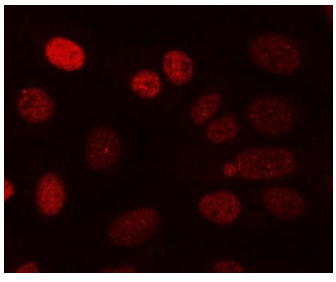
PPP3CA Antibody / Calcineurin (RQ8111)

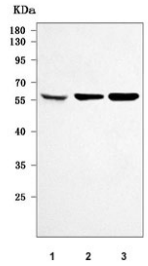
Catalog No.	Formulation	Size
RQ8111	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

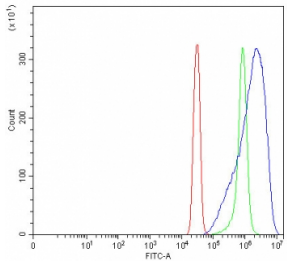
Availability	1-3 business days
Species Reactivity	Human, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q08209
Localization	Cytoplasmic, cell surface, nuclear
Applications	Western Blot : 0.5-1ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This PPP3CA antibody is available for research use only.



Immunofluorescent staining of FFPE human U-2 OS cells with PPP3CA antibody (red). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of 1) human HeLa, 2) human U-87 MG and 3) rat C6 cell lysate with PPP3CA antibody. Predicted molecular weight: 51-59 kDa, ~32 kDa (multiple isoforms).



Flow cytometry testing of fixed and permeabilized human SiHa cells with PPP3CA antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= PPP3CA antibody.

Description

Calcineurin A is also known as PPP3CA. It is mapped to 4q24. Semsarian et al. (1999) and Musaro et al. (1999) independently showed that IGF1 stimulates skeletal muscle hypertrophy and a switch to glycolytic metabolism by activating calcineurin A and inducing the nuclear translocation of transcription factor NFATC1. Semsarian et al. (1999) found that hypertrophy was suppressed by the calcineurin inhibitors cyclosporin A or FK506, but not by inhibitors of the MAP kinase or phosphatidylinositol-3-OH kinase pathways. Musaro et al. (1999) showed that expression of a dominant-negative calcineurin mutant also repressed myocyte differentiation and hypertrophy. Musaro et al. (1999) demonstrated that either IGF1 or activated calcineurin induces expression of transcription factor GATA2, which accumulates in a subset of myocyte nuclei, where it associates with calcineurin and a specific dephosphorylated isoform of NFATC1.

Application Notes

Optimal dilution of the PPP3CA antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids E3-D511) was used as the immunogen for the PPP3CA antibody.

Storage

After reconstitution, the PPP3CA antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Ordering: Phone: 858.663.9055 | Fax: 1.267.821.0800 | Email: info@nsjbio.com