10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

FAM120A Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AW5641

Product Information

Application	IF, IHC-P, WB
Primary Accession	Q9NZB2
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	121888
Isotype	IgG1,k
Antigen Source	HUMAN

Additional Information

Gene ID	23196
Antigen Region	280-600
Other Names	Constitutive coactivator of PPAR-gamma-like protein 1, Oxidative stress-associated Src activator, Protein FAM120A, FAM120A, C9orf10, KIAA0183, OSSA
Dilution	IF~~1:25 IHC-P~~1:100~500 WB~~1:2000
Target/Specificity	This FAM120A antibody is generated from a mouse immunized with a recombinant protein of human FAM120A.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	FAM120A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	FAM120A
Function	Membrane-associated scaffold protein that participates in multiple cellular processes, including oxidative stress-induced survival signaling, RNA trafficking and translational regulation, and the modulation of membrane signaling through its interaction with RNA- binding proteins and lipid raft-associated domains (PubMed:19015244). Functions as a regulator of activation of several intracellular kinases, including SRC, FAK, and PI3K, following oxidative stress (PubMed:19015244). Promotes RNA splicing and

	stability of lipogenic enzymes (PubMed:37595559). Mechanistically, recruits the lipogenic transcription factor SREBP1 at active promoters, thereby bridging the newly transcribed lipogenic genes from RNA polymerase II to the SRSF1 and U1-70K-containing RNA-splicing machinery (PubMed:37595559). Associates with key proteins of the NLRP3 inflammasome pathway and subsequently inhibits NLRP3 inflammasome activation (PubMed:40250624). Sequesters a subset of AGO2-bound mRNAs from miRNA-mediated silencing by binding to poly(G)-rich motifs in their 3'-UTR independently of the AGO2 binding site, likely by preventing recruitment of miRISC effectors (By similarity).
Cellular Location	Cytoplasm. Cell membrane; Peripheral membrane protein; Cytoplasmic side. Note=Translocates from the cytosol to plasma membrane after UV irradiation.
Tissue Location	Widely expressed (PubMed:14585507). In gastric mucosa, detected in the bottom region of the foveolar epithelium (at protein level) (PubMed:19015244).

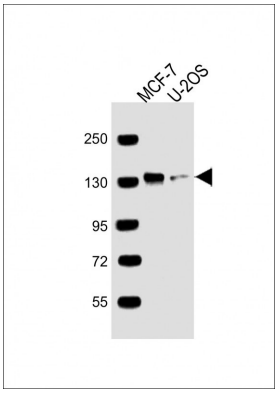
Background

May participate in mRNA transport in the cytoplasm (By similarity). Critical component of the oxidative stress-induced survival signaling. Activates src family kinases and acts as a scaffolding protein enabling src family kinases to phosphorylate and activate PI3-kinase. Binds RNA and promotes the secretion of IGF-II. May play a pivotal role in the progression of scirrhous- type gastric cancer by supporting cancer cell survival in environments with various oxidative stresses.

References

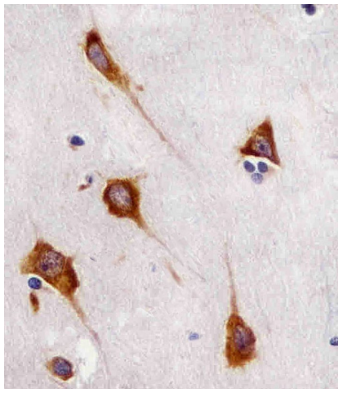
Brahmbhatt S.B.,et al.Submitted (NOV-1999) to the EMBL/GenBank/DDBJ databases.
Humphray S.J.,et al.Nature 429:369-374(2004).
Nagase T.,et al.DNA Res. 3:17-24(1996).
Ohara O.,et al.Submitted (JUN-2005) to the EMBL/GenBank/DDBJ databases.
Holden S.,et al.Gene 318:149-161(2003).

Images



All lanes : Anti-FAM120A Antibody at1:2000 dilution Lane 1: MCF-7 whole cell lysate Lane 2: U-2OS whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 122 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

AW5641 staining FAM120A in human brain sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were



incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0. 1% Triton X-100 permeabilized HeLa (human cervical epithelial adenocarcinoma cell line) cells labeling Pdx1 with AW5641 at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-mouse IgG (NA166821) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm staining on HeLa cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (PD18466410) at 1/100 dilution (red). The nuclear counter stain is DAPI (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.