

## **FKBP12 Antibody (Center)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7756c

# **Specification**

## FKBP12 Antibody (Center) - Product Information

Application IHC-P, WB,E Primary Accession P62942

Other Accession <u>Q62658</u>, <u>P62943</u>, <u>P26883</u>, <u>P18203</u>

Reactivity Human

Predicted Bovine, Mouse, Rabbit, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 11951
Antigen Region 43-74

# FKBP12 Antibody (Center) - 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 FKBP12 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 43-74 amino acids from the Central region of human FKBP12.

## **Dilution**

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

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**

FKBP12 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# FKBP12 Antibody (Center) - 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**

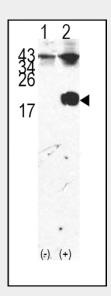
Cytoplasm, cytosol. Sarcoplasmic reticulum membrane {ECO:0000250|UniProtKB:P62943}; Peripheral membrane protein {ECO:0000250|UniProtKB:P62943}; Cytoplasmic side {ECO:0000250|UniProtKB:P62943}

### FKBP12 Antibody (Center) - Protocols

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

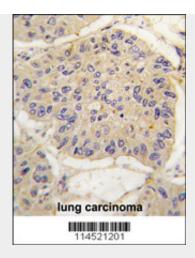
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## FKBP12 Antibody (Center) - Images



Western blot analysis of FKBP12 (arrow) using rabbit polyclonal FKBP12 Antibody (Center) (Cat.#AP7756c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the FKBP12 gene (Lane 2) (Origene Technologies).





Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with FKBP12 antibody (Center) (Cat.#AP7756c), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

# FKBP12 Antibody (Center) - Background

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.

## FKBP12 Antibody (Center) - 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)