SANTA CRUZ BIOTECHNOLOGY, INC.

ETO-2 (C-20): sc-9739

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

ETO and ETO-2, which are alternatively designated MTG8 and MTG16, respectively, are members of the ETO transcription factor family. These transcription factors are characterized by a zinc-finger domain and four conserved domains, of which domain II is required for dimerization between family members. ETO and ETO-2 may function to mediate interactions between DNA binding proteins and transcriptional regulators, such as N-CoR. Frequently, the t(8;21) translocation of ETO produces the AML-1/ETO oncoprotein, which consists of the first 177 amino acids of AML-1 and all but the first 30 amino acids of ETO. AML-1/ETO expression is observed in 12–15% of acute myelogenous, M2 subtype leukemias. The AML-1/ETO fusion proteins associate with multimeric N-CoR/mSin3/HDAC1 complexes, block differentiation and induce transcriptional repression by altering chromatin remodeling.

CHROMOSOMAL LOCATION

Genetic locus: CBFA2T3 (human) mapping to 16q24.3; Cbfa2t3 (mouse) mapping to 8 E1.

SOURCE

ETO-2 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of ETO-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-9739 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-9739 X, 200 µg/0.1 ml.

APPLICATIONS

ETO-2 (C-20) is recommended for detection of ETO-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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), immunohistochemistry (including paraffin-embedded sections) (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 ETO-2 siRNA (h): sc-35344, ETO-2 siRNA (m): sc-35345, ETO-2 shRNA Plasmid (h): sc-35344-SH, ETO-2 shRNA Plasmid (m): sc-35345-SH, ETO-2 shRNA (h) Lentiviral Particles: sc-35344-V and ETO-2 shRNA (m) Lentiviral Particles: sc-35345-V.

ETO-2 (C-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

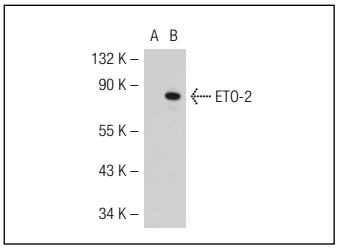
Molecular Weight of ETO-2: 76 kDa.

Positive Controls: HuT 78 whole cell lysate: sc-2208, HL-60 whole cell lysate: sc-2209 or ETO-2 (h): 293T Lysate: sc-116819.

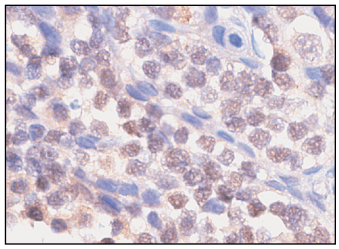
STORAGE

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

DATA



ETO-2 (C-20): sc-9739. Western blot analysis of ETO-2 expression in non-transfected: sc-117752 (**A**) and human ETO-2 transfected: sc-116819 (**B**) 293T whole cell lysates.



ETO-2 (C-20): sc-9739. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human tonsil showing nuclear localization.

SELECT PRODUCT CITATIONS

1. Qiu, J., et al. 2006. Decreased intranuclear mobility of acute myeloid leukemia 1-containing fusion proteins is accompanied by reduced mobility and compartmentalization of core binding factor β. Oncogene 25: 3982-3993.
2. Tripic, T., et al. 2009. SCL and associated proteins distinguish active from repressive GATA transcription factor complexes. Blood 113: 2191-2201.
3. Kiefer, C.M., et al. 2011. Distinct Ldb1/NLI complexes orchestrate γ-globin repression and reactivation through ETO2 in human adult erythroid cells. Blood 118: 6200-6208.
4. Kim, S., et al. 2012. Chromatin structure of the LCR in the human β-globin locus transcribing the adult δ- and β-globin genes. Int. J. Biochem. Cell Biol. 44: 505-513.

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.

MONOS Satisfaction Guaranteed

Try **ETO-2 (C-12): sc-373691** or **ETO-2 (D-4): sc-166058,** our highly recommended monoclonal alternatives to ETO-2 (C-20).