

**FKBP51 Antibody**  
**FKBP51 Antibody, Clone Hi51B**  
**Catalog # ASM10055****Specification**

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**FKBP51 Antibody - Product Information**

|                   |  |
|-------------------|--|
| Application       | <b>WB</b>                                      |
| Primary Accession | <a href="#">O13451</a>                         |
| Other Accession   | <a href="#">NP_001139247.1</a>                 |
| Host              | <b>Mouse</b>                                   |
| Isotype           | <b>IgG</b>                                     |
| Reactivity        | <b>Human, Mouse, Rat, Rabbit, Hamster, Dog</b> |
| Clonality         | <b>Monoclonal</b>                              |

**Description**

Mouse Anti-Human FKBP51 Monoclonal IgG

**Target/Specificity**

Detects ~51kDa.

**Other Names**

AIG6 Antibody, FK506 binding protein 5 Antibody, FKBP5 Antibody, FKBP54 Antibody, HSP90 binding immunophilin Antibody, p54 Antibody, Pplase Antibody, Ptg10 Antibody, Rotamase Antibody, T cekk FK506 binding protein Antibody

**Immunogen**

Synthetic peptide corresponding to the residues of human FKBP51

**Purification**

Protein G Purified

Storage **-20°C****Storage Buffer**

PBS, 50% glycerol, 0.09% sodium azide

Shipping Temperature **Blue Ice or 4°C****Certificate of Analysis**

A 1:2000 dilution was sufficient for detection of FKBP51 in ~50 µg total protein using WB analysis.

**Cellular Localization**

Cytoplasm | Nucleus

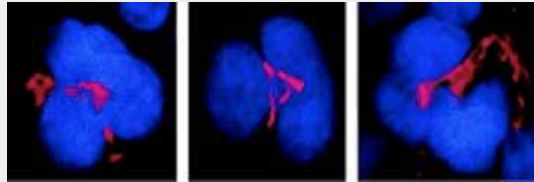
**FKBP51 Antibody - Protocols**

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

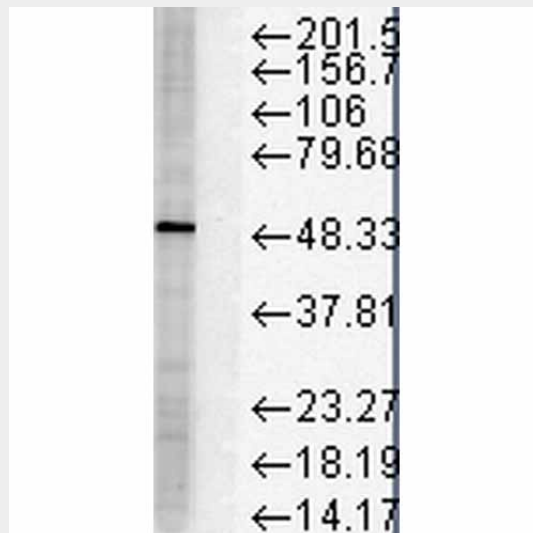
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)

- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### FKBP51 Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-FKBP51 Monoclonal Antibody, Clone Hi51B (ASM10055). Tissue: MK cells. Species: Mouse. Primary Antibody: Mouse Anti-FKBP51 Monoclonal Antibody (ASM10055) at 1:1000. Secondary Antibody: APC Goat Anti-Mouse (red). Counterstain: DAPI (blue) nuclear stain. Courtesy of: the Hospital Henri Mondor, France.



Western Blot analysis of Human HeLa cell lysates showing detection of FKBP51 protein using Mouse Anti-FKBP51 Monoclonal Antibody, Clone Hi51B (ASM10055). Load: 15 µg. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-FKBP51 Monoclonal Antibody (ASM10055) at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.

### FKBP51 Antibody - 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).

#### **FKBP51 Antibody - 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.