

FKBP4 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7387C

Specification

FKBP4 Antibody (Center) - Product Information

WB, FC, E Application **Primary Accession** 002790 Reactivity Human **Rabbit** Host Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 51805 Antigen Region 186-216

FKBP4 Antibody (Center) - Additional Information

Gene ID 2288

Other Names

Peptidyl-prolyl cis-trans isomerase FKBP4, PPlase FKBP4, 51 kDa FK506-binding protein, FKBP51, 52 kDa FK506-binding protein, 52 kDa FKBP, FKBP-52, 59 kDa immunophilin, p59, FK506-binding protein 4, FKBP-4, FKBP59, HSP-binding immunophilin, HBI, Immunophilin FKBP52, Rotamase, Peptidyl-prolyl cis-trans isomerase FKBP4, N-terminally processed, FKBP4, FKBP52

Target/Specificity

This FKBP4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 186-216 amino acids from the Central region of human FKBP4.

Dilution

WB~~1:1000 FC~~1:10~50

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

FKBP4 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

FKBP4 Antibody (Center) - Protein Information



Name FKBP4

Synonyms FKBP52

Function Immunophilin protein with PPlase and co-chaperone activities. Component of steroid receptors heterocomplexes through interaction with heat-shock protein 90 (HSP90). May play a role in the intracellular trafficking of heterooligomeric forms of steroid hormone receptors between cytoplasm and nuclear compartments. The isomerase activity controls neuronal growth cones via regulation of TRPC1 channel opening. Also acts as a regulator of microtubule dynamics by inhibiting MAPT/TAU ability to promote microtubule assembly. May have a protective role against oxidative stress in mitochondria.

Cellular Location

Cytoplasm, cytosol. Mitochondrion. Nucleus {ECO:0000250|UniProtKB:P30416}. Cytoplasm, cytoskeleton {ECO:0000250|UniProtKB:Q9QVC8}. Cell projection, axon {ECO:0000250|UniProtKB:Q9QVC8}. Note=Shuttles from mitochondria to nucleus; co-localizes in mitochondria with the glucocorticoid receptor (PubMed:21730050). Colocalized with MAPT/TAU in the distal part of the primary cortical neurons (By similarity) {ECO:0000250|UniProtKB:Q9QVC8, ECO:0000269|PubMed:21730050}

Tissue Location

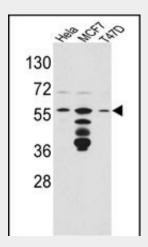
Widely expressed..

FKBP4 Antibody (Center) - Protocols

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

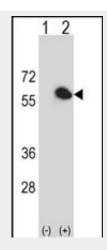
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

FKBP4 Antibody (Center) - Images

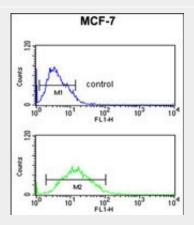


Western blot analysis of FKBP4 Antibody (Center) (Cat. #AP7387c) in Hela, MCF7, T47D cell line lysates (35 ug/lane). FKBP4 (arrow) was detected using the purified Pab.





Western blot analysis of FKBP4 (arrow) using rabbit polyclonal FKBP4 Antibody (Center) (Cat. #AP7387c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the FKBP4 gene.



FKBP4 Antibody (Center) (Cat. #AP7387c) flow cytometric analysis of MCF-7 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

FKBP4 Antibody (Center) - Background

FKBP4 is a member of the immunophilin protein family, which play a role in immunoregulation and basic cellular processes involving protein folding and trafficking. This protein is a cis-trans prolyl isomerase that binds to the immunosuppressants FK506 and rapamycin. It has high structural and functional similarity to FK506-binding protein 1A (FKBP1A), but unlike FKBP1A, this protein does not have immunosuppressant activity when complexed with FK506. It interacts with interferon regulatory factor-4 and plays an important role in immunoregulatory gene expression in B and T lymphocytes. This protein is known to associate with phytanoyl-CoA alpha-hydroxylase. It can also associate with two heat shock proteins (hsp90 and hsp70) and thus may play a role in the intracellular trafficking of hetero-oligomeric forms of the steroid hormone receptors. This protein correlates strongly with adeno-associated virus type 2 vectors (AAV) resulting in a significant increase in AAV-mediated transgene expression in human cell lines. Thus this protein is thought to have important implications for the optimal use of AAV vectors in human gene therapy.

FKBP4 Antibody (Center) - References

Tatro, E.T., J Neuroimmune Pharmacol 4 (2), 218-226 (2009) Ruan, B., Proc. Natl. Acad. Sci. U.S.A. 105 (1), 33-38 (2008) Cox, M.B., Mol. Endocrinol. 21 (12), 2956-2967 (2007)