

Product Information

Anti-APRIL, Extracellular Domain

produced in rabbit, affinity isolated antibody

Catalog Number **A1726**

Product Description

Anti-APRIL, Extracellular Domain is produced in rabbit using as immunogen a synthetic peptide (GTGGPSQNGEGYP) corresponding to the extracellular domain, amino acids 67-79 of human APRIL¹⁻³. This antibody is purified by immunoaffinity chromatography.

Anti-APRIL, Extracellular Domain recognizes human APRIL by immunoblotting (42 kDa).

APRIL (a proliferation-inducing ligand) is a member of the TNF (tumor necrosis factor) superfamily that regulates immune responses and induces apoptosis. It has been identified by several groups and designated as APRIL, Tall-2 (TNF-and ApoL-related Leukocyte-expressed Ligand 2), and TRDL-1 α (TNF related death ligand 1 α) in mouse and human.¹⁻⁴ Two receptors for APRIL have been identified and designated as TACI and BCMA.⁵⁻⁷

APRIL stimulates B and T cell proliferation, triggers humoral immune responses, activates NF- κ B, and induces cell death.¹⁻⁷ APRIL, along with its close relative BlyS, and the receptors BCMA and TACI are involved in diseases of autoimmunity and cancer.^{8,9} Expression of APRIL is widespread with highest levels in peripheral blood leukocytes.³

Reagent

Supplied at ~0.5 mg/ml in phosphate buffered saline, containing 0.02% sodium azide

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Antibody can be stored at 2-8 °C for three months and at -20 °C for 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.

Product Profile

Immunoblotting: the recommended working antibody concentration is 4-5 μ g/ml using human Jurkat and HL60 whole cell lysates.

Note: In order to obtain the best results in various techniques and preparations, we recommend determining optimal working concentrations by titration.

References

1. Hahne, M., et al., APRIL, a new ligand of the tumor necrosis factor family, stimulates tumor cell growth. *J. Exp. Med.*, **188**, 1185-1190 (1998).
2. Shu, H.B., et al., TALL-1 is a novel member of the TNF family that is down-regulated by mitogens. *J. Leukoc. Biol.*, **65**, 680-683 (1999).
3. Kelly, K., et al., APRIL/TRDL-1, a tumor necrosis factor-like ligand, stimulates cell death. *Cancer Res.*, **60**, 1021-1027 (2000).
4. Yu, G., et al., APRIL and TALL-1 and receptors BCMA and TACI: system for regulating humoral immunity. *Nat. Immunol.*, **1**, 252-256 (2000)
5. Wu, Y., et al., Tumor necrosis factor (TNF) receptor superfamily member TACI is a high affinity receptor for TNF family members APRIL and BlyS. *J. Biol. Chem.*, **275**, 35478-35485 (2000).
6. Marsters, S.A., et al., Interaction of the TNF homologues BlyS and APRIL with the TNF receptor homologues BCMA and TACI. *Curr. Biol.*, **10**, 785-788 (2000).
7. Rennert, P., et al., A soluble form of B cell maturation antigen, a receptor for the tumor necrosis factor family member APRIL, inhibits tumor cell growth. *J. Exp. Med.*, **192** (1677-1684) 2000.

8. Gross, J.A., et al., TACI and BCMA are receptors for a TNF homologue implicated in B-cell autoimmune disease. *Nature*, **404**, 995-999 (2000).

9. Ware, C.F., APRIL and BAFF connect autoimmunity and cancer. *J. Exp. Med.*, **192**, F35-F38 (2000).

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