

TAL2 (C-15): sc-46266

BACKGROUND

LYL1, TAL1 and TAL2 are part of a family of basic helix-loop-helix (bHLH) proteins implicated in T cell acute leukemia. TAL1 (also designated SCL) is a serine phosphoprotein and basic helix-loop-helix transcription factor known to regulate embryonic hematopoiesis. Lyl-1 (lymphoblastic leukemia derived sequence 1) is a nuclear protein. T cell acute lymphocytic leukemia-2 protein (TAL2), is involved in T cell acute lymphoblastic leukemia through a chromosomal translocation involving TAL2 and T cell receptor beta chain genes. TAL2 includes a helix-loop-helix protein dimerization and DNA binding domain that is homologous to TAL1 and Lyl-1 protooncogenes. In leukemic cells TAL2 exists in both a phosphorylated (pp13TAL2) and an unphosphorylated (p12TAL2) form. A chromosomal aberration involving TAL2 may be a cause of some T cell acute lymphoblastic leukemia (T-ALL). TAL2 interacts with the E2A proteins (E47 and E12) to form bHLH heterodimers that can bind DNA in a sequence-specific manner.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TAL2 (human) mapping to 9q32; Tal2 (mouse) mapping to 4 B2.

SOURCE

TAL2 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of TAL2 of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-46266 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-46266 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TAL2 (C-15) is recommended for detection of TAL2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); may cross-react with Per1.

Suitable for use as control antibody for TAL2 siRNA (h): sc-45599, TAL2 shRNA Plasmid (h): sc-45599-SH and TAL2 shRNA (h) Lentiviral Particles: sc-45599-V.

TAL2 (C-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TAL2: 12 kDa.

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) 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.

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 **TAL2 (1G6): sc-517121**, our highly recommended monoclonal alternative to TAL2 (C-15).