

Boris Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10685**Specification**

Boris Antibody - Product Information

Application	WB
Primary Accession	O9R1D1
Other Accession	NP_114012
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	83880

Boris Antibody - Additional Information**Gene ID** 83726

Application & Usage	Western blotting (0.5-4 µg/ml). However, the optimal conditions should be determined individually. Other applications have not been tested. The antibody detects ~76 kDa of Boris in samples from human, mouse and rat origins.
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Other Names

CCCTC-binding factor, Brother of the regulator of imprinted sites, Transcriptional repressor CTCFL, CTCF, CTCF paralog, CTCF T, CTCFL, Zinc finger protein CTCF-T

Target/Specificity

Boris

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 µg (0.5 mg/ml) affinity purified rabbit anti-Boris polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol and 0.01% Thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

Boris Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Boris Antibody - Protein Information**Name** Ctcf**Function**

Chromatin binding factor that binds to DNA sequence specific sites and regulates the 3D structure of chromatin. Binds together strands of DNA, thus forming chromatin loops, and anchors DNA to cellular structures, such as the nuclear lamina. Defines the boundaries between active and heterochromatic DNA via binding to chromatin insulators, thereby preventing interaction between promoter and nearby enhancers and silencers. Plays a critical role in the epigenetic regulation. Participates in the allele-specific gene expression at the imprinted IGF2/H19 gene locus (By similarity). On the maternal allele, binding within the H19 imprinting control region (ICR) mediates maternally inherited higher-order chromatin conformation to restrict enhancer access to IGF2. Mediates interchromosomal association between IGF2/H19 and WSB1/NF1 and may direct distant DNA segments to a common transcription factory. Regulates asynchronous replication of IGF2/H19. Plays a critical role in gene silencing over considerable distances in the genome (By similarity). Preferentially interacts with unmethylated DNA, preventing spreading of CpG methylation and maintaining methylation-free zones. Inversely, binding to target sites is prevented by CpG methylation. Plays an important role in chromatin remodeling. Can dimerize when it is bound to different DNA sequences, mediating long-range chromatin looping. Causes local loss of histone acetylation and gain of histone methylation in the beta-globin locus, without affecting transcription. When bound to chromatin, it provides an anchor point for nucleosomes positioning (By similarity). Seems to be essential for homologous X-chromosome pairing (By similarity). May participate with Tsix in establishing a regulatable epigenetic switch for X chromosome inactivation. May play a role in preventing the propagation of stable methylation at the escape genes from X-inactivation. Involved in sister chromatid cohesion. Associates with both centromeres and chromosomal arms during metaphase and required for cohesin localization to CTCF sites. Plays a role in the recruitment of CENPE to the pericentromeric/centromeric regions of the chromosome during mitosis. Acts as a transcriptional repressor binding to promoters of vertebrate MYC gene and BAG1 gene. Also binds to the PLK and PIM1 promoters. Acts as a transcriptional activator of APP. Regulates APOA1/C3/A4/A5 gene cluster and controls MHC class II gene expression (By similarity). Plays an essential role in oocyte and preimplantation embryo development by activating or repressing transcription (By similarity). Seems to act as tumor suppressor (By similarity).

Cellular Location

Nucleus, nucleoplasm {ECO:0000250|UniProtKB:Q61164}. Chromosome {ECO:0000250|UniProtKB:P49711}. Chromosome, centromere {ECO:0000250|UniProtKB:P49711}. Note=May translocate to the nucleolus upon cell differentiation. Associates with both centromeres and chromosomal arms during metaphase. Associates with the H19 ICR in mitotic chromosomes. May be preferentially excluded from heterochromatin during interphase. {ECO:0000250|UniProtKB:P49711}

Boris Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Boris Antibody - Images**Boris Antibody - Background**

Brother of the regulator of imprinted sites (BORIS) is a transcription factor also known as CCCTC-binding factor like protein (CTCF). Boris is usually expressed at a high level in the testis which correlates with male germ cell development and is also abnormally activated in a broad range of human cancers. Boris can be found in the nucleus as well as in the cytoplasm.