

Calcineurin A

Cat.No. 387-0P; control protein, 100 µg protein (lyophilized)

Data Sheet

Reconstitution/ Storage	100 µg protein, lyophilized. For reconstitution add 100 µl H ₂ O to get a 1mg/ml solution in TBS. Then aliquot and store at -20°C until use.
Immunogen	Recombinant protein corresponding to AA 1 to 521 from human Calcineurin (UniProt Id: Q08209)
Recommended dilution	Optimal concentrations should be determined by the end-user.
matching antibodies	387 002, 387 003
Remarks	This control protein consists of the recombinant protein (full length human Calcineurin A) that has been used for immunization. It has been tested in preadsorption experiments and blocks efficiently and specifically the corresponding signal in Western blots. The amount of protein needed for efficient blocking depends on the titer and on the affinity of the antibody to the antigen.

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Calcineurin (PP2B) is a calcium/calmodulin dependent Ser/Thr protein phosphatase that is expressed at high levels in the CNS. It is a heterodimeric protein consisting of a catalytic subunit **calcineurin A** containing an active site dinuclear metal center, and a tightly associated, myristoylated, Ca²⁺-binding subunit called calcineurin B. Calcineurin is involved in many cellular processes and Ca²⁺-dependent signal transduction pathways.

Selected General References

Beta-amyloid causes downregulation of calcineurin in neurons through induction of oxidative stress. Celsi F, Svedberg M, Unger C, Cotman CW, Carri MT, Ottersen OP, Nordberg A, Torp R *Neurobiology of disease* (2007) 26(2): 342-52.

Calcineurin: form and function. Rusnak F, Mertz P *Physiological reviews* (2000) 80(4): 1483-521.

Involvement of a calcineurin/inhibitor-1 phosphatase cascade in hippocampal long-term depression. Mulkey RM, Endo S, Shenolikar S, Malenka RC *Nature* (1994) 369(6480): 486-8.

Calcineurin is a common target of cyclophilin-cyclosporin A and FKBP-FK506 complexes. Liu J, Farmer JD, Lane WS, Friedman J, Weissman I, Schreiber SL *Cell* (1991) 66(4): 807-15.

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