

# Datasheet for ABIN2486502 anti-FKBP5 antibody (Atto 390)

# 2 Images



### Overview

Quantity:	100 μg
Target:	FKBP5
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This FKBP5 antibody is conjugated to Atto 390
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunocytochemistry (ICC)

# **Product Details**

Immunogen:	Synthetic peptide corresponding to the residues of human FKBP51
Clone:	Hi51B
Isotype:	lgG1
Specificity:	Detects ~51 kDa.
Cross-Reactivity:	Dog, Hamster, Human, Mouse, Rabbit, Rat
Purification:	Protein G Purified

# Target Details

Target:	FKBP5
Alternative Name:	FKBP51 (FKBP5 Products)
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 (PPlase) 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).

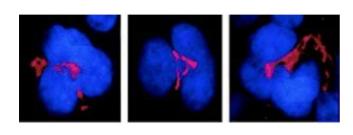
Gene ID:	2289
NCBI Accession:	NP_001139247
UniProt:	Q13451

Application Details	
Application Notes:	<ul> <li>WB (1:2000)</li> <li>ICC/IF (1:1000)</li> <li>optimal dilutions for assays should be determined by the user.</li> </ul>
Comment:	A 1:2000 dilution was sufficient for detection of FKBP51 in $\sim$ 50 $\mu g$ total protein using WB analysis.
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Concentration:	1 mg/mL
Buffer:	PBS, 50 % glycerol, 0.09 % sodium azide, Storage buffer may change when conjugated

# Handling

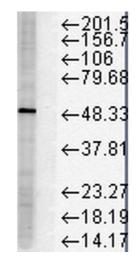
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Conjugated antibodies should be stored at 4°C
1	

# **Images**



## Immunofluorescence (fixed cells)

Image 1. 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. Courtesy of: the Hospital Henri Mondor, France.



#### **Western Blotting**

Image 2. Western Blot analysis of Human HeLa cell lysates showing detection of FKBP51 protein using Mouse Anti-FKBP51 Monoclonal Antibody, Clone Hi51B . Load: 15 μg. 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.