Anti-Calcineurin A Antibody [JA64-11]

ET1704-02

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, FC
Molecular Wt:	Predicted band size: 59 kDa
Clone number:	JA64-11

Description: In eukaryotes, the phosphorylation and dephosphorylation of proteins on serine and threonine residues is an essential means of regulating a broad range of cellular functions including division, homeostasis and apoptosis. A group of proteins that are intimately involved in this process are the protein phosphatases. In general, the protein phosphatase (PP) holoenzyme is a trimeric complex composed of a regulatory subunit, a variable subunit and a catalytic subunit. Four major families of protein phosphatase catalytic subunit have been identified, designated PP1, PP2A, PP2B and PP2C. An additional protein phosphatase catalytic subunit, PPX (also known as PP4), is a putative member of a novel PP family. The PP2B family comprises subfamily members PP2B-Aα, PP2B-Aβ and PP2B-Aγ. Two additional regulatory subunits been identified, designated PP2B-B1 and PP2B-B2.

Immunogen: Synthetic peptide within Human Calcineurin A aa 472-521 / 521.

Positive control: MCF7 cell lysate, mouse brain tissue lysate, rat brain tissue lysate, Hela cell lysate, 293 cell lysate, A431 cell lysate, mouse cerebellum tissue lysate, Hela.

Subcellular location: Cell membrane, Cytoplasm.

Database links: SwissProt: Q08209 Human | P63328 Mouse | P63329 Rat

Recommended Dilutions:

WB	1:500-1:1,000
FC	1:50-1:100

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

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

Purity: Protein A affinity purified.

Images

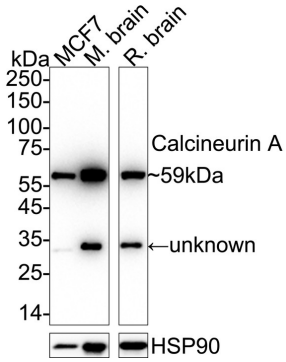

Fig1: Western blot analysis of Calcineurin A on different lysates with Rabbit anti-Calcineurin A antibody (ET1704-02) at 1/1,000 dilution.

Lane 1: MCF7 cell lysate (20 µg/Lane)
Lane 2: Mouse brain tissue lysate (40 µg/Lane)
Lane 3: Rat brain tissue lysate (40 µg/Lane)

Predicted band size: 59 kDa
Observed band size: 59 kDa

Exposure time: 25 seconds; ECL: K1801;

4-20% 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 (ET1704-02) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

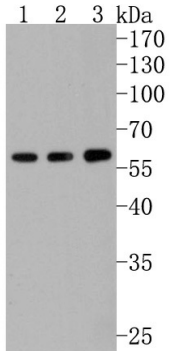

Fig2: Western blot analysis of Calcineurin A on different lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (ET1704-02, 1/500) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:200,000 dilution was used for 1 hour at room temperature.
Positive control:
Lane 1: Hela cell lysate
Lane 2: 293 cell lysate
Lane 3: A431 cell lysate

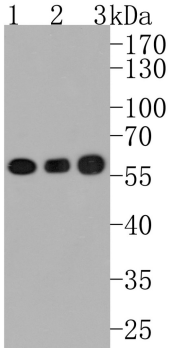

Fig3: Western blot analysis of Calcineurin A on different lysates. Proteins were transferred to a PVDF membrane and blocked with 5% BSA in PBS for 1 hour at room temperature. The primary antibody (ET1704-02, 1/500) was used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:200,000 dilution was used for 1 hour at room temperature.
Positive control:
Lane 1: Mouse brain tissue lysate
Lane 2: Mouse cerebellum tissue lysate
Lane 3: Rat brain tissue lysate

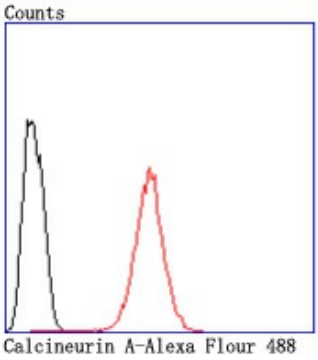

Fig4: Flow cytometric analysis of Calcineurin A was done on Hela cells. The cells were fixed, permeabilized and stained with the primary antibody (ET1704-02, 1/50) (red). After incubation of the primary antibody at room temperature for an hour, the cells were stained with a Alexa Fluor®488 conjugate-Goat anti-Rabbit IgG Secondary antibody at 1/1,000 dilution for 30 minutes.Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

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

Background References

1. Turdi S et al. Interaction between maternal and postnatal high fat diet leads to a greater risk of myocardial dysfunction in offspring via enhanced lipotoxicity, IRS-1 serine phosphorylation and mitochondrial defects. J Mol Cell Cardiol 55:117-29 (2013).
2. Thoms KM et al. Cyclosporin A, but not everolimus, inhibits DNA repair mediated by calcineurin: implications for tumorigenesis under immunosuppression. Exp Dermatol 20:232-6 (2011).