

## FEM1B Antibody (aa609-622)

Rabbit Polyclonal Antibody Catalog # ALS11458

## **Specification**

### FEM1B Antibody (aa609-622) - Product Information

Application IF, WB, IHC Primary Accession Q9UK73

Reactivity Human, Mouse, Rat, Rabbit, Hamster,

Monkey, Pig, Horse, Bovine, Dog

Host Rabbit
Clonality Polyclonal
Calculated MW 70kDa KDa

## FEM1B Antibody (aa609-622) - Additional Information

### **Gene ID 10116**

#### **Other Names**

Protein fem-1 homolog B, FEM1b, FEM1-beta, Fem-1-like death receptor-binding protein alpha, Fem-1-like in apoptotic pathway protein alpha, F1A-alpha, FEM1B, F1AA, KIAA0396

# **Target/Specificity**

Peptide (DINYQDQIPRTLEE) corresponding to amino acids 609 to 622 of human F1Aa This sequence is identical to the corresponding sequence of mouse FEM1b.

### **Reconstitution & Storage**

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

#### **Precautions**

FEM1B Antibody (aa609-622) is for research use only and not for use in diagnostic or therapeutic procedures.

# FEM1B Antibody (aa609-622) - Protein Information

Name FEM1B {ECO:0000303|PubMed:10623617, ECO:0000312|HGNC:HGNC:3649}

### **Function**

Substrate-recognition component of a Cul2-RING (CRL2) E3 ubiquitin-protein ligase complex of the DesCEND (destruction via C-end degrons) pathway, which recognizes a C-degron located at the extreme C terminus of target proteins, leading to their ubiquitination and degradation (PubMed:<a href="http://www.uniprot.org/citations/29779948" target="\_blank">29779948</a>, PubMed:<a href="http://www.uniprot.org/citations/33398170" target="\_blank">33398170</a>, PubMed:<a href="http://www.uniprot.org/citations/33398168" target="\_blank">33398168</a>). The C-degron recognized by the DesCEND pathway is usually a motif of less than ten residues and can be present in full-length proteins, truncated proteins or proteolytically cleaved forms (PubMed:<a href="http://www.uniprot.org/citations/29779948" target="\_blank">29779948</a>, PubMed:<a href="http://www.uniprot.org/citations/33398170" target="\_blank">33398170</a>, PubMed:<a



href="http://www.uniprot.org/citations/33398168" target=" blank">33398168</a>). The CRL2(FEM1B) complex specifically recognizes proteins ending with -Gly-Leu-Asp-Arg, such as CDK5R1, leading to their ubiquitination and degradation (PubMed:<a href="http://www.uniprot.org/citations/33398170" target="\_blank">33398170</a>, PubMed:<a href="http://www.uniprot.org/citations/33398168" target="blank">33398168</a>). Also acts as a regulator of the reductive stress response by mediating ubiquitination of reduced FNIP1: in response to reductive stress, the CRL2(FEM1B) complex specifically recognizes a conserved Cvs degron in FNIP1 when this degron is reduced, leading to FNIP1 degradation and subsequent activation of mitochondria to recalibrate reactive oxygen species (ROS) (By similarity). Mechanistically, recognizes and binds reduced FNIP1 through two interface zinc ions, which act as a molecular glue that recruit reduced FNIP1 to FEM1B (By similarity). Promotes ubiquitination of GLI1, suppressing GLI1 transcriptional activator activity (PubMed: <a href="http://www.uniprot.org/citations/24076122" target=" blank">24076122</a>). Promotes ubiquitination and degradation of ANKRD37 (By similarity). Promotes ubiquitination and degradation of SLBP (PubMed: <a href="http://www.uniprot.org/citations/28118078" target=" blank">28118078</a>). Involved in apoptosis by acting as a death receptor-associated protein that mediates apoptosis (PubMed:<a href="http://www.uniprot.org/citations/10542291" target=" blank">10542291</a>). Also involved in glucose homeostasis in pancreatic islet (By similarity). May also act as an adapter/mediator in replication stress-induced signaling that leads to the activation of CHEK1 (PubMed: <a href="http://www.uniprot.org/citations/19330022" target=" blank">19330022</a>).

#### **Cellular Location**

Cytoplasm. Nucleus Note=In the nucleus, the protein level increased slightly after camptothecin (CPT) treatment (PubMed:19330022). Associated with chromatin (PubMed:19330022).

### **Tissue Location**

Widely expressed (PubMed:10542291). Highly expressed in testis (PubMed:10542291). Weakly expressed in other tissues (PubMed:10542291).

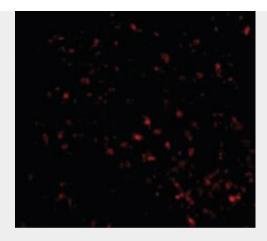
## FEM1B Antibody (aa609-622) - Protocols

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

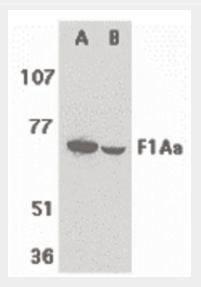
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## FEM1B Antibody (aa609-622) - Images

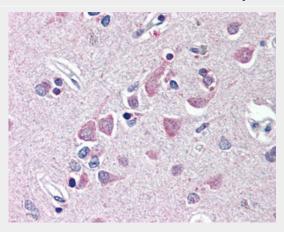




Immunofluorescence of F1A alpha in Mouse Liver cells with F1A alpha antibody at 20 ug/ml.



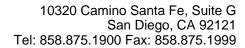
Western blot of F1A alpha in mouse (A) and rat (B) liver tissue lysates with F1A alpha antibody...



Anti-FEM1B antibody IHC of human brain, cortex.

## FEM1B Antibody (aa609-622) - Background

Component of an E3 ubiquitin-protein ligase complex, in which it may act as a substrate recognition subunit. Involved in apoptosis by acting as a death receptor-associated protein that mediates apoptosis. Also involved in glucose homeostasis in pancreatic islet. Functions as an adapter/mediator in replication stress-induced signaling that leads to the activation of CHEK1.





# FEM1B Antibody (aa609-622) - References

Chan S.-L.,et al.J. Biol. Chem. 274:32461-32468(1999). Ventura-Holman T.,et al.Biochem. Biophys. Res. Commun. 267:317-320(2000). Ishikawa K.,et al.DNA Res. 4:307-313(1997). Nakajima D.,et al.DNA Res. 9:99-106(2002). Ota T.,et al.Nat. Genet. 36:40-45(2004).