

# FAC1 / BPTF Antibody (clone 2F10)

Mouse Monoclonal Antibody Catalog # ALS16184

# **Specification**

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

Application IHC, WB
Primary Accession O12830
Reactivity Human
Host Mouse
Clonality Monoclonal
Calculated MW 338kDa KDa

# 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:<a href="http://www.uniprot.org/citations/14609955" target="\_blank">14609955</a>, PubMed:<a href="http://www.uniprot.org/citations/28801535" target="\_blank">28801535</a>). 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</a>). 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:<a href="http://www.uniprot.org/citations/14609955"



target="\_blank">14609955</a>). Histone-binding protein which binds to H3 tails trimethylated on 'Lys-4' (H3K4me3), which mark transcription start sites of active genes (PubMed:<a href="http://www.uniprot.org/citations/16728976" target="\_blank">16728976</a>, PubMed:<a href="http://www.uniprot.org/citations/16728978" target="\_blank">16728978</a>). Binds to histone H3 tails dimethylated on 'Lys-4' (H3K4Me2) to a lesser extent (PubMed:<a href="http://www.uniprot.org/citations/16728976" target="\_blank">16728976</a>, PubMed:<a href="http://www.uniprot.org/citations/16728978" target="\_blank">16728978</a>, PubMed:<a href="http://www.uniprot.org/citations/18042461" target="\_blank">18042461</a>). May also regulate transcription through direct binding to DNA or transcription factors (PubMed:<a href="http://www.uniprot.org/citations/10575013" target=" blank">10575013</a>).

# **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)

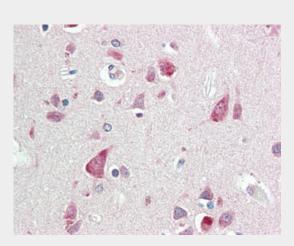
Volume 50 µl

# FAC1 / BPTF Antibody (clone 2F10) - Protocols

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

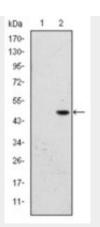
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# 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).