10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

FKBP12 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7756c

Product Information

Application	WB, IHC-P, E
Primary Accession	P62942
Other Accession	Q62658, P62943, P26883, P18203
Reactivity	Human
Predicted	Bovine, Mouse, Rabbit, Rat, Canine, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB14521
Calculated MW	11951
Antigen Region	43-74

Additional Information

Gene ID	2280
Other Names	Peptidyl-prolyl cis-trans isomerase FKBP1A, PPIase 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	WB~~1:1000 IHC-P~~1:100~500 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.

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. PPIases 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}

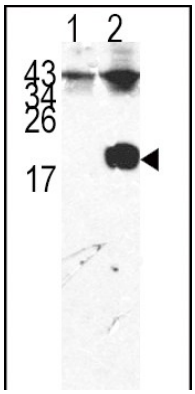
Background

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.

References

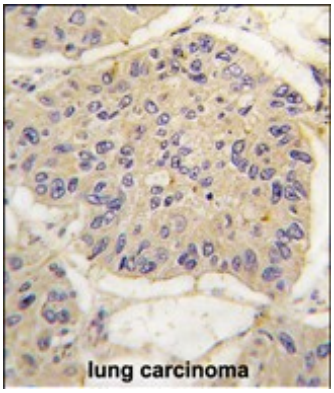
Gerard,M., J. Neurochem. 106 (1), 121-133 (2008)
Shor,B., Cancer Res. 68 (8), 2934-2943 (2008)
Jayaraman,T.,J. Biol. Chem. 267 (14), 9474-9477 (1992)

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.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.