

Datasheet for 200-301-F28**FKBP51 Antibody****Overview**

Description:	Anti-FKBP51 (MOUSE) Monoclonal Antibody - 200-301-F28
Item No.:	200-301-F28
Size:	100 µg
Applications:	IF, WB
Reactivity:	Human, Mouse, Rat, Dog, Hamster, Rabbit
Host Species:	Mouse

Product Details

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. 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. FK506-binding protein 51 (FKBP51) and FKBP52 are large molecular weight immunophilins that are part of the mature glucocorticoid receptor (GR) heterocomplex. 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. Although FKBP52 and FKBP51 share ~75% sequence similarity, they affect hormone binding by glucocorticoid receptor in opposing manners and have different Hsp90-binding characteristics. 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.
Synonyms:	AIG6, FK506 binding protein 5, FKBP5, FKBP54, FKBP51, Hsp90 binding immunophilin, p54, Pplase, Ptg10, Rotamase, T cell FK506 binding protein antibody
Host Species:	Mouse
Clonality:	Monoclonal
Clone ID:	Hi51B
Format:	IgG

Target Details

Gene Name:	FKBP5
Reactivity:	Human, Mouse, Rat, Dog, Hamster, Rabbit
Immunogen Type:	Conjugated Peptide
Immunogen:	FKBP51 Antibody was produced in mice by repeated immunizations with a synthetic peptide corresponding to the residues of human FKBP51.
Purity/Specificity:	Anti-FKBP51 Antibody was purified by Protein G chromatography. A BLAST analysis was used to suggest cross-reactivity with FKBP51 from Canine, Hamster, Human, Mouse, Rat, and Rabbit based on 100% homology with the immunizing sequence. Also detects FKBP51 in whole tissue extracts from rat kidney and rat and mouse testes. Cross-reactivity with FKBP51 from other sources has not been determined. Heat Shock research.
Relevant Links:	• NCBI - NP_001139247.1 • GeneID - 2289 • UniProtKB - Q13451

Application Details

Tested Applications:	IF, WB
Application Note:	Anti-FKBP51 Antibody is tested for IF and WB. Expect a band approximately ~51kDa protein representing FKBP51 in cell lysates. Specific conditions for reactivity should be optimized by the end user.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IF:	10 µg/mL
WB:	1:2000

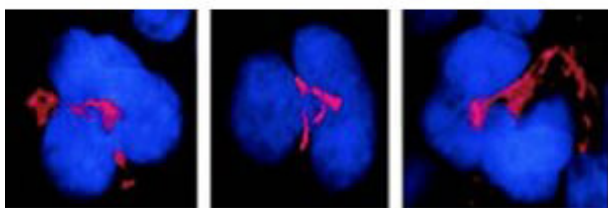
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/mL by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.09% (w/v) Sodium Azide
Stabilizer:	50% (v/v) Glycerol

Shipping & Handling

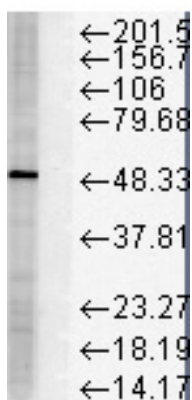
Shipping Condition:	Wet Ice
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Immunofluorescence Microscopy

Immunofluorescence Microscopy of Mouse anti-FKBP51 antibody. Tissue: normal MK cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: FKBP51 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Fluorescein mouse secondary antibody at 1:10,000 for 45 min at RT. Localization: FKBP51 is nuclear and cytoplasmic. Staining: FKBP51 as red fluorescent signal.



Western Blot

Western Blot of mouse anti-FKBP51 antibody. Lane 1: HeLa Cell lysates. Lane 2: none. Load: 35 µg per lane. Primary antibody: FKBP51 antibody at 1:1000 for overnight at 4°C. Secondary antibody: IRDye800™ mouse secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 51.2kDa/~50 kDa for FKBP51. Other band(s): none.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.