

APRIL (H-10): sc-374674

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, autoimmune 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 multivalent ligand.

REFERENCES

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3. Hahne, M., et al. 1998. APRIL, a new ligand of the tumor necrosis factor family, stimulates tumor cell growth. *J. Exp. Med.* 188: 1185-1190.
4. Hu, S., et al. 1999. Characterization of TNFRSF19, a novel member of the tumor necrosis factor receptor superfamily. *Genomics* 62: 103-107.
5. Khare, S.D., et al. 2000. Severe B cell hyperplasia and autoimmune disease in TALL-1 transgenic mice. *Proc. Natl. Acad. Sci. USA* 97: 3370-3375.
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8. Moreaux, J., et al. 2004. BAFF and APRIL protect myeloma cells from apoptosis induced by interleukin 6 deprivation and dexamethasone. *Blood* 103: 3148-3157.
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CHROMOSOMAL LOCATION

Genetic locus: TNFSF13/TNFSF12-TNFSF13 (human) mapping to 17p13.1.

SOURCE

APRIL (H-10) is a mouse monoclonal antibody raised against amino acids 105-164 mapping within an internal region of APRIL of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

APPLICATIONS

APRIL (H-10) is recommended for detection of mature APRIL of human origin by Western Blotting (starting dilution 1:100, 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).

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

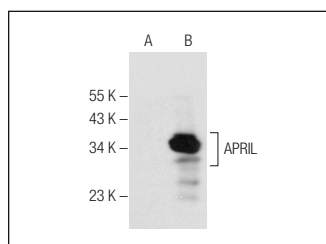
Molecular Weight of APRIL: 27 kDa.

Positive Controls: human APRIL transfected HEK293T whole cell lysates.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



APRIL (H-10): sc-374674. Western blot analysis of APRIL expression in non-transfected (A) and human APRIL transfected (B) HEK293T whole cell lysates.

STORAGE

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

PROTOCOLS

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