Revision 1

Store at -20C

#4498

ETO Antibody

Cell Signaling TECHNOLOGY®

Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W	H M R Mk	Endogenous	60	Rabbit	#Q06455	862

Product Usage Information

Application	Dilution
Western Blotting	1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

Specificity/Sensitivity

ETO Antibody detects endogenous levels of ETO protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to amino acid sequence surrounding Ser270 of human ETO. Antibodies are purified by protein A and peptide affinity chromatography.

Background

ETO belongs to a family of evolutionarily conserved nuclear factors. Although it has no DNA binding domains it is reported to act as a transcriptional corepressor (1). It is best characterized as the fusion partner of AML1 in acute myeloid leukemia with the t(8;21) translocation which gives rise to the AML-ETO fusion protein (2). AML1 is a transcription factor that is involved in the differentiation of all hematopoietic lineages. The fusion protein lacks the activation domain of AML1 and behaves as a dominant negative AML1, repressing AML1 target genes. AML-ETO also causes activation of other genes through a mechanism that involves Bcl-2 and enhanced expression of p21 waf1/cip1 (3,4). The AML-ETO fusion protein is thought to cause the expansion of a hematopoietic stem cell population that has limited lineage commitment and genomic instability (5). Recent evidence derived from chromatin immunoprecipitation (ChIP) experiments has demonstrated that ETO may play a role in the regulation of Notch target genes, and AML-ETO has been shown to disrupt repression of Notch target genes (6). Therefore, both AML and Notch target genes are deregulated by AML-ETO. Epigenetic silencing of the microRNA-223 gene has also been attributed to activities of AML-ETO, contributing to the differentiation block in t(8;21) leukemia (7).

Background References

1. Davis, J.N. et al. (2003) *Gene* 303, 1-10.
2. Downing, J.R. et al. (1993) *Blood* 81, 2860-5.
3. Klampfer, L. et al. (1996) *Proc Natl Acad Sci USA* 93, 14059-64.
4. Peterson, L.F. et al. (2007) *Blood* 109, 4392-8.
5. Elagib, K.E. and Goldfarb, A.N. (2007) *Cancer Lett* 251, 179-86.
6. Salat, D. et al. (2008) *Mol Cell Biol* 28, 3502-12.
7. Nervi, C. et al. *Epigenetics* 3, 1-4.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Mk:** Monkey

Trademarks and Patents

Limited Uses

separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.