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KD-Validated Anti-BAZ1B Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI1346

Specification

KD-Validated Anti-BAZ1B Rabbit Monoclonal Antibody - Product Information

Application	**WB, FC, ICC**
Primary Accession	Q9UIG0
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Rabbit IgG**
Calculated MW	**Predicted, 170 kDa , observed, 185 kDa KDa**
Gene Name	**BAZ1B**
Aliases	**BAZ1B; Bromodomain Adjacent To Zinc Finger Domain 1B; WSTF; WBSCR10; WBSCR9; Williams-Beuren Syndrome Chromosomal Region 10 Protein; Williams-Beuren Syndrome Chromosomal Region 9 Protein; Williams Syndrome; Transcription Factor; Tyrosine-Protein Kinase BAZ1B; Transcription Factor; WSTF; EC 2.7.10.2; HWALp2; Bromodomain Adjacent To Zinc Finger Domain Protein 1B; Williams-Beuren Syndrome Chromosome Region 10; Williams-Beuren Syndrome Chromosome Region 9; WBSC10**
Immunogen	**A synthesized peptide derived from human WSTF**

KD-Validated Anti-BAZ1B Rabbit Monoclonal Antibody - Additional Information

Gene ID	**9031**

Other Names
Tyrosine-protein kinase BAZ1B, 2.7.10.2, 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

KD-Validated Anti-BAZ1B Rabbit Monoclonal Antibody - 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:<a href="http://www.uniprot.org/citations/19092802"

target="_blank">19092802). 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:11980720, PubMed:28801535). 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

KD-Validated Anti-BAZ1B Rabbit Monoclonal 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

KD-Validated Anti-BAZ1B Rabbit Monoclonal Antibody - Images

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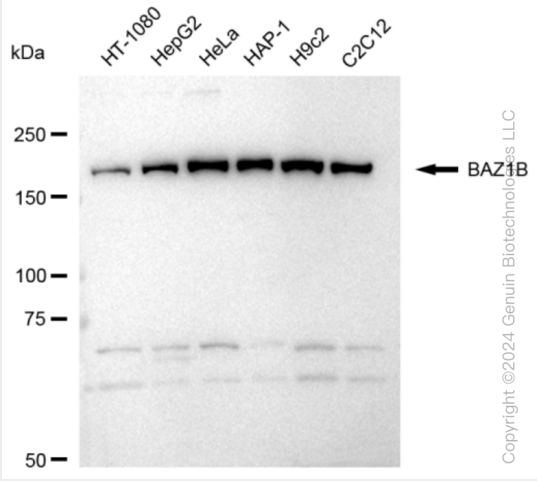
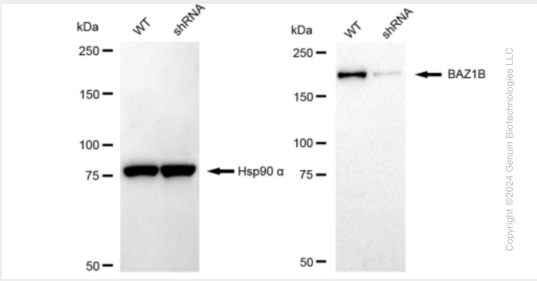
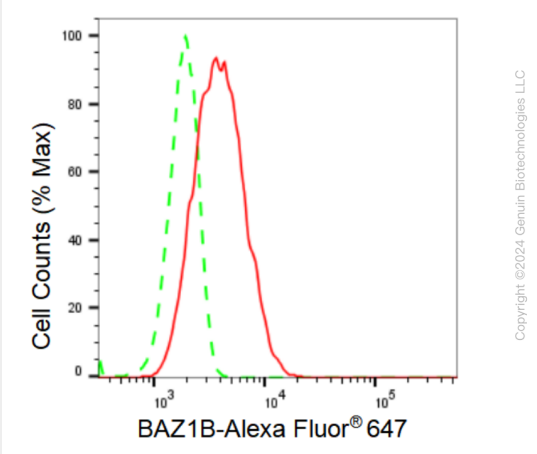


Western blotting analysis using anti-BAZ1B antibody (Cat#AGI1346). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-BAZ1B antibody (Cat#AGI1346, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-BAZ1B antibody (Cat#AGI1346). BAZ1B expression in wild type (WT) and BAZ1B shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-BAZ1B antibody (Cat#AGI1346, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of BAZ1B expression in HeLa cells using BAZ1B antibody (Cat#AGI1346, 1:2,000). Green, isotype control; red, BAZ1B.

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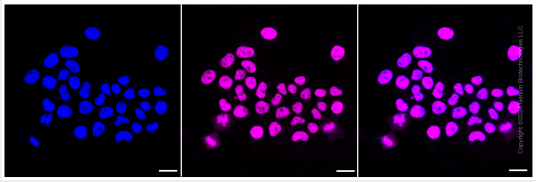

Immunocytochemical staining of Hela cells with BAZ1B antibody (Cat#AGI1346, 1:1,000). Nuclei were stained blue with DAPI; BAZ1B was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.