

Product datasheet

Rat TNFSF12 ELISA Kit (TWEAK) ab213915

1 Image

Overview

Product name Rat TNFSF12 ELISA Kit (TWEAK)

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
1	16	31pg/ml	1.7	= 5.5%
2	16	228pg/ml	9.8	= 4.3%
3	16	507pg/ml	30.42	= 6%

Inter-assay

Sample	n	Mean	SD	CV%
1	24	28pg/ml	1.96	= 7%
2	24	218pg/ml	9.59	= 4.4%
3	24	506pg/ml	37.44	= 7.4%

Sample type Cell culture supernatant, Serum, Cell Lysate, Hep Plasma, EDTA Plasma

Assay type Sandwich (quantitative)

Sensitivity < 10 pg/ml

Range 15.6 pg/ml - 1000 pg/ml

Assay time 3h 30m

Assay duration Multiple steps standard assay

Species reactivity **Reacts with:** Rat

Product overview The Rat TNFSF12 Enzyme-Linked Immunosorbent Assay (ELISA) kit (ab213915) is designed for the quantitative measurement of Rat TNFSF12 in cell culture supernatants, cell lysates, serum and plasma (heparin, EDTA).

The ELISA kit is based on standard sandwich enzyme-linked immune-sorbent assay technology.

A monoclonal antibody from mouse specific for TNFSF12 has been pre-coated onto 96-well plates. Standards and test samples are added to the wells; a biotinylated detection polyclonal antibody from goat specific for TNFSF12 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex is added and unbound conjugates are washed away with PBS or TBS buffer. HRP substrate TMB is used to visualize HRP enzymatic reaction. TMB is catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the rat TNFSF12 amount of sample captured in plate.

Notes Tumor necrosis factor ligand superfamily member 12 also known as TNF-related weak inducer of apoptosis (TWEAK) is a protein that in humans is encoded by the TNFSF12 gene. The protein encoded by this gene is a cytokine that belongs to the tumor necrosis factor (TNF) ligand 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 induce apoptosis via multiple pathways of cell death in a cell type-specific manner. This cytokine is also found to promote proliferation and migration of endothelial cells, and thus acts as a regulator of angiogenesis. The TNFSF12 gene lies 878 bp upstream of the putative transcriptional start site of the TNFSF13 gene on chromosome 17p13.1.

Platform Pre-coated microplate (12 x 8 well strips)

Properties

Storage instructions Store at -20°C. Please refer to protocols.

Components	Identifier	1 x 96 tests
ABC Diluent Buffer	Blue Cap	1 x 12ml
Adhesive Plate Seal		4 units
Antibody Diluent Buffer	Green Cap	1 x 12ml
Anti-rat TNFSF12 coated Microplate (12 x 8 wells)		1 unit
Avidin-Biotin-Peroxidase Complex (ABC)		1 x 100µl
Biotinylated anti- rat TNFSF12 antibody		1 x 130µl
Lyophilized recombinant rat TNFSF12 standard		2 vials
Sample Diluent Buffer	Green Cap	1 x 30ml
TMB Color Developing Agent	Black Cap	1 x 10ml
TMB Stop Solution	Yellow Cap	1 x 10ml

Function Binds to FN14 and possibly also to TNFSF12/APO3. Weak inducer of apoptosis in some cell types. Mediates NF-kappa-B activation. Promotes angiogenesis and the proliferation of endothelial cells. Also involved in induction of inflammatory cytokines.

Tissue specificity Highly expressed in adult heart, pancreas, skeletal muscle, brain, colon, small intestine, lung, ovary, prostate, spleen, lymph node, appendix and peripheral blood lymphocytes. Low expression

in kidney, testis, liver, placenta, thymus and bone marrow. Also detected in fetal kidney, liver, lung and brain.

Sequence similarities

Belongs to the tumor necrosis factor family.

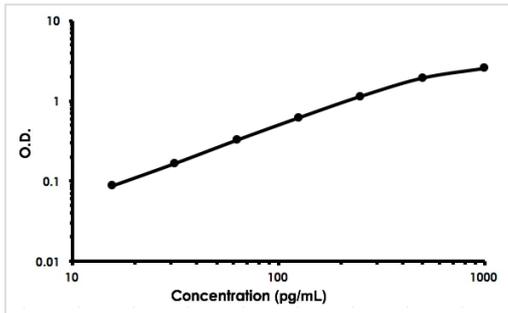
Post-translational modifications

The soluble form derives from the membrane form by proteolytic processing.

Cellular localization

Secreted and Cell membrane.

Images



Rat TNFSF12 ELISA Kit (ab213915) Standard Curve

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