

Mouse FKBP51 Monoclonal Antibody | anti-FKBP5 antibody

FKBP51 Antibody

CATALOG # AAA102942	HOST Mouse	REACTIVITY Canine, Hamster, Human, Mouse, Rat, Rabbit	APPLICATIONS Immunofluorescence, Western Blot
-------------------------------	----------------------	---	---

PRODUCT SYNONYMS

FKBP51; Monoclonal Antibody; FKBP51 Antibody; AIG6; FK506 binding protein 5; FKBP5; FKBP54; Hsp90 binding immunophilin; p54; Pplase; Ptg10; Rotamase; T cekk FK506 binding protein antibody; anti-FKBP5 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Canine, Hamster, Human, Mouse, Rat, Rabbit
Clonality	Monoclonal
Isotype	IgG
Clone Number	Hi51B
Form/Format	Protein G Purified
Concentration	1mg/mL (varies by lot)
Sequence Length	457
Applicable Applications for anti-FKBP5 antibody	IF (Immunofluorescence), WB (Western Blot)
Certificate of Analysis	A 1:2000 dilution was sufficient for detection of FKBP51 in ~50ug total protein using WB analysis.
Storage Buffer	PBS, 50% glycerol, 0.09% sodium azide
Preparation and Storage	-20 degree C

IMAGES



WB (Western Blot)

Western Blot analysis of Human Cervical cancer cell line (HeLa) lysate showing detection of FKBP51 protein using Mouse Anti-FKBP51 Monoclonal Antibody, Clone Hi51B. Load: 15 ug. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-FKBP51 Monoclonal Antibody at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.



ICC (Immunocytochemistry)

Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-FKBP51 Monoclonal Antibody, Clone Hi51B. Tissue: MK cells. Species: Mouse. Primary Antibody: Mouse Anti-FKBP51 Monoclonal Antibody at 1:1000. Secondary Antibody: APC Goat Anti-Mouse (red). Counterstain: DAPI (blue) nuclear stain. Cells stained red. Courtesy of: the Hospital Henri Mondor, France.

ADDITIONAL INFORMATION

Related Product Information for anti-FKBP5 antibody	Background Info: Detects an ~51kDa protein representing FKBP51 in cell lysate. Also detects FKBP51 in whole tissue extracts from rat kidney and rat and mouse testes. Scientific Background: Hsp90 is crucial to cellular signaling by its regulation of the folding, activity, and stability of a wide range of client proteins. These client protein complexes may also contain one or more cochaperones (1). One class of Hsp90-binding cochaperone is composed of proteins with a characteristic tetratricopeptide repeat (TPR) domain that forms an Hsp90 binding site. Among the TPR cochaperones of Hsp90 are Hop/Sti1, protein phosphatase PP5, and members of both the FK506- and cyclosporin A-binding families of immunophilins (2). FK506-binding protein 51 (FKBP51) and FKBP52 are large molecular weight immunophilins that are part of the mature glucocorticoid receptor (GR) heterocomplex (3). The N terminal domain of each protein binds FK506 and has peptidyl-prolyl isomerase (PPIase) activity that converts prolyl peptide bonds within target proteins from cis- to trans- proline. The C-terminal domains contain the TPR repeats involved in protein-protein interactions with the Hsp90 (4). Although FKBP52 and FKBP51 share ~75% sequence similarity, they affect hormone binding by glucocorticoid receptor in opposing manners and have different Hsp90-binding characteristics (3). FK506 binding protein 51 kDa (FKBP51 or otherwise referred to as FKBP54) has been identified as a progestininducible gene. This protein is predominantly expressed in murine T cells but in humans, it is abundantly expressed in numerous tissues at levels many times higher than FKBP12. The FKBP51 gene is known to be induced by glucocorticoids (5).
Product Categories/Family for anti-FKBP5 antibody	Chaperones; Heat Shock; Trafficking
References	1. Cheung-Flynn J., Roberts P.J., Riggs D.L., and Smith D.F.(2003) J. Biol. Chem. 278(19): 17388-17394. 2. Davies T.H., Ning Y.N., and Sanchez E.R. (2002) J Biol. Chem. 277 (7): 4597-4600. 3. Wu B. et al. (2004) Proc. Natl. Acad. Sci. USA. 101(22): 8348-8353. 4. Denny W.B., Prapapanich V., Smith D.F., and Scammell J.G. (2005) Endocrinology 146(7): 3194-3201. 5. Hubler T.R. et al. (2003) Endocrinology 144(6): 2380- 2387.

NCBI AND UNIPROT INFORMATION

NCBI GI #	224809327
NCBI GeneID	2289
NCBI Accession #	NP_001139247.1
NCBI GenBank Nucleotide #	NM_001145775.2
UniProt Accession #	Q13451; Q59EB8; Q5TGM6; F5H7R1
Molecular Weight	30,032 Da
NCBI Official Full Name	peptidyl-prolyl cis-trans isomerase FKBP5 isoform 1
NCBI Official Synonym Full Names	FK506 binding protein 5
NCBI Official Symbol	FKBP5
NCBI Official Synonym Symbols	P54; AIG6; FKBP51; FKBP54; PPIase; Ptg-10
NCBI Protein Information	peptidyl-prolyl cis-trans isomerase FKBP5; FKBP-51; rotamase; 51 kDa FKBP; FF1 antigen; PPIase FKBP5; HSP90-binding immunophilin; 51 kDa FK506-binding protein; T-cell FK506-binding protein; androgen-regulated protein 6; peptidylprolyl cis-trans isomerase; 54 kDa progesterone receptor-associated immunophilin
UniProt Protein Name	Peptidyl-prolyl cis-trans isomerase FKBP5
UniProt Gene Name	FKBP5
UniProt Synonym Gene Names	AIG6; FKBP51; PPIase FKBP5; 51 kDa FKBP; FKBP-51; FKBP-5; p54
UniProt Entry Name	FKBP5_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.