

### FKBP1A Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7756a

## **Specification**

## FKBP1A Antibody (N-term) - Product Information

Application WB, FC, IHC-P,E

Primary Accession P62942

Other Accession <u>P62943</u>, <u>P26883</u>, <u>P18203</u>

Reactivity Human, Mouse Predicted Bovine, Rabbit

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 11951
Antigen Region 1-30

## FKBP1A Antibody (N-term) - Additional Information

#### **Gene ID 2280**

### **Other Names**

Peptidyl-prolyl cis-trans isomerase FKBP1A, PPlase FKBP1A, 12 kDa FK506-binding protein, 12 kDa FKBP, FKBP-12, Calstabin-1, FK506-binding protein 1A, FKBP-1A, Immunophilin FKBP12, Rotamase, FKBP1A, FKBP1, FKBP12

## Target/Specificity

This FKBP1A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human FKBP1A.

## **Dilution**

WB~~1:1000 FC~~1:10~50 IHC-P~~1:50~100

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

## Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

FKBP1A Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# FKBP1A Antibody (N-term) - Protein Information



## Name FKBP1A

## Synonyms FKBP1, FKBP12

**Function** Keeps in an inactive conformation TGFBR1, the TGF-beta type I serine/threonine kinase receptor, preventing TGF-beta receptor activation in absence of ligand. Recruits SMAD7 to ACVR1B which prevents the association of SMAD2 and SMAD3 with the activin receptor complex, thereby blocking the activin signal. May modulate the RYR1 calcium channel activity. PPlases accelerate the folding of proteins. It catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides.

#### **Cellular Location**

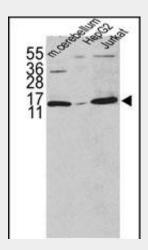
Cytoplasm, cytosol. Sarcoplasmic reticulum membrane {ECO:0000250|UniProtKB:P62943}; Peripheral membrane protein {ECO:0000250|UniProtKB:P62943}; Cytoplasmic side {ECO:0000250|UniProtKB:P62943}

## FKBP1A Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

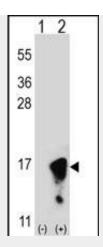
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# FKBP1A Antibody (N-term) - Images

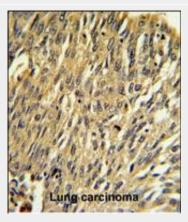


Western blot analysis of FKBP1A antibody (N-term) (Cat.# AP7756a) in mouse cerebellum tissue lysates, HepG2 and Jurkat cell line lysates (35ug/lane). FKBP1A (arrow) was detected using the purified Pab.

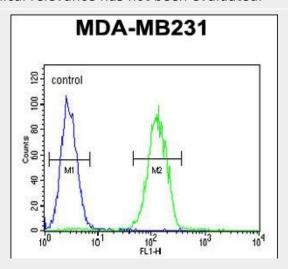




Western blot analysis of FKBP1A (arrow) using rabbit polyclonal FKBP1A Antibody (N-term) (Cat. #AP7756a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the FKBP1A gene.

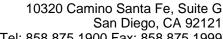


FKBP1A Antibody (N-term) (Cat.# AP7756a) IHC analysis in formalin fixed and paraffin embedded human Lung carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the FKBP1A Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.



FKBP1A Antibody (N-term) (Cat. #AP7756a) flow cytometric analysis of MDA-MB231 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

## FKBP1A Antibody (N-term) - Background





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FKBP12 is a member of the immunophilin protein family, which play a role in immunoregulation and basic cellular processes involving protein folding and trafficking. The protein is a cis-trans prolyl isomerase that binds the immunosuppressants FK506 and rapamycin. It interacts with several intracellular signal transduction proteins including type I TGF-beta receptor. It also interacts with multiple intracellular calcium release channels, and coordinates multi-protein complex formation of the tetrameric skeletal muscle ryanodine receptor. In mouse, deletion of this homologous gene causes congenital heart disorder known as noncompaction of left ventricular myocardium.

## FKBP1A Antibody (N-term) - References

Gerard, M., J. Neurochem. 106 (1), 121-133 (2008) Shor, B., Cancer Res. 68 (8), 2934-2943 (2008) Jayaraman, T., J. Biol. Chem. 267 (14), 9474-9477 (1992)