

Recombinant Human BAZ1B, His&FLAG-tagged

Cat. No. BAZ1B-32H Lot. No. (See product label)

SPECIFICATION

Product Overview Recombinant Human BAZ1B corresponding to amino acids 1340-1457 that contains the bromodomain sequences of BAZ1B (accession number NP_115784.1) was expressed in E. coli and contains an N-terminal His tag and C-terminal FLAG tag.

Species Human

Source E.coli

ProteinLength 1340-1457 a.a.

Description Bromodomain adjacent to zinc finger domain, 1B (BAZ1B) is a member of the bromodomain protein family. The bromodomain functions as a "reader" of epigenetic histone marks and regulates chromatin structure and gene expression by linking associated proteins to the recognized acetylated nucleosomal targets. BAZ1B is an atypical tyrosine protein kinase that plays a central role in chromatin remodeling and acts as a transcriptional regulator. It is an 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 and has a role in RNA polymerase I and RNA polymerase III transcription. In the complex, BAZ1B mediates the recruitment of the WICH complex to replication foci during DNA replication. BAZ1B and the WICH complex are also involved in DNA damage response through phosphorylation of Tyr142 of histone H2AX (H2AXY142ph), a mark that distinguishes between apoptotic and repair responses to genotoxic stress. BAZ1B is also involved in vitamin D-

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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, BAZ1B plays an essential role by targeting the complex to acetylated histones, an essential step for VDR-promoter association. Deletion of BAZ1B leads to Williams-Beuren syndrome.

Form 25 mM HEPES pH 7.5, 150 mM NaCl and 5% glycerol.

Molecular Mass 20.2 kDa

Applications Binding assays, inhibitor screening, and selectivity profiling.

Storage Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage.

Concentration 4.7 mg/ml

GENE INFORMATION

Gene Name [BAZ1B bromodomain adjacent to zinc finger domain, 1B \[Homo sapiens \]](#)

Official Symbol BAZ1B

Synonyms BAZ1B; bromodomain adjacent to zinc finger domain, 1B; WBSCR9, WBSCR10; tyrosine-protein kinase BAZ1B; transcription factor WSTF; Williams Beuren syndrome chromosome region 9; Williams Beuren syndrome chromosome region 10; WSTF; hWALp2; williams syndrome transcription factor; williams-Beuren syndrome chromosomal region 9 protein; williams-Beuren syndrome chromosomal region 10 protein; WBSCR9; WBSCR10;

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Gene ID	9031
mRNA Refseq	NM_032408
Protein Refseq	NP_115784
MIM	605681
UniProt ID	Q9UIG0
Chromosome Location	7q11.23
Function	ATP binding; chromatin binding; histone acetyl-lysine binding; histone kinase activity; kinase activity; metal ion binding; non-membrane spanning protein tyrosine kinase activity; nucleotide binding; protein binding; protein complex scaffold; protein tyrosine kinase activity; transferase activity; vitamin D receptor activator activity; vitamin D receptor binding; zinc ion binding;

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