

## Calcineurin Phospho-Serine-197 Polyclonal Anti-Serum

### Quality Control Certificate of Analysis

Catalogue No.: A010-80

Unit Size: 100 µl

Lot No.: 0210-07

**Background:** Cytoplasmic  $Ca^{2+}$  binds to calmodulin and activates the phosphatase calcineurin (Cn) a 60 kDa protein, and CaM kinase II (CaMKII). One action of Cn is to dephosphorylate cytoplasmic NFAT (nuclear factor of activated T cells), inducing its translocation to the nucleus where it activates antiapoptotic and hypertrophic target genes. The phosphorylation of Cn at Phospho Ser-197 site has been observed in cultured neonatal rat ventricular myocytes (NRVMs) over-expressing constitutively active CAMKII. This appears to inhibit Cn activity which in turn prevents the dephosphorylation of NFAT and prevents activation of NFAT regulated genes.

**Description:** Lyophilised rabbit polyclonal anti-serum (A010-80) containing IgG antibody specific for Ser-197 phosphorylated forms Calcineurin.

**Immunogen:** Synthetic peptide CGKMARVFS(PO<sub>3</sub>H<sub>2</sub>)VLREES-amide corresponding to residues surrounding Ser at position 197 of Calcineurin

**Antibody Isotype:** IgG.

**Antibody Purity:** Raw serum.

**Specificity:** The antibody epitope peptide sequence aligns exactly with Calcineurin isoforms A1 and A2 but not B1 or B2

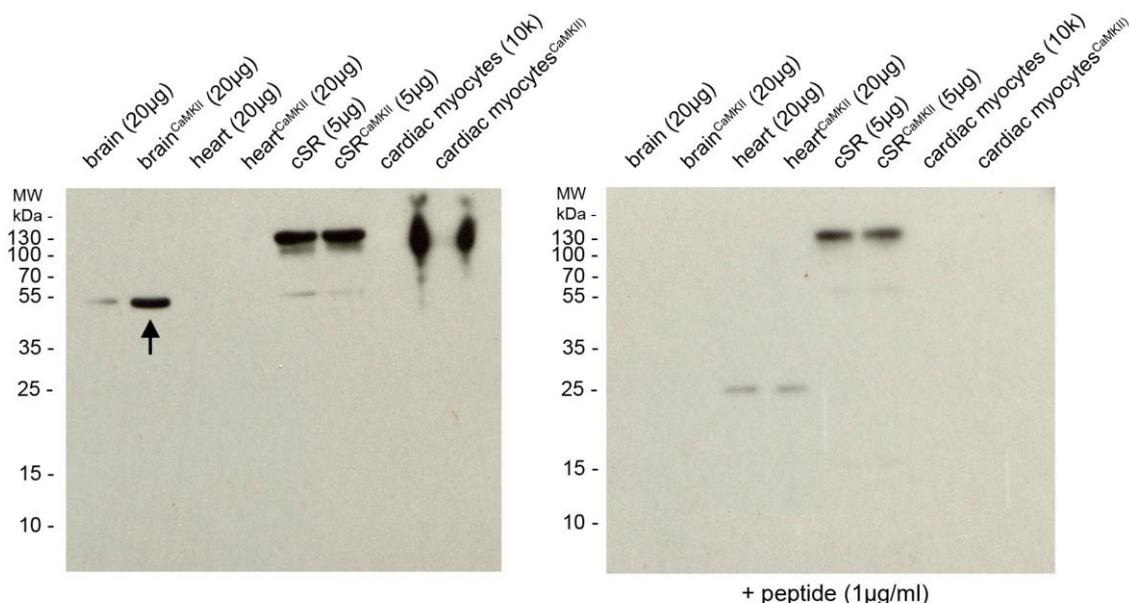
**Species Specificity:** The antibody recognises Calcineurin in all mammalian species, when phosphorylated on Ser-197. Eptiope sequence also aligns with chicken and *Xenopus*.

**Vial Constituents:** Lyophilised A010-80 anti-serum (100 µl).

**Storage Instructions:** Lyophilised antibody is stable at 4°C when stored with desiccant. Reconstitute lyophilised powder in 100 µl of 18 MΩ H<sub>2</sub>O, aliquot and store frozen at -80 °C for 1 year. Avoid freeze - thaw cycles.

**Tested Applications:** WB: 1:200

Epitope	PO <sub>3</sub> H <sub>2</sub> Specific															
	190										200					
Human	A	I	G	K	M	A	R	V	F	S	V	L	R	E	E	S
Mouse	A	I	G	K	M	A	R	V	F	S	V	L	R	E	E	S
Rat	A	I	G	K	M	A	R	V	F	S	V	L	R	E	E	S
Rabbit	A	I	G	K	M	A	R	V	F	S	V	L	R	E	E	S
Chicken	A	I	G	K	M	A	R	V	F	S	V	L	R	E	E	S
Xenopus	A	I	G	K	M	A	R	V	F	S	V	L	R	E	E	S
Danio	S	N	G	E	L	F	Q	V	L	K	M	M	V	G	N	N
Drosophila	A	I	G	K	M	S	R	V	F	S	I	L	R	E	E	S



**WB +/- 1µg/ml epitope peptide**  
using 1:200 of Calcineurin Phospho Ser-197 Polyclonal Anti-Serum (A010-80)  
against rat brain / heart extract / canine cardiac Sarcoplasmic Reticulum +/- CaMKII treatment, and cardiac myocytes +/- isoprenaline treatment. Ab recognises a CaMKII phosphospecific band around 55 kDa that is blocked by the epitope peptide

**Related Products:** Calcineurin Phospho Ser-197 epitope peptide P010-80