

FAC1 / BPTF Antibody (clone 2F10)

Mouse Monoclonal Antibody Catalog # ALS16184

Specification

FAC1 / BPTF Antibody (clone 2F10) - Product Information

WB, IHC-P, E Application **Primary Accession** 012830 Reactivity Human Host Mouse Clonality **Monoclonal** Calculated MW 338kDa KDa Dilution WB~~1:1000 IHC-P~~N/A E~~N/A

FAC1 / BPTF Antibody (clone 2F10) - 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

Human FAC1 / BPTF

Reconstitution & Storage

Long term: -20°C; Short term: +4°C; Avoid freeze-thaw cycles.

Precautions

FAC1 / BPTF Antibody (clone 2F10) is for research use only and not for use in diagnostic or therapeutic procedures.

FAC1 / BPTF Antibody (clone 2F10) - 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, PubMed:28801535). The NURF-1 ISWI chromatin remodeling complex has a lower ATP hydrolysis rate than the NURF-5 ISWI chromatin remodeling complex (PubMed:<a href="http://www.uniprot.org/citations/28801535"



target="_blank">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 plagues (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)

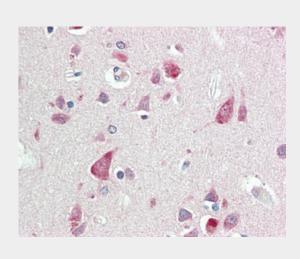
Volume 50 µl

FAC1 / BPTF Antibody (clone 2F10) - Protocols

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

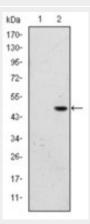
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

FAC1 / BPTF Antibody (clone 2F10) - Images





Anti-FAC1 / BPTF antibody IHC staining of human brain, cortex.



Western blot using BPTF monoclonal antibody against HEK293 (1) and BPTF (AA: 503-670)-hlgGFc...

FAC1 / BPTF Antibody (clone 2F10) - Background

Histone-binding component of NURF (nucleosome-remodeling factor), a complex which catalyzes ATP-dependent nucleosome sliding and facilitates transcription of chromatin. Specifically recognizes H3 tails trimethylated on 'Lys-4' (H3K4me3), which mark transcription start sites of virtually all active genes. May also regulate transcription through direct binding to DNA or transcription factors.

FAC1 / BPTF Antibody (clone 2F10) - References

Jones M.H.,et al.Genomics 63:35-39(2000). Zody M.C.,et al.Nature 440:1045-1049(2006). Bowser R.,et al.Dev. Neurosci. 17:20-37(1995). Barak O.,et al.EMBO J. 22:6089-6100(2003). Mu X.,et al.Exp. Neurol. 146:17-24(1997).