Product Datasheet

FKBP51/FKBP5 Antibody (Hi51B) - BSA Free
NB110-96873

Unit Size: 0.1 mg

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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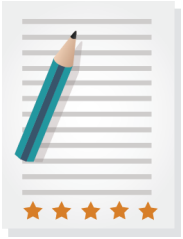
Updated 2/21/2025 v.20.1



NB110-96873

FKBP51/FKBP5 Antibody (Hi51B) - BSA Free

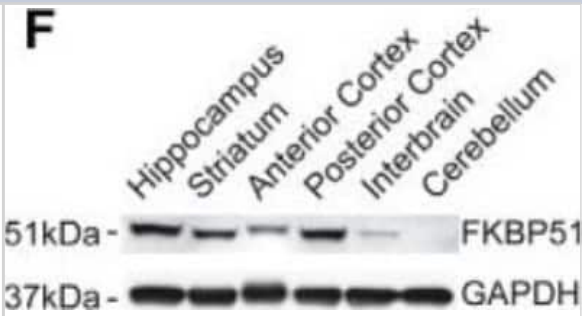
Product Information	
Unit Size	0.1 mg
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	Hi51B
Preservative	0.09% Sodium Azide
Isotype	IgG1
Purity	Protein G purified
Buffer	PBS, 50% Glycerol

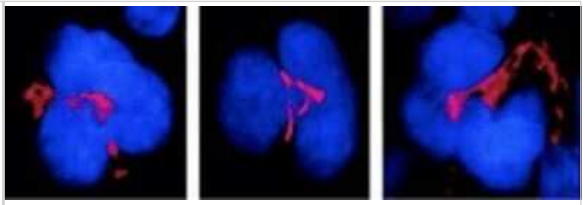
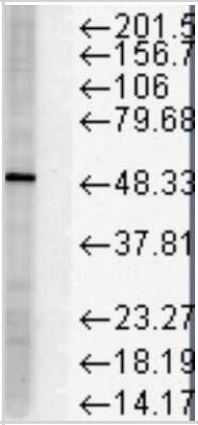
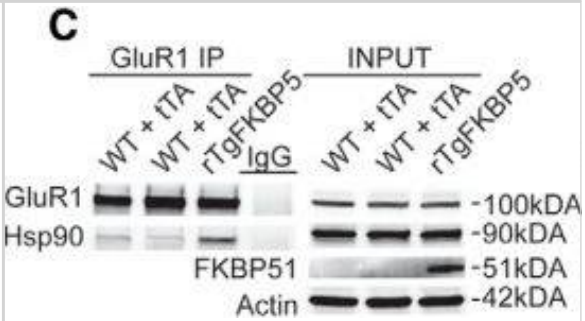
Product Description	
Host	Mouse
Gene ID	2289
Gene Symbol	FKBP5
Species	Human, Mouse, Rat, Canine, Hamster, Rabbit
Specificity/Sensitivity	Detects approx 51kDa.
Immunogen	Synthetic peptide corresponding to the residues of human FKBP51

Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence
Recommended Dilutions	Western Blot 1:2000, Immunocytochemistry/ Immunofluorescence 1:1000
Application Notes	A 1:2000 dilution was sufficient for detection of FKBP51 in approx 50 ug total protein using WB analysis.FKBP51 Antibody.

Images

Western Blot: FKBP51/FKBP5 Antibody (Hi51B) [NB110-96873] - Blot showing FKBP51/FKBP5 levels in the hippocampus, striatum, ACX, posterior cortex (PCX), interbrain, thalamus and hypothalamus, and cerebellum of a rTgFKBP5 mouse. Image collected and cropped by CiteAb from the following publication (//pubmed.ncbi.nlm.nih.gov/30963102/) licensed under a CC-BY license.



Immunocytochemistry/Immunofluorescence: FKBP51/FKBP5 Antibody (Hi51B) [NB110-96873] - Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-FKBP51/FKBP5 Monoclonal Antibody, Clone Hi51B (NB110-96873). Tissue: MK cells. Species: Mouse. Primary Antibody: Mouse Anti-FKBP51/FKBP5 Monoclonal Antibody (NB110-96873) at 1:1000. Secondary Antibody: APC Goat Anti-Mouse (red). Counterstain: DAPI (blue) nuclear stain. Cells stained red. Courtesy of: the Hospital Henri Mondor, France.	
Western Blot: FKBP51/FKBP5 Antibody (Hi51B) [NB110-96873] - analysis of Human HeLa cell lysates showing detection of FKBP51 protein using Mouse Anti-FKBP51 Monoclonal Antibody, Clone Hi51B . Load: 15 ug protein. 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.	
Western Blot: FKBP51/FKBP5 Antibody (Hi51B) [NB110-96873] - FKBP51/Hsp90 bind to GluR1-type AMPA receptors to regulate trafficking. A, Representative Western blottings form biotinylation assays of receptor endocytosis was performed on ex vivo slices, as described in Materials & Methods, rTgFKBP5 (N = 4; n = 8), WT (N = 2; n = 8), & tTA (N = 2; n = 8). Following labeling with Sulfo-NHS-SS biotin & chemical LTD (20 µM NMDA; 5 min) treatment, receptors were permitted to externalize at 30°C for the indicated times. B, The quantification ± SEM of multiple acquisitions is shown for GluR1. C, Representative Western blottings from anti-GluR1 co-immunoprecipitations & corresponding inputs from control & rTgFKBP5 mice immunoblotted as indicated. rTgFKBP5 (N = 2), WT (N = 2), & tTA (N = 2) total from two independent experiments. D, Representative Western blottings of anti-GluR1 co-immunoprecipitations & corresponding inputs from HEK293T cells transfected with GluR1 & FKBP51 or empty vector (EV) for 48 h were immunoblotted with antibodies as indicated. Just before harvest, cells were treated with 100 µM AMPA or PBS for 10 min to induce GluR1 receptor internalization. *p = 0.0286 by t-test of this time point. **p < 0.001 by two-way ANOVA. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/30963102), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	

Western Blot: FKBP51/FKBP5 Antibody (Hi51B) [NB110-96873] - Detailed schematic & validation of the FKBP5 TRE transgene. A, To allow for site-directed, single copy insertion into the mouse genome in chromosome 11, the transgenic construct contained flanking attB sites via a PhiC31 integrase. The downstream Mp1 poly A tail will help maintain stable expression. To drive high expression, the transgenic construct included a tetracycline-response element (TRE) promoter made of seven repeats of the tetracycline operators used to drive high expression of the singly inserted FKBP5 gene in the presence of the tTA, & a weak minimal CMV promoter which produces low basal expression. B, Western blotting from HEK293T cells transfected with increasing amounts of FKBP5 TRE plasmid, as indicated, for 48 h. C, HEK293T cells were transfected with the indicated amounts of FKBP5 TRE & tTA plasmid, to ensure the tTA would drive high FKBP51 expression. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/30963102), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	
Western Blot: FKBP51/FKBP5 Antibody (Hi51B) [NB110-96873] - FKBP51 expression & distribution in rTgFKBP5 mice. A, Expression of human & mouse FKBP5 in rTgFKBP5 mice expressed as fold change ± SEM compared to WT mice using qPCR; ***p < 0.001 by t test (N = 10) with three technical replicates. B, Western blotting showing FKBP51 levels in the hippocampus from rTgFKBP5, WT, FKBP5, & tTA mice. C, Western blotting showing levels of FKBP51 levels in the rTgFKBP5 hippocampus from 1 to 10 µg of protein loaded compared to 50 µg of protein from WT or FKBP51 mice. GAPDH levels are shown to confirm protein load. See Extended Data Figure 2-1 for more information on the antibody. D, 20× images of anti-FKBP51 staining from rTgFKBP5 mice. The entorhinal cortex (ECX), anterior cortex (ACX), CA1, CA3, & dentate gyrus (DG) are labeled. E, 20× images of anti-FKBP51 staining from rTgFKBP5 mice in the CA1, CA3, DG, ECX, & ACX. Scale bar = 100 µm; 10 µm (inset). F, Western blotting showing FKBP51 levels in the hippocampus, striatum, ACX, posterior cortex (PCX), interbrain, thalamus & hypothalamus, & cerebellum of a rTgFKBP5 mouse. G, Quantitation of FKBP51 proteins levels throughout the hippocampus (HPC), striatum (STR), ACX, PCX, interbrain, thalamus & hypothalamus (INTER), & cerebellum (CER), of rTgFKBP5 mice from multiple exposures. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/30963102), licensed under a CC-BY license. Not internally tested by Novus Biologicals.	

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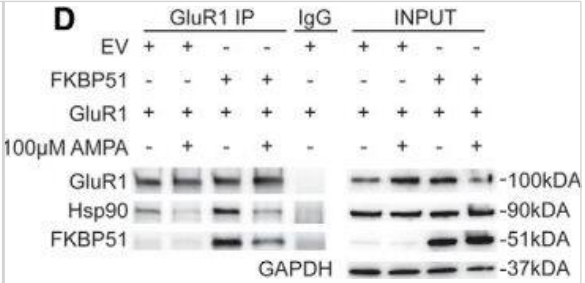

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Publications

Blair L J, Criado-Marrero M et al. The Disease-Associated Chaperone FKBP51 Impairs Cognitive Function by Accelerating AMPA Receptor Recycling. Eneuro 2019-10-04 [PMID: 30963102] (WB, Mouse)

Halbert D, Domenyuk V, Spetzler D et al. Aptamers and uses thereof United States Patent Application US 9958448 B2 2018-01-01

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NBP1-97005-0.5mg	Mouse IgG1 Isotype Control (MG1)
NB110-96873UV	FKBP51/FKBP5 Antibody (Hi51B) [DyLight 350]

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