10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.622.0609

FKBP52 Antibody
FKBP52 Antibody, Clone Hi52C
Catalog # ASM10057

Specification

FKBP52 Antibody - Product Information

Application	**IHC, WB, ICC/IF**
Primary Accession	Q02790
Other Accession	NP_002005.1
Host	**Mouse**
Isotype	**IgG**
Reactivity	**Human, Mouse, Rat, Hamster, Dog**
Clonality	**Monoclonal**
Format	**RPE**

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

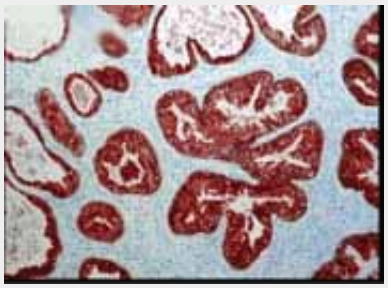
Storage	**-20ºC**

Storage Buffer
PBS, 50% glycerol, 0.09% sodium azide

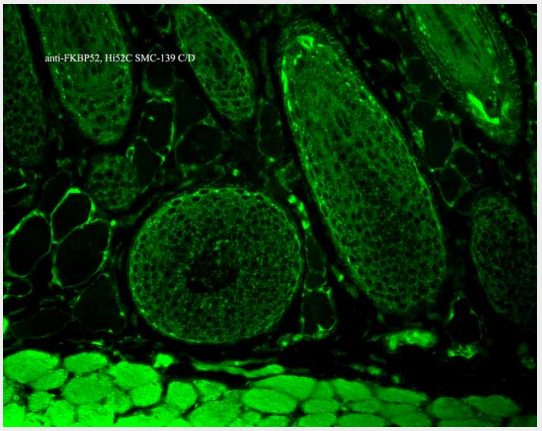
Shipping Temperature	**Blue Ice or 4ºC**

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



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.



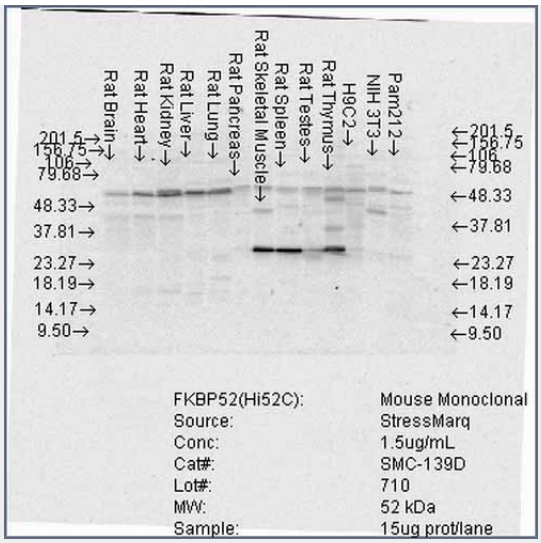
Immunohistochemistry analysis using Mouse Anti-FKBP52 Monoclonal Antibody, Clone Hi52C (ASM10057). Tissue: backskin. Species: Mouse. Fixation: Bouin's Fixative and paraffin-embedded. Primary Antibody: Mouse Anti-FKBP52 Monoclonal Antibody (ASM10057) at 1:100 for 1 hour at RT. Secondary Antibody: FITC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

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.622.0609

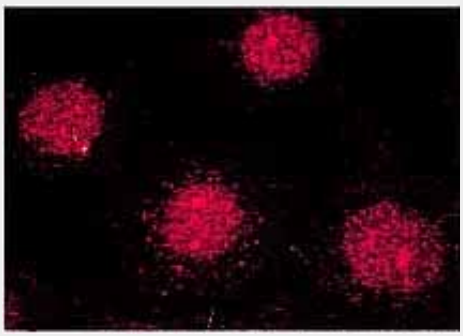
FKBP52 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

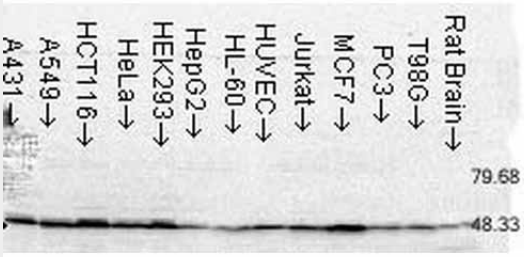


Western Blot analysis of Rat Brain, Heart, Kidney, Liver, Pancreas, Skeletal muscle, Spleen, Testes, Thymus cell lysates showing detection of FKBP52 protein using Mouse Anti-FKBP52 Monoclonal Antibody, Clone Hi52C (ASM10057). Load: 15 µg. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse 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.



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.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.622.0609



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.