# Mouse FKBP51 Monoclonal Antibody | anti-FKBP5 antibody

FKBP51 Antibody: Biotin

| CATALOG # | HOST | REACTIVITY | APPLICATIONS |
|---|---|---|---|
| **AAA103154** | **Mouse** | **Canine, Hamster, Human, Mouse, Rat, Rabbit** | **Immunofluorescence, Western Blot** |

## PRODUCT SYNONYMS

FKBP51; Monoclonal Antibody; FKBP51 Antibody: Biotin; 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

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|---|---|
| **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) |
| **Conjugate** | Biotin |
| **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

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| **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.<br><br>**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

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| **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.

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Online datasheet: https://stage.aaabiotech.com/monoclonal/fkbp51-antibody-clone-hi51b-immunofluorescence-western-blot-elisa/103154