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CBFA2T2 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP16252a

Specification

CBFA2T2 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession O43439

CBFA2T2 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 9139

Other Names
Protein CBFA2T2, ETO homologous on chromosome 20, MTG8-like protein, MTG8-related protein 1, Myeloid translocation-related protein 1, p85, CBFA2T2, EHT, MTGR1

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CBFA2T2 Antibody (N-term) Blocking Peptide - Protein Information

Name CBFA2T2

Synonyms EHT, MTGR1

Function
Transcriptional corepressor which facilitates transcriptional repression via its association with DNA-binding transcription factors and recruitment of other corepressors and histone-modifying enzymes (PubMed:12559562, PubMed:15203199). Via association with PRDM14 is involved in regulation of embryonic stem cell (ESC) pluripotency (PubMed:27281218). Involved in primordial germ cell (PCG) formation. Stabilizes PRDM14 and OCT4 on chromatin in a homooligomerization- dependent manner (By similarity). Can repress the expression of MMP7 in a ZBTB33-dependent manner (PubMed:23251453). May function as a complex with the chimeric protein RUNX1/AML1-CBFA2T1/MTG8 (AML1-MTG8/ETO fusion protein) which is produced in acute myeloid leukemia with the chromosomal translocation t(8;21). May thus be involved in the repression of AML1-dependent transcription and the induction of G- CSF/CSF3-dependent cell growth. May be a tumor suppressor gene candidate involved in myeloid tumors with the deletion of the 20q11

region. Through heteromerization with CBFA2T3/MTG16 may be involved in regulation of the proliferation and the differentiation of erythroid progenitors by repressing the expression of TAL1 target genes (By similarity). Required for the maintenance of the secretory cell lineage in the small intestine. Can inhibit Notch signaling probably by association with RBPJ and may be involved in GFI1-mediated Paneth cell differentiation (By similarity).

Cellular Location
Nucleus.

Tissue Location
Ubiquitously expressed in fetal and adult tissues. Highly expressed in adult brain, heart, lung, kidney, lymph node, appendix, thymus, testis, uterus, small intestine, prostate and thymus

CBFA2T2 Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

CBFA2T2 Antibody (N-term) Blocking Peptide - Images

CBFA2T2 Antibody (N-term) Blocking Peptide - Background

In acute myeloid leukemia, especially in the M2 subtype,the t(8;21)(q22;q22) translocation is one of the most frequentkaryotypic abnormalities. The translocation produces a chimericgene made up of the 5'-region of the RUNX1 (AML1) gene fused to the3'-region of the CBFA2T1 (MTG8) gene. The chimeric protein isthought to associate with the nuclear corepressor/histonedeacetylase complex to block hematopoietic differentiation. Theprotein encoded by this gene binds to the AML1-MTG8 complex and maybe important in promoting leukemogenesis. Several transcriptvariants are thought to exist for this gene, but the full-lengthnatures of only three have been described.

CBFA2T2 Antibody (N-term) Blocking Peptide - References

Guastadisegni, M.C., et al. Leukemia 24(8):1516-1519(2010)Ossovskaya, V.S., et al. J. Neurosci. Methods 177(2):322-333(2009)Venkatesan, K., et al. Nat. Methods 6(1):83-90(2009)Olsson, A., et al. Biochim. Biophys. Acta 1779(10):590-598(2008)Kumar, R., et al. Mol. Cancer Res. 4(9):655-665(2006)