

# ETO-2 (C-12): sc-373691

## 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.

## REFERENCES

1. Erickson, P.F., et al. 1994. The ETO portion of acute myeloid leukemia t(8;21) fusion transcript encodes a highly evolutionarily conserved, putative transcription factor. *Cancer Res.* 54: 1782-1786.
2. Erickson, P.F., et al. 1996. ETO and AML1 phosphoproteins are expressed in CD34<sup>+</sup> hematopoietic progenitors: implications for t(8;21) leukemogenesis and monitoring residual disease. *Blood* 88: 1813-1823.
3. Wolford, J.K., et al. 1998. Structure and expression of the human MTG8/ETO gene. *Gene* 212: 103-109.

## CHROMOSOMAL LOCATION

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

## SOURCE

ETO-2 (C-12) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 625-653 at the C-terminus of ETO-2 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain 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-373691 X, 200 µg/0.1 ml.

ETO-2 (C-12) is available conjugated to agarose (sc-373691 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-373691 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-373691 PE), fluorescein (sc-373691 FITC), Alexa Fluor<sup>®</sup> 488 (sc-373691 AF488), Alexa Fluor<sup>®</sup> 546 (sc-373691 AF546), Alexa Fluor<sup>®</sup> 594 (sc-373691 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-373691 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-373691 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-373691 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-373691 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## RESEARCH USE

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

## APPLICATIONS

ETO-2 (C-12) is recommended for detection of ETO-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

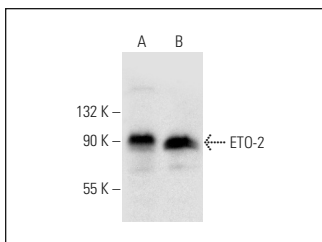
Molecular Weight of ETO-2: 76 kDa.

Positive Controls: AML-193 whole cell lysate: sc-364182, MOLT-4 cell lysate: sc-2233 or CCRF-CEM cell lysate: sc-2225.

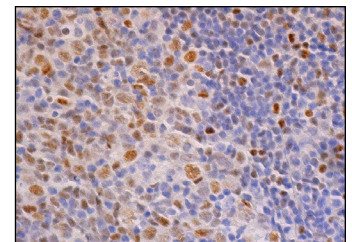
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> 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-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



ETO-2 (C-12): sc-373691. Western blot analysis of ETO-2 expression in AML-193 (A) and MOLT-4 (B) whole cell lysates.



ETO-2 (C-12): sc-373691. Immunoperoxidase staining of formalin fixed, paraffin-embedded human tonsil tissue showing nuclear staining of cells in germinal and non-germinal centers.

## STORAGE

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

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