

Goat Anti-PPID / CyP-40 Antibody

Peptide-affinity purified goat antibody Catalog # AF1852a

Specification

Goat Anti-PPID / CyP-40 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB, E <u>O08752</u> NP_005029, 5481, 67738 (mouse), 361967 (rat) Human Mouse, Rat, Dog Goat Polyclonal 100ug/200ul IgG 40764

Goat Anti-PPID / CyP-40 Antibody - Additional Information

Gene ID 5481

Other Names Peptidyl-prolyl cis-trans isomerase D, PPIase D, 5.2.1.8, 40 kDa peptidyl-prolyl cis-trans isomerase, Cyclophilin-40, CYP-40, Cyclophilin-related protein, Rotamase D, PPID, CYP40, CYPD

Dilution WB~~1:1000 E~~N/A

Format

0.5 mg lgG/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-PPID / CyP-40 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-PPID / CyP-40 Antibody - Protein Information

Name PPID (<u>HGNC:9257</u>)

Synonyms CYP40, CYPD



Function

PPlase that catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides and may therefore assist protein folding (PubMed:11350175, PubMed:20676357). Proposed to act as a co- chaperone in HSP90 complexes such as in unligated steroid receptors heterocomplexes. Different co-chaperones seem to compete for association with HSP90 thus establishing distinct HSP90-co-chaperone- receptor complexes with the potential to exert tissue-specific receptor activity control. May have a preference for estrogen receptor complexes and is not found in glucocorticoid receptor complexes. May be involved in cytoplasmic dynein-dependent movement of the receptor from the cytoplasm to the nucleus. May regulate MYB by inhibiting its DNA- binding activity. Involved in regulation of AHR signaling by promoting the formation of the AHR:ARNT dimer; the function is independent of HSP90 but requires the chaperone activity. Involved in regulation of UV radiation-induced apoptosis. Promotes cell viability in anaplastic lymphoma kinase-positive anaplastic large-cell lymphoma (ALK+ ALCL) cell lines.

Cellular Location Cytoplasm. Nucleus, nucleolus. Nucleus, nucleoplasm

Tissue Location Widely expressed.

Goat Anti-PPID / CyP-40 Antibody - Protocols

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

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

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Goat Anti-PPID / CyP-40 Antibody - Images
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AF1852a (0.1 μ g/ml) staining of Human Brain (Frontal Cortex) lysate (35 μ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.





HEK293 overexpressing CyP-40 (RC206039) and probed with AF1852a (mock transfection in first lane), tested by Origene.

Goat Anti-PPID / CyP-40 Antibody - Background

The protein encoded by this gene is a member of the peptidyl-prolyl cis-trans isomerase (PPlase) family. PPlases catalyze the cis-trans isomerization of proline imidic peptide bonds in oligopeptides and accelerate the folding of proteins. This protein has been shown to possess PPlase activity and, similar to other family members, can bind to the immunosuppressant cyclosporin A.

Goat Anti-PPID / CyP-40 Antibody - References

Sirtuin-3 deacetylation of cyclophilin D induces dissociation of hexokinase II from the mitochondria. Shulga N, et al. J Cell Sci, 2010 Mar 15. PMID 20159966.

A genome-wide perspective of genetic variation in human metabolism. Illig T, et al. Nat Genet, 2010 Feb. PMID 20037589.

FKBP51 and Cyp40 are positive regulators of androgen-dependent prostate cancer cell growth and the targets of FK506 and cyclosporin A. Periyasamy S, et al. Oncogene, 2010 Mar 18. PMID 20023700.

Redox characterization of human cyclophilin D: identification of a new mammalian mitochondrial redox sensor? Linard D, et al. Arch Biochem Biophys, 2009 Nov. PMID 19735641.

Cyclophilin D interacts with Bcl2 and exerts an anti-apoptotic effect. Eliseev RA, et al. J Biol Chem, 2009 Apr 10. PMID 19228691.