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Anti-BORIS (RABBIT) Antibody

BORIS Antibody
Catalog # ASR5333

Specification

Anti-BORIS (RABBIT) Antibody - Product Information

Host	**Rabbit**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Human**
Clonality	**Polyclonal**
Application	**WB, E, I, LCI**
Application Note	**BORIS affinity purified antibody has been tested for use in ELISA and by western blot. Specific conditions for reactivity should be optimized by the end user. Expect a predominant band approximately 75 kDa in size corresponding to BORIS by western blotting in the appropriate cell lysate or extract.**
Physical State	**Liquid (sterile filtered)**
Buffer	**0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2**
Immunogen	**This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to N-Terminal region near aa 1-30 of human BORIS protein.**
Preservative	**0.01% (w/v) Sodium Azide**

Anti-BORIS (RABBIT) Antibody - Additional Information

Gene ID 140690

Other Names
140690

Purity
This affinity-purified antibody is directed against the human BORIS protein. The product was affinity purified from monospecific antiserum by immunoaffinity purification. A BLAST analysis was used to suggest cross reactivity with BORIS proteins from human and chimpanzee. Partial reactivity may occur against BORIS from mouse, dog and rat sources based on varying degrees of homology to the immunizing sequence. Reactivity against homologues from other sources is not known.

Storage Condition
Store BORIS Antibody 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.

Precautions Note
This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-BORIS (RABBIT) Antibody - Protein Information

Name CTCFL

Synonyms BORIS

Function
Testis-specific DNA binding protein responsible for insulator function, nuclear architecture and transcriptional control, which probably acts by recruiting epigenetic chromatin modifiers. Plays a key role in gene imprinting in male germline, by participating in the establishment of differential methylation at the IGF2/H19 imprinted control region (ICR). Directly binds the unmethylated H19 ICR and recruits the PRMT7 methyltransferase, leading to methylate histone H4 'Arg-3' to form H4R3sme2. This probably leads to recruit de novo DNA methyltransferases at these sites (By similarity). Seems to act as tumor suppressor. In association with DNMT1 and DNMT3B, involved in activation of BAG1 gene expression by binding to its promoter. Required for dimethylation of H3 lysine 4 (H3K4me2) of MYC and BRCA1 promoters.

Cellular Location
Cytoplasm. Nucleus.

Tissue Location
Testis specific. Specifically expressed in primary spermatocytes

Anti-BORIS (RABBIT) 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 Cytomety
- Cell Culture

Anti-BORIS (RABBIT) Antibody - Images

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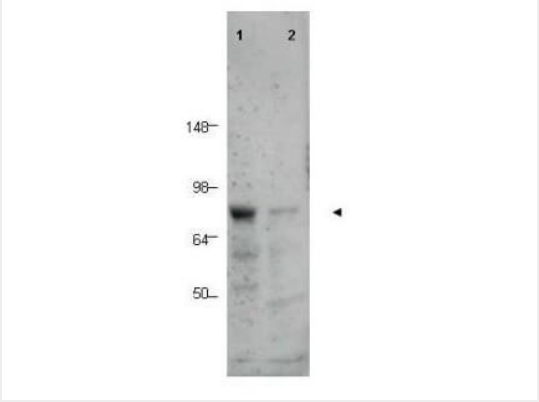

Western blot using Rockland's Affinity Purified anti-BORIS antibody shows detection of a predominant band corresponding to BORIS in human tissue lysates (arrowhead). Lane 1 contains lysate from human prostate tissue. Lane 2 contains lysate from human spleen tissue. A predominant band at ~75 kDa is observed. Molecular weight estimation was made by comparison to prestained MW markers as indicated.

Anti-BORIS (RABBIT) Antibody - Background

Anti-BORIS antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI) and is suitable for Cancer, Immunology and Nuclear Signaling research. BORIS (Brother of the Regulator of Imprinted Sites) also known as CCCTC-binding factor-like protein, is normally only expressed in the testis and expressed in a mutually exclusive manner with CTCF during male germ cell development. However, previous studies have shown that BORIS is abnormally activated in a wide range of human cancers. Expression of BORIS in normally BORIS-negative cells promotes cell growth that may lead to transformation. BORIS maps to the cancer-associated amplification region thought to contain an oncogene or dominant-immortalizing gene. BORIS is a candidate protein for the epigenetic reprogramming factor acting in the male germ line. BORIS is found in both the nucleus and cytoplasm. BORIS antibody can be used to investigate epigenetic regulation.