

**FKBP52 Antibody**  
**FKBP52 Antibody, Clone Hi52C**  
**Catalog # ASM10057****Specification****FKBP52 Antibody - Product Information**

Application	WB, IHC, ICC, IP
Primary Accession	<a href="#">Q02790</a>
Other Accession	<a href="#">NP_002005.1</a>
Host	Mouse
Isotype	IgG
Reactivity	Human, Mouse, Rat, Hamster, Dog
Clonality	Monoclonal
Format	Biotin

**Description**

Mouse Anti-Human FKBP52 Monoclonal IgG

**Target/Specificity**

Detects ~52kDa. Heavy chain migrates close to FKBP52 on SDS PAGE.

**Other Names**

FK506 binding protein 4 Antibody, FKBP4 Antibody, FKBP59 Antibody, HBI Antibody, HSP56 Antibody, p52 Antibody, p59 Antibody, PPIase Antibody, Rotamase Antibody, T cell FK506 binding protein Antibody

**Immunogen**

Synthetic peptide corresponding to the residues of human FKBP52

**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**

0.5 µg/ml was sufficient for detection of FKBP52 in 20 µg total protein using WB by colorimetric immunoblot analysis using Goat Anti-Mouse IgG:HRP as the secondary.

**Cellular Localization**

Cytoplasm | Nucleus

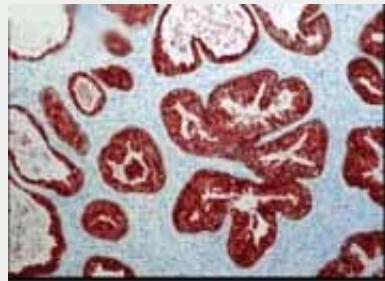
**FKBP52 Antibody - Protocols**

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

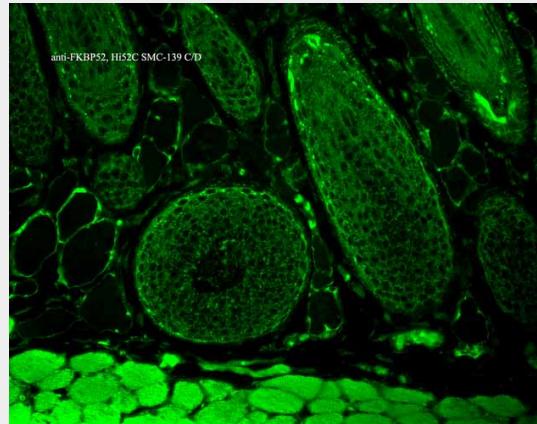
- [Western Blot](#)
- [Blocking Peptides](#)

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

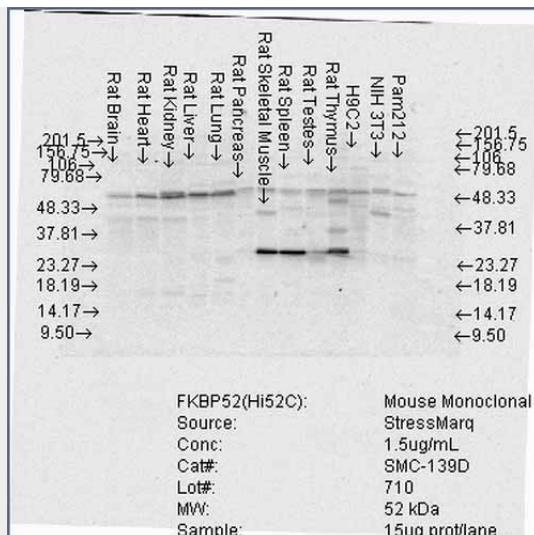
### FKBP52 Antibody - Images



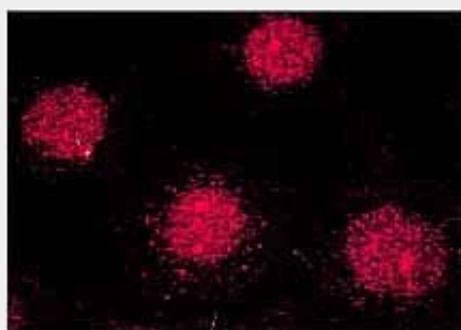
Immunohistochemistry analysis using Mouse Anti-FKBP52 Monoclonal Antibody, Clone Hi52C (ASM10057). Tissue: prostate tissue (ductal epithelial cells). Species: Human. Primary Antibody: Mouse Anti-FKBP52 Monoclonal Antibody (ASM10057) at 1:1000. Courtesy of: David F. Smith, Mayo Clinic, USA.



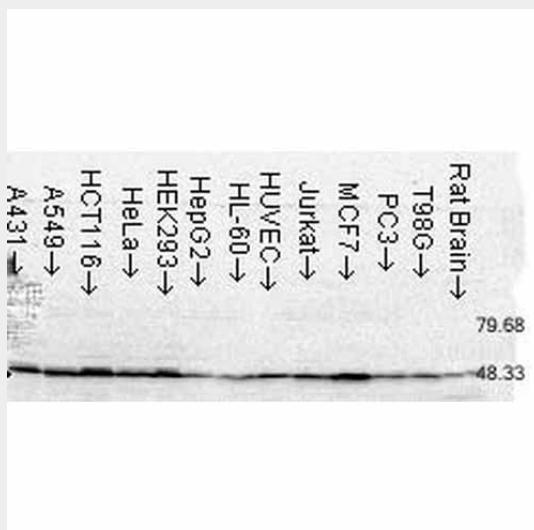
Immunohistochemistry analysis using Mouse Anti-FKBP52 Monoclonal Antibody, Clone Hi52C (ASM10057). Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-FKBP52 Monoclonal Antibody (ASM10057) at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat Anti-Mouse (green) at 1:50 for 1 hour at RT. Localization: Epidermis.



Western Blot analysis of Rat Brain, Heart, Kidney, Liver, Pancreas, Skeletal muscle, Spleen, Testes, Thymus cell lysates showing detection of FKBP52 protein using Mouse Anti-FKBP52 Monoclonal Antibody, Clone Hi52C (ASM10057). Load: 15  $\mu$ g. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-FKBP52 Monoclonal Antibody (ASM10057) at 1.5  $\mu$ g/mL for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-FKBP52 Monoclonal Antibody, Clone Hi52C (ASM10057). Tissue: MCF-7 cells (metastatic mammary gland/breast cell line). Species: Human. Primary Antibody: Mouse Anti-FKBP52 Monoclonal Antibody (ASM10057) at 1:1000. Secondary Antibody: APC Goat Anti-Mouse (red). Courtesy of: Tom Ratajczak, Univ. of W. Australia.



Western Blot analysis of Human Cell lysates showing detection of FKBP52 protein using Mouse Anti-FKBP52 Monoclonal Antibody, Clone Hi52C (ASM10057). Load: 15 µg. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-FKBP52 Monoclonal Antibody (ASM10057) at 1.5 µg/mL for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.

### FKBP52 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).

### FKBP52 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. Cox M.B. et al. (2007) *Molecular Endocrinology.* Epub.