A22658

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DNMT3B Rabbit mAb

Catalog No.: A22658 Recombinant 1 Publications

Basic Information

Observed MW
100kDa

Calculated MW
96kDa

Category
Monoclonal Antibody

Applications
WB,ChIP,ChIP-seq,ELISA

Cross-Reactivity
Human,Mouse

Clone number
ARC57702

Background

CpG methylation is an epigenetic modification that is important for embryonic development, imprinting, and X-chromosome inactivation. Studies in mice have demonstrated that DNA methylation is required for mammalian development. This gene encodes a DNA methyltransferase which is thought to function in de novo methylation, rather than maintenance methylation. The protein localizes primarily to the nucleus and its expression is developmentally regulated. Mutations in this gene cause the immunodeficiency-centromeric instability-facial anomalies (ICF) syndrome. Eight alternatively spliced transcript variants have been described. The full length sequences of variants 4 and 5 have not been determined.

Recommended Dilutions

WB	1:1000 - 1:5000
ChIP	5μg antibody for 10μg-15μg of Chromatin
ChIP-seq	5 μg antibody for 14 μg of Chromatin
ELISA	Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements.

Contact

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Immunogen Information

Gene ID
1789

Swiss Prot
Q9UBC3

Immunogen
Recombinant protein (or fragment).This information is considered to be commercially sensitive.

Synonyms
ICF; ICF1; FSHD4; M.HsaIIIB; DNMT3B

Product Information

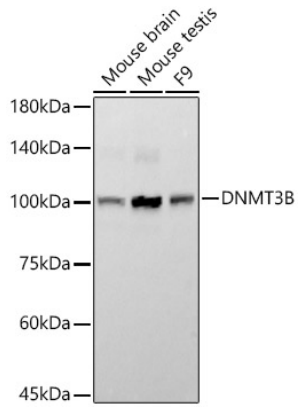
Source
Rabbit

Isotype
IgG

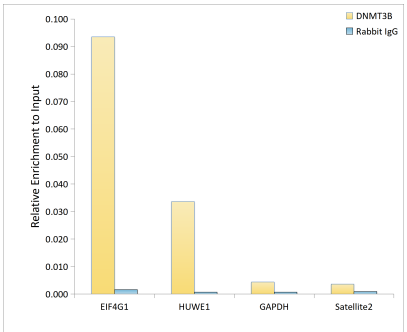
Purification
Affinity purification

Storage
Store at -20℃

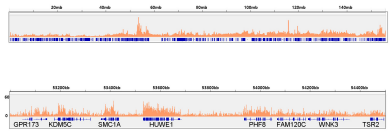
Validation Data



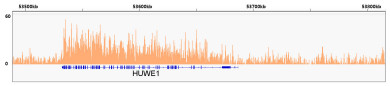
Western blot analysis of various lysates using DNMT3B Rabbit mAb (A22658) at 1:2000 dilution incubated overnight at 4℃.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 60s.



Chromatin immunoprecipitation was performed with 10 µg of cross-linked chromatin from NCCIT cells, using 5 µg of DNMT3B antibody (A22658) and Rabbit IgG isotype control (AC042). The enrichment of immunoprecipitated DNA at different genomic loci was examined by quantitative PCR. The histogram compares the ratio of the immunoprecipitated DNA to the input at given loci.



Chromatin immunoprecipitation was performed with 14 µg of cross-linked chromatin from A-549 cells using 5 µg of DNMT3B Rabbit mAb (A22658). DNA libraries were prepared using Scale ssDNA-seq Lib Prep Kit for Illumina V2 (RK20228). The ChIP sequencing results indicate the enrichment pattern of DNMT3B across chromosome X (upper panel) and the genomic region encompassing HUWE1, a representative gene enriched in DNMT3B (lower panel).



Chromatin immunoprecipitation was performed with 14 µg of cross-linked chromatin from NCCIT cells using 5 µg of DNMT3B Rabbit mAb (A22658). DNA libraries were prepared using Scale ssDNA-seq Lib Prep Kit for Illumina V2 (RK20228). The ChIP sequencing results indicate the enrichment pattern of DNMT3B in the representative genomic region surrounding HUWE1 gene.