

Recombinant Human TNFRSF12A/TWEAKR/CD266 Protein

Catalog No.: RP00166 **Recombinant**

Sequence Information

Species	Gene ID	Swiss Prot
Human	51330	Q9NP84

Tags

C-hFc&His

Synonyms

CD266; FN14;
TWEAKR;TNFRSF12A;FN14;TWEAKR

Product Information

Source	Purification
HEK293 cells	> 90% by SDS-PAGE.

Endotoxin

< 0.1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4. Contact us for customized product form or formulation.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Background

Fn14 (tumor necrosis factor receptor superfamily, member 12A), also known as TNFRSF12A, is the receptor for TNFSF12/TWEAK. Human and mouse TNFRSF12A share 82% aa sequence identity. TNFRSF12A transcript was expressed at high levels in heart, placenta, and kidney, at intermediate levels in lung, skeletal muscle, and pancreas, and at low levels in brain and liver. In addition, elevated TNFRSF12A expression was found in human liver cancer cell lines and hepatocellular carcinoma specimens. TNFRSF12A is the weak inducer of apoptosis in some cell types. It promotes angiogenesis and the proliferation of endothelial cells. TNFRSF12A may modulate cellular adhesion to matrix proteins.

Basic Information

Description

Recombinant Human TNFRSF12A/TWEAKR/CD266 Protein is produced by HEK293 expression system. The target protein is expressed with sequence (Glu28-Trp79) of human TNFRSF12A/FN14/TWEAKR (Accession #NP_057723.1) fused with an Fc, 6×His tag at the C-terminus.

Bio-Activity

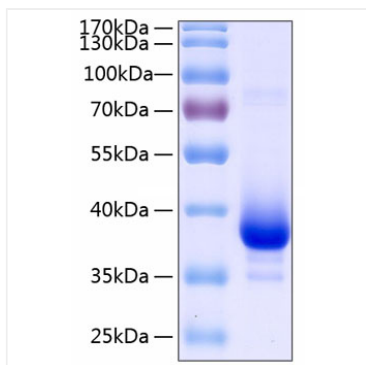
1. Measured by its ability to inhibit TWEAK-induced apoptosis in HT-29 human colon adenocarcinoma cells. The ED₅₀ for this effect is 2-12 μg/mL in the presence of 1 μg/mL recombinant human TWEAK. 2. Measured by its binding ability in a functional ELISA. Immobilized Human TNFSF12 at 2 μg/mL (100 μL/well) can bind Human TNFRSF12A with a linear range of 0.1-2.3 ng/mL. 3. Measured by its ability to inhibit the TWEAK-dependent proliferation of HUVEC human umbilical vein endothelial cells. The ED₅₀ for this effect is 20-80 ng/mL in the presence of 15 ng/mL recombinant human TWEAK.

Storage

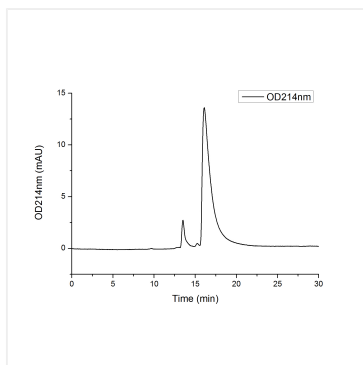
Store the lyophilized protein at -20°C to -80 °C for long term. After reconstitution, the protein solution is stable at -20 °C for 3 months, at 2-8 °C for up to 1 week. Avoid repeated freeze/thaw cycles.

Contact

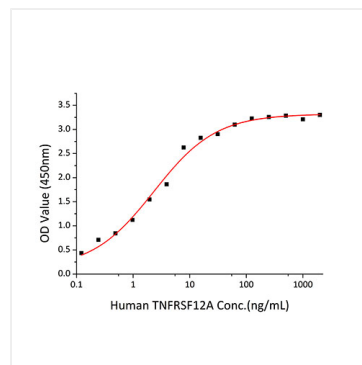
Validation Data



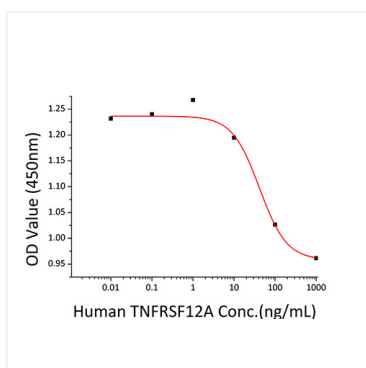
Recombinant Human TNFRSF12A/TWEAKR/CD266 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 35-45 kDa.



The purity of Human TNFRSF12A/FN14/TWEAKR Protein (Cat.RP00166) was greater than 90% as determined by SEC-HPLC.



Immobilized Human TNFSF12 at 2 µg/mL (100 µL/well) can bind Human TNFRSF12A with a linear range of 0.1-2.3 ng/mL.



Recombinant Human TNFRSF12A inhibits the TWEAK-dependent proliferation of HUVEC human umbilical vein endothelial cells. The ED₅₀ for this effect is 20-80 ng/mL in the presence of 15 ng/mL recombinant human TWEAK.