

WSTF Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58381

Product Information

Application IHC-P, IHC-F, IF, E

Primary Accession

Reactivity

Host

Clonality

Calculated MW

Q9UIGO

Rat, Pig

Rabbit

Polyclonal

170903

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

Dilution IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000

Format 0.01 M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

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: 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:<u>19092802</u>, PubMed:<u>19234442</u>). 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

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