

# TWEAK Antibody

Catalog # ASC10414

# **Product Information**

**Application** WB, E, IHC-P **Primary Accession** 043508

Other Accession NP\_003800, 4507597
Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Isotype IgG
Calculated MW 27216
Concentration (mg/ml) 1 mg/mL
Conjugate Unconjugated

**Application Notes**TWEAK antibody can be used for the detection of TWEAK by Western blot at 1

□g/mL. Antibody can also be used for immunohistochemistry starting at 10

□g/mL.

## **Additional Information**

**Gene ID** 8742

Other Names TWEAK Antibody: APO3L, DR3LG, TWEAK, APO3L, UNQ181/PRO207, Tumor

necrosis factor ligand superfamily member 12, APO3 ligand, tumor necrosis

factor (ligand) superfamily, member 12

Target/Specificity TNFSF12;

**Reconstitution & Storage** TWEAK antibody can be stored at 4°C for three months and -20°C, stable for

up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high

temperatures.

**Precautions**TWEAK Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

## **Protein Information**

Name TNFSF12

**Synonyms** APO3L, DR3LG

**Function** Binds to FN14 and possibly also to TNRFSF12/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. Promotes IL8 secretion.

**Cellular Location** Cell membrane; Single-pass type II membrane protein [Isoform TWE-PRIL]:

Cell membrane; Single-pass membrane protein

#### **Tissue Location**

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

# **Background**

TWEAK Antibody: TNF-related weak inducer of apoptosis (TWEAK) is a member of the tumor necrosis factor superfamily (TNFSF) of structurally related cytokines. Like most other members of this family, TWEAK is a cell surface-associated type II transmembrane protein although a smaller, biologically active form can also be generated by cleavage near the cell membrane. TWEAK has multiple biological activities, including stimulation of cell growth and angiogenesis, induction of inflammatory cytokines, in addition to stimulation of apoptosis. The TWEAK signal transduction pathway has not been well established but it appears to signal via TweakR/Fn14 in a manner similar to that described for other TNFSF members that bind receptors lacking death domains.

### References

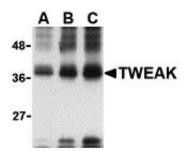
Wiley SR and Winkles JA. TWEAK, a member of the TNF superfamily, is a multifunctional cytokine that binds the TweakR/Fn14 receptor. Cyto. And Growth Factor Rev. 2003; 14:241-9.

Chicheportiche Y, Bourdon PR, Xu H, et al. TWEAK, a new secreted ligand in the tumor necrosis factor family that weakly induces apoptosis. J. Biol. Chem. 1997; 272:32401-10.

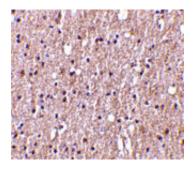
Lynch CN, Wang YC, Lund JK, et al. TWEAK induces angiogenesis and proliferation of endothelial cells. J. Biol. Chem. 1999; 274:8455-9.

Chicheportiche Y, Chicheportiche R, Sizing I, et al. Proinflammatory activity of TWEAK on human dermal fibroblasts and synoviocytes: blocking and enhancing effects of anti-TWEAK monoclonal antibodies. Arthr. Res. 2002; 4:126-33. 5.

# **Images**



Western blot analysis of (A) 5 ng, (B) 25 ng and (C) 50 ng of recombinant TWEAK with TWEAK antibody at 1  $\mu$ g/mL.



Immunohistochemistry of TWEAK in human brain tissue with TWEAK antibody at 10  $\mu$ g/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.