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Goat Anti-FKBP4 / FKBP52 Antibody

Peptide-affinity purified goat antibody
Catalog # AF1419a

Specification

Goat Anti-FKBP4 / FKBP52 Antibody - Product Information

Application	**WB**
Primary Accession	Q02790
Other Accession	NP_002005, 2288
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**51805**

Goat Anti-FKBP4 / FKBP52 Antibody - Additional Information

Gene ID 2288

Other Names
Peptidyl-prolyl cis-trans isomerase FKBP4, PPIase FKBP4, 5.2.1.8, 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

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-FKBP4 / FKBP52 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-FKBP4 / FKBP52 Antibody - Protein Information

Name FKBP4

Synonyms FKBP52

Function
Immunophilin protein with PPIase 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. Acts also 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..

Goat Anti-FKBP4 / FKBP52 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Goat Anti-FKBP4 / FKBP52 Antibody - Images



AF1419a (0.01 µg/ml) staining of Human Placenta lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-FKBP4 / FKBP52 Antibody - Background

The protein encoded by this gene is a member of the immunophilin protein family, which play a role in immunoregulation and basic cellular processes involving protein folding and trafficking. This encoded 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 encoded 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 encoded protein is thought to have important implications for the optimal use of AAV vectors in human gene therapy. The human genome contains several non-transcribed pseudogenes similar to this gene.

Goat Anti-FKBP4 / FKBP52 Antibody - References

Assessment of SNPs associated with the human glucocorticoid receptor in primary open-angle glaucoma and steroid responders. Fingert JH, et al. Mol Vis, 2010 Apr 3. PMID 20376328.
A role for FKBP52 in Tau protein function. Chambraud B, et al. Proc Natl Acad Sci U S A, 2010 Feb 9. PMID 20133804.
Peptidyl-prolyl isomerase FKBP52 controls chemotropic guidance of neuronal growth cones via regulation of TRPC1 channel opening. Shim S, et al. Neuron, 2009 Nov 25. PMID 19945390.
Identification of a new panel of serum autoantibodies associated with the presence of in situ carcinoma of the breast in younger women. Desmetz C, et al. Clin Cancer Res, 2009 Jul 15. PMID 19584157.
Modulation of glucocorticoid receptor nuclear translocation in neurons by immunophilins FKBP51 and FKBP52: implications for major depressive disorder. Tatro ET, et al. Brain Res, 2009 Aug 25. PMID 19545546.