

Datasheet for 100-401-V32**CBFb Antibody****Overview**

Description:	Anti-CBFb (RABBIT) Antibody - 100-401-V32
Item No.:	100-401-V32
Size:	100 µL
Applications:	ChIP, ELISA
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	CBFb represents the beta subunit of a heterodimeric core-binding transcription factor belonging to the PEBP2/CBF transcription factor family. These transcription factors regulate a host of genes specific to haematopoiesis (e.g. RUNX1) and osteogenesis (e.g. RUNX2). The beta subunit is the regulatory subunit which allosterically enhances the activity of the DNA binding alpha subunit as the complex binds to the core site of various enhancers and promoters. CBFb can be involved in a chromosomal rearrangement of chromosome 16 (inv(16)(p13q22)) which produces a fusion protein consisting of the N terminus of CBFb and the C-terminal portion of MYH11. This chromosomal rearrangement is associated with acute myeloid leukemia of the M4Eo subtype. Anti-CBFb Antibody is ideal for research in Gene Expression, Cell Differentiation and Cancer.
Synonyms:	Core-binding factor subunit beta, CBF-beta, Polyomavirus enhancer-binding protein 2 beta subunit, PEA2-beta, PEBP2-beta, SL3-3 enhancer factor 1 subunit beta, SL3/AKV core-binding factor beta subunit
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	Antiserum

Target Details

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

Immunogen:	Anti-CBFb Antibody was produced in rabbits by repeated immunizations with human CBFb using two synthetic peptides containing sequences from the internal region of the protein.
Purity/Specificity:	Anti-CBFb Antibody is monospecific antiserum processed by delipidation and defibrination followed by sterile filtration. This product reacts with human CBFb. Cross reactivity with CBFb from other sources is not known.
Relevant Links:	• UniProtKB - Q13951 • GeneID - 865 • NCBI - NP_001746.1

Application Details

Tested Applications:	ChIP, ELISA
Application Note:	Anti-CBFb Antibody has been tested in ChIP and ELISA. Specific conditions for reactivity should be optimized by the end user.
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

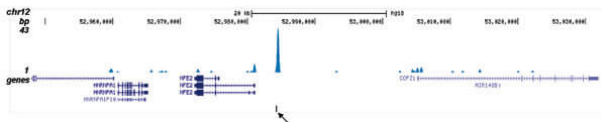
Formulation

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

Shipping & Handling

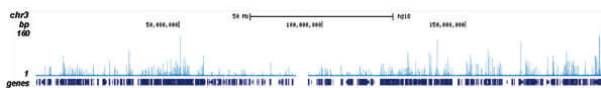
Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several 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



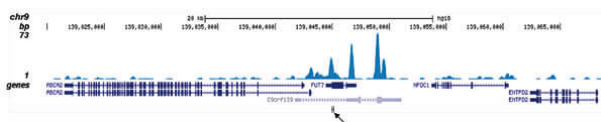
ChIP

ChIP-seq results obtained with the antibody directed against CBFb. ChIP was performed as described in figure 1. The IP'd DNA from 6 ChIP's were pooled and analysed 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 surrounding the OGG1, FUT7 and NFE2 genes, respectively. The position of the PCR amplicon is indicated with an arrow.



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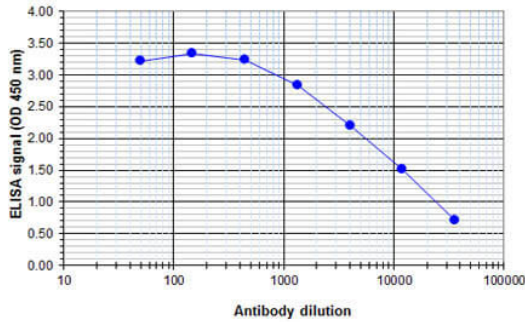


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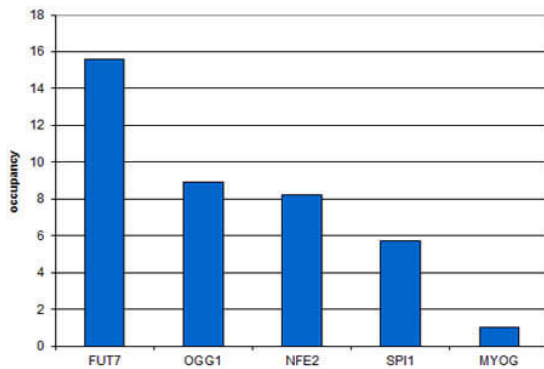
ELISA

ELISA results of Rabbit anti-human CBFb antibody. Antigen: BSA conjugated CBFb. Coating amount: 0.1 µg per well. Dilution series: serial dilution. Estimated Antibody Titer to be 1:8,800. Substrate: TMB (p/n TMBE-1000).



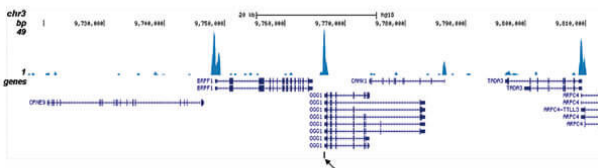
ChIP

Chromatin Immunoprecipitation results of Rabbit Anti-CBFb Antibody. Chromatin from 1.25 million formaldehyde cross-linked SKNO-1 cells was used with 4ul of Anti-human CBFb Antibody and 20ul of magnetic IgG beads per immunoprecipitation. QPCR was performed using primers specific for the FUT7, OGG1, NFE2, and SPI1 genes. ChIP results shows the relative occupancy, calculated as the ratio + control/background for which the MYOG gene was used.



ChIP

ChIP-seq results obtained with the antibody directed against CBFb. ChIP was performed as described in figure 1. The IP'd DNA from 6 ChIP's were pooled and analysed 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 surrounding the OGG1, FUT7 and NFE2 genes, respectively. The position of the PCR amplicon is indicated with an arrow.



Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.