

# BAALC (E-18): sc-70021

## BACKGROUND

BAALC (brain and acute leukemia, cytoplasmic) is a 180 amino acid protein that localizes to both the membrane and the cytoplasm and exists as multiple alternatively spliced isoforms. Expressed by hematopoietic and neural cells, BAALC interacts with CaMKII $\alpha$  and is thought to play a role in synaptic function at postsynaptic lipid rafts. BAALC may be overexpressed in acute myeloid leukemia (AML), suggesting a role in tumorigenesis. The gene encoding BAALC maps to human chromosome 8, which consists of nearly 146 million base pairs, houses more than 800 genes and is associated with a variety of diseases and malignancies. Schizophrenia, bipolar disorder, Trisomy 8, Pfeiffer syndrome, congenital hypothyroidism, Waardenburg syndrome and some leukemias and lymphomas are thought to occur as a result of defects in specific genes that maps to chromosome 8.

## REFERENCES

1. Tanner, S.M., et al. 2001. BAALC, the human member of a novel mammalian neuroectoderm gene lineage, is implicated in hematopoiesis and acute leukemia. *Proc. Natl. Acad. Sci. USA* 98: 13901-13906.
2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606602. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
3. Satoskar, A.A., et al. 2005. BAALC, a marker of mesoderm and muscle. *Gene Expr. Patterns* 5: 463-473.
4. Baldus, C.D., et al. 2007. Low ERG and BAALC expression identifies a new subgroup of adult acute T-lymphoblastic leukemia with a highly favorable outcome. *J. Clin. Oncol.* 25: 3739-3745.
5. Langer, C., et al. 2008. High BAALC expression associates with other molecular prognostic markers, poor outcome, and a distinct gene-expression signature in cytogenetically normal patients younger than 60 years with acute myeloid leukemia: a Cancer and Leukemia Group B (CALGB) study. *Blood* 111: 5371-5379.
6. Qi, X., et al. 2008. Upregulation of BAALC gene may be an important alteration in AML-M2 patients with t(8;21) translocation. *J. Cell. Mol. Med.* 12: 2301-2304.

## CHROMOSOMAL LOCATION

Genetic locus: BAALC (human) mapping to 8q22.3; Baalc (mouse) mapping to 15 B3.1.

## SOURCE

BAALC (E-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of BAALC of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-70021 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

BAALC (E-18) is recommended for detection of BAALC of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

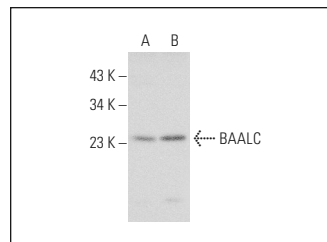
BAALC (E-18) is also recommended for detection of BAALC in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for BAALC siRNA (h): sc-72595, BAALC siRNA (m): sc-72596, BAALC shRNA Plasmid (h): sc-72595-SH, BAALC shRNA Plasmid (m): sc-72596-SH, BAALC shRNA (h) Lentiviral Particles: sc-72595-V and BAALC shRNA (m) Lentiviral Particles: sc-72596-V.

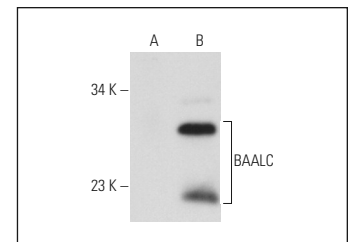
Molecular Weight of BAALC: 22 kDa.

Positive Controls: BAALC (h): 293T Lysate: sc-170308, Jurkat whole cell lysate: sc-2204 or CCRF-CEM cell lysate: sc-2225.

## DATA



BAALC (E-18): sc-70021. Western blot analysis of BAALC expression in Jurkat (A) and CCRF-CEM (B) whole cell lysates.



BAALC (E-18): sc-70021. Western blot analysis of BAALC expression in non-transfected: sc-117752 (A) and human BAALC transfected: sc-170308 (B) 293T 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.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **BAALC (C-2): sc-365516** or **BAALC (H-12): sc-515606**, our highly recommended monoclonal alternatives to BAALC (E-18).