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FKBP12 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP7756c

Specification

FKBP12 Antibody (Center) Blocking Peptide - Product Information

Primary Accession P62942

FKBP12 Antibody (Center) Blocking Peptide - 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
The synthetic peptide sequence used to generate the antibody AP7756c was selected from the Center region of human FKBP12. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

FKBP12 Antibody (Center) Blocking Peptide - 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}

FKBP12 Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

FKBP12 Antibody (Center) Blocking Peptide - Images

FKBP12 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - 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)