with the EC50 of 75.5 ng/mL determined by ELISA.
- SDS-PAGE
- Surface Plasmon Resonance

  Human TNFSF12, hFc Tag immobilized on CM5 Chip can bind Human TNFRSF12A, hFc Tag with an affinity constant of 0.24 nM as determined in SPR assay (Biacore T200).

Gene Info — TNFSF12

Entrez GeneID	8742
Protein Accession#	O43508-1
Gene Name	TNFSF12
Gene Alias	APO3L, DR3LG, MGC129581, MGC20669, TWEAK
Gene Description	tumor necrosis factor (ligand) superfamily, member 12
Omim ID	602695
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is a cytokine that belongs to the tumor necrosis factor (TNF) lig and family. This protein is a ligand for the FN14/TWEAKR receptor. This cytokine has overlapping signaling functions with TNF, but displays a much wider tissue distribution. This cytokine can indu ce apoptosis via multiple pathways of cell death in a cell type-specific manner. This cytokine is als o found to promote proliferation and migration of endothelial cells, and thus acts as a regulator of angiogenesis. Some transcripts that skip the last exon of this gene and continue with the second exon of the neighboring TNFSF13 gene have been identified; such read-through transcripts are c ontained in GeneID 407977, TNFSF12-TNFSF13. [provided by RefSeq
Other Designations	APO3/DR3 ligand|TNF-related WEAK inducer of apoptosis

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Pathway

- Cytokine-cytokine receptor interaction

Disease

- Genetic Predisposition to Disease
- Hematologic Diseases
- Lupus Erythematosus
- Occupational Diseases

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