Calcineurin A polyclonal antibody

Calcineurin is a Ca2+/Calmodulin-dependent serine/threonine protein phosphatase. The active enzyme is a heterodimer consisting of a catalytic A subunit and a myristylated regulatory B subunit that binds calcium. Calcineurin, which is the target of immunosuppressant drugs such as cyclosporin A and FK506, controls the translocation of Nuclear factors of activated T-cells (NFAT), a family of transcriptional activators that control the expression of cytokine genes essential to immune response, from the cytosol into the nucleus of activated T-cells.

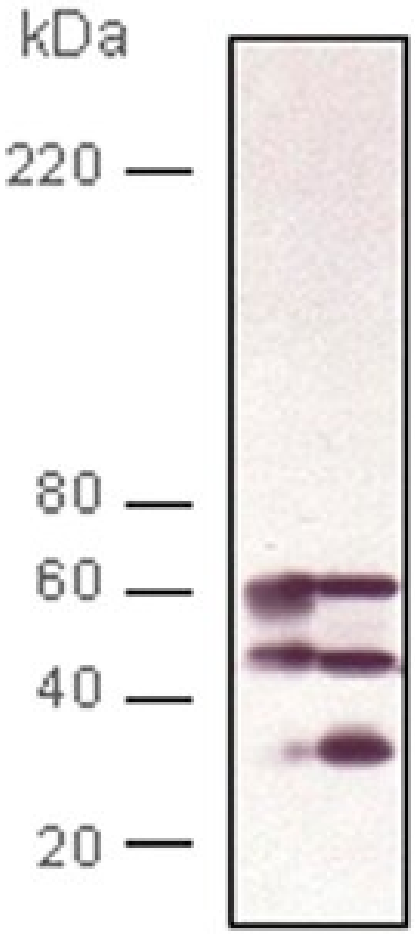
This antibody is covered by our Worry-Free Guarantee.

Citations: 3 View Online »

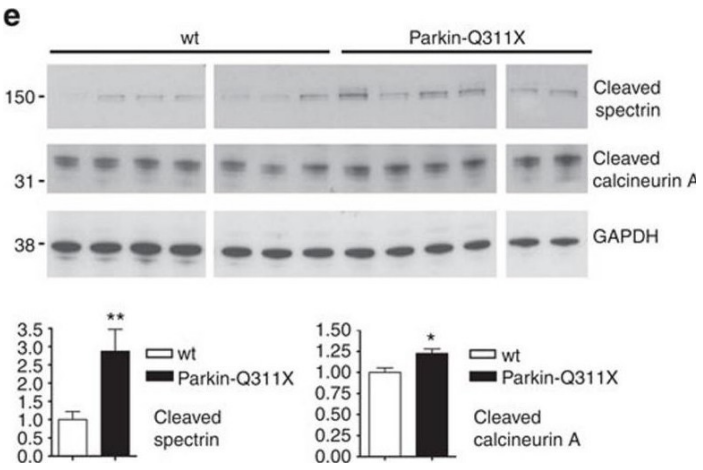
Ordering Information Order Online »

ADI-SPA-610-D	50µg

Manuals, SDS & CofA View Online »



Western blot analysis of ADI-SPA-610: Lane 1: Rat Brain Lysate, Lane 2: Mouse Brain Lysate.



Loss of parkin function increases surface GluK2 levels, KAR currents and causes excitotoxicity.(a) Surface biotinylation assay in hippocampal neurons infected with lentivirus encoding sh-scrambled or sh-parkin, or sh-parkin+parkinR. Endogenous parkin silencing increased surface GluK2 levels; co-infection with lentivirus encoding parkinR rescued GluK2 surface levels (one-way analysis of variance (ANOVA)–Dunnett's multiple comparison test, **P=0.0053, F=14.25). (b) Surface Myc labelling in hippocampal neurons co-transfected with sh-parkin+Myc-GluK2a or sh-scrambled+Myc-GluK2a, or sh-parkin+parkinR+Myc-GluK2a (one-way ANOVA–Bonferroni test, **P=0.0066, F=6.082, 29 degrees of freedom; ten neurons analysed/each condition). Scale bar, 20 μm. (c) KAR current analysis in hippocampal neurons infected with lentivirus encoding GFP bicistronic sh-scrambled or sh-parkin, or sh-parkin+parkinR. Whole-cell responses were induced by rapid application of 100 μM kainate. To isolate KAR currents from those resulting from AMPAR opening, we added 10 μM GYKI 53655 (IC50=0.9±0.08 μM)16. Responses are shown before application (left panel), during the concomitant application of GYKI53655 (central panel) and after GYKI53655 washout (right panel). Western blotting shows parkin expression in the three experimental conditions. The chart plot shows the ratio between current stimulated by kainate+GYKI53655 and the current triggered by 3 s application of kainate alone (one-way ANOVA and Tukey test, **P<0.01; ***P<0.001; F=15.87). Error bars indicate 25th and 75th percentiles. (d) Primary hippocampal neurons were infected with lentivirus encoding GFP bicistronic sh-scrambled or sh-parkin, or sh-parkin+parkinR. Data represent the percentage of infected cells (green fluorescent cells) labelled by propidium iodide (PI). Kainate 2–4 μM or concanavalin A 200 μg ml−1 alone did not induce cell death. Kainate 2–4 μM+concanavalin A 200 μg ml−1 caused excitotoxicity in parkin-silenced cells. Co-infection with lentivirus encoding parkinR rescued cell death (one-way ANOVA–Tukey test,

Handling & Storage

Long Term Storage	-20°C
Shipping	Blue Ice

Regulatory Status RUO - Research Use Only

Product Details

Application	IP, WB
Application Notes	Detects a band of ~61kDa by Western blot.
Formulation	Liquid. In PBS containing 50% glycerol and 0.09% sodium azide.
GenBank ID	M29550
Host	Rabbit
Immunogen	Synthetic peptide corresponding to human calcineurin A.
Purity Detail	Protein A affinity purified.
Recommendation Dilutions/Conditions	Western Blot (1:1,000, ECL)Suggested dilutions/conditions may not be available for all applications.Optimal conditions must be determined individually for each application.
Source	Purified from rabbit serum.
Species Reactivity	Bovine, Chicken, Dog, Drosophila, Hamster, Human, Monkey, Mouse, Porcine, Rabbit, Rat, Sheep
UniProt ID	P16298
Worry-free Guarantee	**This antibody is covered by our Worry-Free Guarantee .**

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ENZO LIFE SCIENCES, Inc.
Phone: 800.942.0430
info-usa@enzolifesciences.com

European Sales Office
ENZO LIFE SCIENCES (ELS) AG
Phone: +41 61 926 8989
info-eu@enzolifesciences.com

Belgium, The Netherlands & Luxembourg
Phone: +32 3 466 0420
info-be@enzolifesciences.com

France
Phone: +33 472 440 655
info-fr@enzolifesciences.com

Germany
Phone: +49 7621 5500 526
info-de@enzolifesciences.com

UK & Ireland
Phone (UK customers): 0845 601 1488
Phone: +44 1392 825900
info-uk@enzolifesciences.com

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