

Phospho-FALZ(S77) Antibody Blocking peptide
Synthetic peptide
Catalog # BP3629a

Specification

Phospho-FALZ(S77) Antibody Blocking peptide - Product Information

Primary Accession [Q12830](#)

Phospho-FALZ(S77) Antibody Blocking peptide - Additional Information

Gene ID 2186

Other Names

Nucleosome-remodeling factor subunit BPTF, Bromodomain and PHD finger-containing transcription factor, Fetal Alz-50 clone 1 protein, Fetal Alzheimer antigen, BPTF, FAC1, FALZ

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP3629a](/products/AP3629a) was selected from the region of human Phospho-FALZ-pS77. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Phospho-FALZ(S77) Antibody Blocking peptide - Protein Information

Name BPTF

Synonyms FAC1, FALZ

Function

Regulatory subunit of the ATP-dependent NURF-1 and NURF-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: [14609955](http://www.uniprot.org/citations/14609955), PubMed: [28801535](http://www.uniprot.org/citations/28801535)). The NURF-1 ISWI chromatin remodeling complex has a lower ATP hydrolysis rate than the NURF-5 ISWI chromatin remodeling complex (PubMed: [28801535](http://www.uniprot.org/citations/28801535)). Within the NURF-1 ISWI chromatin-remodeling complex, binds to the promoters of En1 and En2 to positively regulate their expression and promote brain

development (PubMed:14609955). Histone-binding protein which binds to H3 tails trimethylated on 'Lys-4' (H3K4me3), which mark transcription start sites of active genes (PubMed:16728976, PubMed:16728978). Binds to histone H3 tails dimethylated on 'Lys-4' (H3K4Me2) to a lesser extent (PubMed:16728976, PubMed:16728978, PubMed:18042461). May also regulate transcription through direct binding to DNA or transcription factors (PubMed:10575013).

Cellular Location

Cytoplasm. Nucleus. Note=Localizes to sites of DNA damage (PubMed:25593309). In brains of Alzheimer disease patients, present in a subset of amyloid-containing plaques (PubMed:10727212)

Tissue Location

Ubiquitously expressed, with highest levels in testis. Present in kidney, liver and brain. In the brain, highest levels are found in motor cortex (at protein level)

Phospho-FALZ(S77) Antibody Blocking peptide - Protocols

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

- [Blocking Peptides](#)

Phospho-FALZ(S77) Antibody Blocking peptide - Images

Phospho-FALZ(S77) Antibody Blocking peptide - Background

Analysis of the original protein (fetal Alz-50 reactive clone 1, or FAC1), identified as an 810 aa protein containing a DNA-binding domain and a zinc finger motif, suggested it might play a role in the regulation of transcription. High levels of FAC1 were detected in fetal brain and in patients with neurodegenerative diseases. The protein is actually much larger than originally thought, and it also contains a C-terminal bromodomain characteristic of proteins that regulate transcription during proliferation. The protein is highly similar to the largest subunit of the Drosophila NURF (nucleosome remodeling factor) complex. In Drosophila, the NURF complex, which catalyzes nucleosome sliding on DNA and interacts with sequence-specific transcription factors, is necessary for the chromatin remodeling required for transcription.

Phospho-FALZ(S77) Antibody Blocking peptide - References

Grinberg-Rashi,H., Clin. Cancer Res. 15 (5), 1755-1761 (2009)Olsen,J.V., Cell 127 (3), 635-648 (2006)