

APRIL (R-15): sc-5739

BACKGROUND

A proliferation-inducing ligand (APRIL), also designated TNFSF13, is a type II membrane protein that shares characteristics with other members of the tumor necrosis factor (TNF) cytokine family. APRIL is expressed in high levels in transformed cell lines and in human colon, thyroid and lymphoid tumor tissues. APRIL is critically involved in the regulation of infections, inflammation, auto-immune diseases and tissue homeostasis. APRIL is implicated in the regulation of tumor cell growth. The C-terminal extracellular domain has a jelly roll topography and is important in ligand trimerization. The binding of the ligand to its respective receptor induces oligomerization, initiating downstream signaling events. Intrinsic to oligomerization is the formation of the receptor binding site at the junction between neighboring subunits, creating a multi-valent ligand.

REFERENCES

1. Smith, C.A., et al. 1994. The TNF receptor superfamily of cellular and viral proteins: activation, costimulation, and death. *Cell* 76: 959-962.
2. Banner, D.W., et al. 1996. The crystal structure of the complex of blood coagulation factor VIIa with soluble tissue factor. *Nature* 380: 41-46.

CHROMOSOMAL LOCATION

Genetic locus: TNFSF13/TNFSF12-TNFSF13 (human) mapping to 17p13.1; BC096441 (mouse) mapping to 11 B4.

SOURCE

APRIL (R-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of APRIL of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-5739 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

APRIL (R-15) is recommended for detection of APRIL of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

APRIL (R-15) is also recommended for detection of APRIL in additional species, including equine, canine and porcine.

Suitable for use as control antibody for APRIL siRNA (h): sc-39822, APRIL siRNA (m): sc-39823, APRIL shRNA Plasmid (h): sc-39822-SH, APRIL shRNA Plasmid (m): sc-39823-SH, APRIL shRNA (h) Lentiviral Particles: sc-39822-V and APRIL shRNA (m) Lentiviral Particles: sc-39823-V.

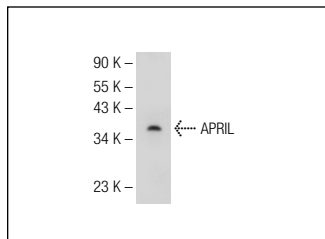
Molecular Weight of APRIL: 27 kDa.

Positive Controls: M1 whole cell lysate: sc-364782.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



APRIL (R-15): sc-5739. Western blot analysis of APRIL expression in M1 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Dore-Duffy, P. 2014. Pericytes and adaptive angioplasticity: the role of tumor necrosis factor-like weak inducer of apoptosis (TWEAK). *Methods Mol. Biol.* 1135: 35-52.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **APRIL (F-5): sc-374673** or **APRIL (H-10): sc-374674**, our highly recommended monoclonal alternatives to APRIL (R-15).