

Anti-FAM3A Antibody [7-B9]

M1008-10



Product Type:	Mouse monoclonal IgG1, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P, FC
Molecular Wt:	Predicted band size: 25 kDa
Clone number:	7-B9

Description: The FAM3 gene family is a novel cytokine-like gene family, which includes four members designated as FAM3A, FAM3B, FAM3C, and FAM3D. FAM3A is a secreted protein belonging to the FAM3 family of four alpha-helix bundle cytokines. It is expressed in multiple tissues. Mature human FAM3A shares approximately 93% amino acid sequence identity with the mouse and rat protein. FAM3A belongs to a novel cytokine-like gene family, and its physiological role remains largely unknown. FAM3A activated Akt through the p110 α catalytic subunit of PI3K in an insulin-independent manner. Blockade of P2 ATP receptors or downstream phospholipase C (PLC) and IP3R and removal of medium calcium all significantly reduced FAM3A-induced increase in cytosolic free Ca²⁺ levels and attenuated FAM3A-mediated PI3K/Akt activation. Moreover, FAM3A-induced Akt activation was completely abolished by the inhibition of calmodulin (CaM).

Immunogen: Recombinant protein within Human FAM3A 1-230 / 230.

Positive control: Rat smooth muscle tissue lysates, human kidney tissue, human fetal skeletal muscle tissue, mouse heart tissue, A431.

Subcellular location: Secreted.

Database links: SwissProt: P98173 Human | Q9D8T0 Mouse
Entrez Gene: 501664 Rat

Recommended Dilutions:

WB	1:2,000-1:5,000
IHC-P	1:50-1:200
FC	1:50-1:200

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4°C. Store at +4°C short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20°C long term.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

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Images

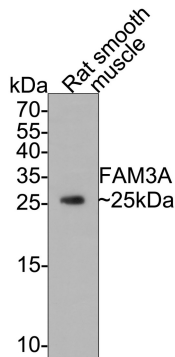


Fig1: Western blot analysis of FAM3A on rat smooth muscle tissue lysates with Mouse anti-FAM3A antibody (M1008-10) at 1/500 dilution.

Lysates/proteins at 20 µg/Lane.

Predicted band size: 25 kDa

Observed band size: 25 kDa

Exposure time: 30 seconds;

15% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (M1008-10) at 1/500 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1:100,000 dilution was used for 1 hour at room temperature.

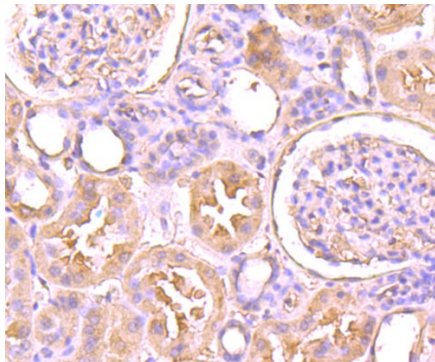


Fig2: Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-FAM3A antibody. Counter stained with hematoxylin.

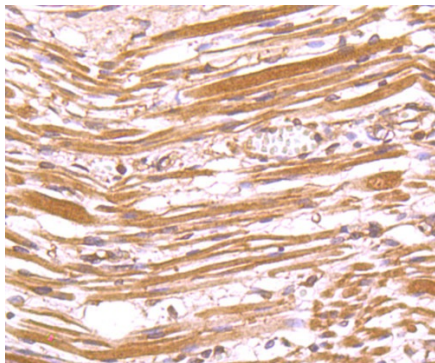


Fig3: Immunohistochemical analysis of paraffin-embedded human fetal skeletal muscle tissue using anti-FAM3A antibody. Counter stained with hematoxylin.

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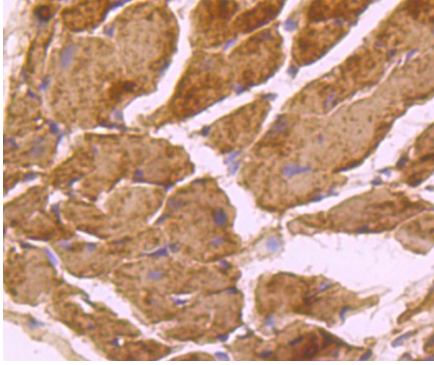


Fig4: Immunohistochemical analysis of paraffin-embedded mouse heart tissue using anti-FAM3A antibody. Counter stained with hematoxylin.

Note: All products are “FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE”.

Background References

1. Chunjiog W et al. FAM3A activates PI3K p110 α /Akt signaling to ameliorate hepatic gluconeogenesis and lipogenesis. *Hepatology* 59(5):1779-90 (2014).
2. Jia S et al. FAM3A promotes vascular smooth muscle cell proliferation and migration and exacerbates neointima formation in rat artery after balloon injury. *J Mol Cell Cardiol* 74:173-82 (2014).

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