

BAZ1B Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19326a

Specification

BAZ1B Antibody (N-term) - Product Information

E
<u>G0</u>
<u>15784.1</u>
an
oit
clonal
oit IgG
003
186

BAZ1B Antibody (N-term) - Additional Information

Gene ID 9031

Other Names

Tyrosine-protein kinase BAZ1B, Bromodomain adjacent to zinc finger domain protein 1B, Williams syndrome transcription factor, Williams-Beuren syndrome chromosomal region 10 protein, Williams-Beuren syndrome chromosomal region 9 protein, hWALp2, BAZ1B, WBSC10, WBSCR10, WBSCR9, WSTF

Target/Specificity

This BAZ1B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 157-186 amino acids from the N-terminal region of human BAZ1B.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

BAZ1B Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

BAZ1B Antibody (N-term) - Protein Information



Name BAZ1B

Synonyms WBSC10, WBSCR10, WBSCR9, WSTF

Function Atypical tyrosine-protein kinase that plays a central role in chromatin remodeling and acts as a transcription regulator (PubMed: <u>19092802</u>). Involved in DNA damage response by phosphorylating 'Tyr-142' of histone H2AX (H2AXY142ph) (PubMed: 19092802, PubMed: 19234442). H2AXY142ph plays a central role in DNA repair and acts as a mark that distinguishes between apoptotic and repair responses to genotoxic stress (PubMed: 19092802, PubMed: 19234442). Regulatory subunit of the ATP-dependent WICH-1 and WICH-5 ISWI chromatin remodeling complexes, which form ordered nucleosome arrays on chromatin and facilitate access to DNA during DNA-templated processes such as DNA replication, transcription, and repair (PubMed:<u>11980720</u>, PubMed:<u>28801535</u>). Both complexes regulate the spacing of nucleosomes along the chromatin and have the ability to slide mononucleosomes to the center of a DNA template (PubMed: 28801535). The WICH-1 ISWI chromatin remodeling complex has a lower ATP hydrolysis rate than the WICH-5 ISWI chromatin remodeling complex (PubMed: 28801535). The WICH-5 ISWI chromatin-remodeling complex regulates the transcription of various genes, has a role in RNA polymerase I transcription (By similarity). Within the B-WICH complex has a role in RNA polymerase III transcription (PubMed: 16603771). Mediates the recruitment of the WICH-5 ISWI chromatin remodeling complex to replication foci during DNA replication (PubMed: 15543136).

Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00063, ECO:0000255|PROSITE-ProRule:PRU00475, ECO:0000269|PubMed:11980720, ECO:0000269|PubMed:15543136, ECO:0000269|PubMed:16603771, ECO:0000269|PubMed:25593309}. Note=Accumulates in pericentromeric heterochromatin during replication (PubMed:15543136). Co-localizes with PCNA at replication foci during S phase (PubMed:15543136). Co-localizes with SMARCA5/SNF2H at replication foci during late-S phase (PubMed:15543136). Also localizes to replication foci independently of SMARCA5/SNF2H and PCNA (PubMed:15543136). Localizes to sites of DNA damage (PubMed:25593309).

Tissue Location

Ubiquitously expressed with high levels of expression in heart, brain, placenta, skeletal muscle and ovary

BAZ1B Antibody (N-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

BAZ1B Antibody (N-term) - Images





BAZ1B Antibody (N-term)(Cat. #AP19326a) western blot analysis in 293 cell line lysates (35ug/lane).This demonstrates the BAZ1B antibody detected the BAZ1B protein (arrow).

BAZ1B Antibody (N-term) - Background

This gene encodes a member of the bromodomain protein family. The bromodomain is a structural motif characteristic of proteins involved in chromatin-dependent regulation of transcription. This gene is deleted in Williams-Beuren syndrome, a developmental disorder caused by deletion of multiple genes at 7q11.23.

BAZ1B Antibody (N-term) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Johansen, C.T., et al. Nat. Genet. 42(8):684-687(2010) Chidambaram, M., et al. Metab. Clin. Exp. (2010) In press : Oya, H., et al. J. Biol. Chem. 284(47):32472-32482(2009) Talmud, P.J., et al. Am. J. Hum. Genet. 85(5):628-642(2009)