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Datasheet for 100-401-V33

AML1-ETO Antibody

Overview

Description:	Anti-AML1-ETO (RABBIT) Antibody - 100-401-V33
Item No.:	100-401-V33
Size:	100 µL
Applications:	ChIP, ELISA, WB, Other
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	This antibody specifically recognizes the AML1 (RUNX1) (UniProtKB/Swiss-Prot entry Q01196) - ETO (RUNX1T1) (UniProtKB/Swiss-Prot entry Q06455) fusion protein that arises due to a translocation between chromosome 8 and 22. This translocation is one of the most frequent karyotypic abnormalities observed in acute myeloid leukemia. It produces a chimerical gene made up of the 5'-region of AML1and the 3'-region of ETO. The chimerical protein is thought to associate with the nuclear corepressor/histone deacetylase complex to block hematopoietic differentiation. Anti-AML1-ETO Antibody is ideal for research in Cancer and Gene Expression.
Synonyms:	Runt-related transcription factor 1, Acute myeloid leukemia 1 protein, Core-binding factor subunit alpha-2, CBF-alpha-2, Oncogene AML-1, Polyomavirus enhancer-binding protein 2 alpha B subunit, PEA2-alpha B, PEBP2-alpha B, SL3-3 enhancer factor 1 alpha B subunit, SL3/AKV core-binding factor alpha B subunit
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

Gene Name:	RUNX1
Reactivity:	Human
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-AML1-ETO Antibody was produced in rabbits by repeated immunizations with a synthetic peptide of human AML1-ETO.
Purity/Specificity:	Anti-AML1-ETO Antibody is monospecific antiserum processed by delipidation and defibrination followed by sterile filtration. This product reacts with human AML1-ETO. Cross reactivity with AML1-ETO from other sources is not known.
Relevant Links:	• UniProtKB - Q01196 • GeneID - 861 • NCBI - NP_001001890

Application Details

Tested Applications:	ChIP, ELISA, WB
Suggested Applications:	Other (Based on references)
Application Note:	Anti-AML1-ETO Antibody has been tested in ChIP, ELISA and Western Blots. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 80 kDa in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ChIP:	4 µl/ChIP
ELISA:	1:500
WB:	1:1,000

Formulation

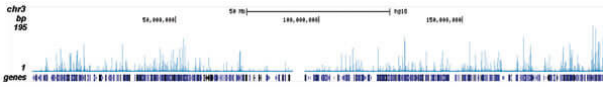
Physical State:	Liquid (sterile filtered)
Concentration:	neat
Buffer:	None
Preservative:	0.05% (w/v) Sodium Azide and 0.05% ProClin 300
Stabilizer:	None

Shipping & Handling

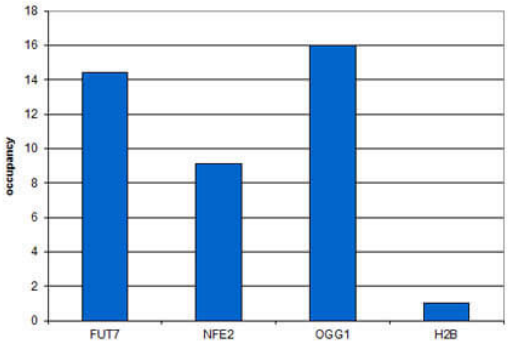
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

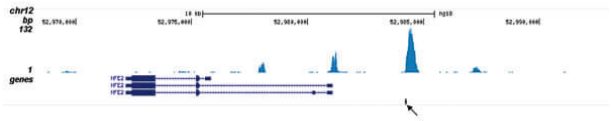
Images



ChIP
ChIP-seq results obtained with the antibody directed against AML1-ETO. ChIP was performed as described in figure 1. The IP'd DNA from 6 ChIP's were pooled and analyzed with an Illumina Genome Analyzer. Library preparation, cluster generation, and sequencing were performed according to the manufacturer's instructions. The 32 bp tags were aligned to the human reference genome (hg18) using the ELAND algorithm. Figure 2 shows the results of the complete chromosome 3. Figure 3-5 shows three genomic regions region surrounding the OGG1, FUT7 and NFE2 genes, respectively. The position of the PCR amplicon is indicated with an arrow.

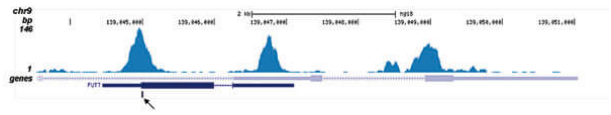


ChIP
Chromatin Immunoprecipitation results of Rabbit Anti-AML1 -ETO Antibody. Chromatin from 1.25 million formaldehyde cross-linked Kasumi-1 cells was used with 4ul of Anti-AML1-ETO Antibody and 20ul of magnetic IgG beads per immunoprecipitation. QPCR was performed using primers specific for the FUT7, NFE2 and OGG1 genes. ChIP results shows the occupancy, calculated as the ratio + control/background for which the H2B gene was used.



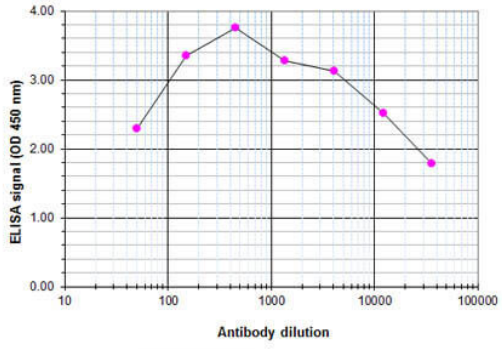
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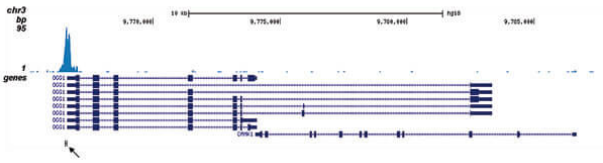
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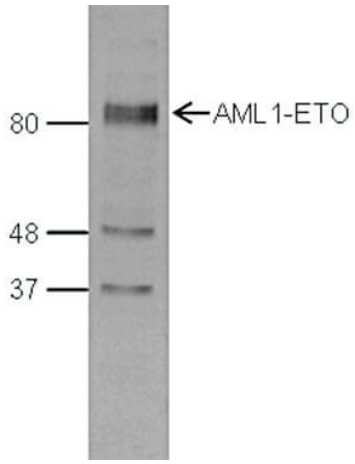
ELISA

ELISA results of Rabbit anti-AML1-ETO antibody. Antigen: BSA conjugated AML1-ETO. Coating amount: 0.1 µg per well. Dilution series: serial dilution. Estimated Antibody Titer to be 1:32,750. Substrate: TMB (p/n TMBE-1000).



ChIP

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Western Blot

Western blot results of Rabbit Anti-AML1-ETO antibody. Lane 1: SKNO-1 Nuclear extract lysates. Load: 15 µg. Primary antibody: AML1-ETO antibody at 1:1000 overnight at 4°C. Secondary antibody: Goat Anti-rabbit HRP secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO/TBST overnight at 4°C.

References

- Qi X et al. HDN-1 induces cell differentiation toward apoptosis in promyelocytic leukemia cells depending on its selective effect on client proteins of Hsp90. *Toxicol Appl Pharmacol.* (2021)

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