

Rabbit Anti-WSTF antibody

SL6128R

Product Name:	WSTF
Chinese Name:	转录因子WSTF抗体
Alias:	BAZ1B; BAZ1B_HUMAN; Bromodomain adjacent to zinc finger domain protein 1B; hWALP 2; hWALP-2; hWALP2; transcription factor WSTF; Tyrosine-protein kinase BAZ1B; WALP-2; WALP2; WBRS 9; WBRS-9; WBRS9; WBSC 10; WBSC-10; WBSC10; Williams Beuren syndrome chromosome region 9 protein; Williams syndrome transcription factor; Williams-Beuren syndrome chromosomal region 10 protein; Williams-Beuren syndrome chromosomal region 9 protein antibody.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Pig, Horse, Rabbit, Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	171kDa
Cellular localization:	The nucleus
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human WSTF:1051-1200/1483
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. 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.
PubMed:	<u>PubMed</u>
Product Detail:	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, adevelopmental disorder caused by deletion of multiple genes at 7q11.23.

Function:

Atypical tyrosine-protein kinase that plays a central role in chromatin remodeling and acts as a transcription regulator. Involved in DNA damage response by phosphorylating 'Tyr-142' of histone H2AX (H2AXY142ph). H2AXY142ph plays a central role in DNA repair and acts as a mark that distinguishes between apoptotic and repair responses to genotoxic stress. Essential component of the WICH complex, a chromatin remodeling complex that mobilizes nucleosomes and reconfigures irregular chromatin to a regular nucleosomal array structure. The WICH complex regulates the transcription of various genes, has a role in RNA polymerase I and RNA polymerase III transcription, mediates the histone H2AX phosphorylation at 'Tyr-142', and is involved in the maintenance of chromatin structures during DNA replication processes. In the complex, it mediates the recruitment of the WICH complex to replication foci during DNA replication. Also involved in vitamin D-coupled transcription regulation via its association with the WINAC complex, a chromatin-remodeling complex recruited by vitamin D receptor (VDR), which is required for the ligand-bound VDR-mediated transrepression of the CYP27B1 gene. In the WINAC complex, plays an essential role by targeting the complex to acetylated histones, an essential step for VDR-promoter association.

Subunit:

Interacts with MYO1C (By similarity). Interacts with CDT1. Interacts with SMARCA5/SNF2H; the interaction is direct and forms the WICH complex. Component of the B-WICH complex, at least composed of SMARCA5/SNF2H, BAZ1B/WSTF, SF3B1, DEK, MYO1C, ERCC6, MYBBP1A and DDX21. Component of the WINAC complex, at least composed of SMARCA2, SMARCA4, SMARCB1, SMARCC1, SMARCC2, SMARCD1, SMARCE1, ACTL6A, BAZ1B/WSTF, ARID1A, SUPT16H, CHAF1A and TOP2B. Interacts with VDR; in a ligand-dependent manner. Interacts with PCNA; the interaction is direct.

Subcellular Location:

Nucleus. Note=Accumulates in pericentromeric heterochromatin during replication. Targeted to replication foci throughout S phase via its association with PCNA.

Tissue Specificity:

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

Post-translational modifications:

Phosphorylated upon DNA damage, probably by ATM or ATR.

DISEASE:

Note=BAZ1B is located in the Williams-Beuren syndrome (WBS) critical region. WBS results from a hemizygous deletion of several genes on chromosome 7q11.23, thought to arise as a consequence of unequal crossing over between highly homologous low-

copy repeat sequences flanking the deleted region. Haploinsufficiency of BAZ1B may be the cause of certain cardiovascular and musculo-skeletal abnormalities observed in the disease.

Similarity:

Belongs to the WAL family. BAZ1B subfamily.

Contains 1 bromo domain.

Contains 1 DDT domain.

Contains 1 PHD-type zinc finger.

Contains 1 WAC domain.

SWISS:

Q9UIG0

Gene ID:

9031

Database links:

Entrez Gene: 9031Human

Entrez Gene: 22385Mouse

Entrez Gene: 368002Rat

Omim: 605681Human

SwissProt: Q9UIG0Human

SwissProt: Q9Z277Mouse

<u>Unigene: 647016</u>Human

Unigene: 40331Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.