

REL T (C-6): sc-373942

BACKGROUND

REL T (receptor expressed in lymphoid tissues), also known as tumor necrosis factor receptor superfamily member 19L (TNFRSF19L) is a transmembrane glycoprotein. It is expressed in thymus, spleen, testis, colon, skeletal muscle and peripheral blood lymphocytes. REL T contains two cysteine rich domains (although one is incomplete) and does not contain the death domain that is present in some of the TNFR family members. Unlike the other family members that also lack the death domain, REL T does not bind the TRAF adaptor proteins. REL T binds and is phosphorylated by SPAK. This interaction is required for the activation of p38 and JNK signaling. REL T also interacts with, and is phosphorylated by, OSR1 kinase. In addition, REL T may be involved in T-cell activation. The overexpression of REL T induces phosphorylation of c-Jun and ATF2. This implies the activation of the JNK and p38 signaling cascades.

REFERENCES

- Sica, G.L., et al. 2001. REL T, a new member of the tumor necrosis factor receptor superfamily, is selectively expressed in hematopoietic tissues and activates transcription factor NF κ B. *Blood* 97: 2702-2707.
- Zhang, G. 2004. Tumor necrosis factor family ligand-receptor binding. *Curr. Opin. Struct. Biol.* 14: 154-160.
- Foster, D., et al. 2004. Cytokine-receptor pairing: accelerating discovery of cytokine function. *Nat. Rev. Drug Discov.* 3: 160-170.
- Cusick, J.K., et al. 2006. Identification of REL T homologues that associate with REL T and are phosphorylated by OSR1. *Biochem. Biophys. Res. Commun.* 340: 535-543.
- Polek, T.C., et al. 2006. The TNF receptor, REL T, binds SPAK and uses it to mediate p38 and JNK activation. *Biochem. Biophys. Res. Commun.* 343: 125-134.

CHROMOSOMAL LOCATION

Genetic locus: REL T (human) mapping to 11q13.4.

SOURCE

REL T (C-6) is a mouse monoclonal antibody raised against amino acids 129-348 mapping within an internal region of REL T of human origin.

PRODUCT

Each vial contains 200 μ g IgG $_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

REL T (C-6) is available conjugated to agarose (sc-373942 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-373942 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-373942 PE), fluorescein (sc-373942 FITC), Alexa Fluor[®] 488 (sc-373942 AF488), Alexa Fluor[®] 546 (sc-373942 AF546), Alexa Fluor[®] 594 (sc-373942 AF594) or Alexa Fluor[®] 647 (sc-373942 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-373942 AF680) or Alexa Fluor[®] 790 (sc-373942 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

REL T (C-6) is recommended for detection of REL T of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 REL T siRNA (h): sc-72389, REL T shRNA Plasmid (h): sc-72389-SH and REL T shRNA (h) Lentiviral Particles: sc-72389-V.

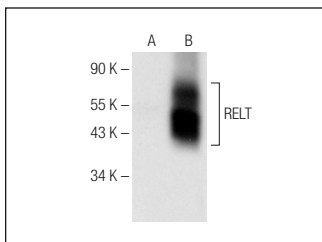
Molecular Weight of REL T: 46 kDa.

Positive Controls: REL T (h2): 293T Lysate: sc-159793 or HEL 92.1.7 cell lysate: sc-2270.

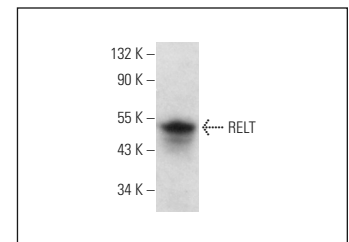
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ 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



REL T (C-6): sc-373942. Western blot analysis of REL T expression in non-transfected: sc-117752 (A) and human REL T transfected: sc-159793 (B) 293T whole cell lysates.



REL T (C-6): sc-373942. Western blot analysis of REL T expression in HEL 92.1.7 whole cell lysate.

SELECT PRODUCT CITATIONS

- Moua, P., et al. 2017. REL T family members activate p38 and induce apoptosis by a mechanism distinct from TNFR1. *Biochem. Biophys. Res. Commun.* 491: 25-32.

STORAGE

Store at 4 $^{\circ}$ 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.