

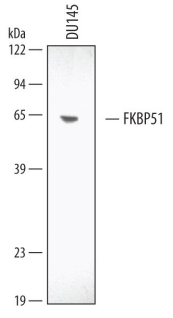
DESCRIPTION	
Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat FKBP51. In Western blots, less than 1% cross-reactivity with recombinant human FKBP12, FKBP13, FKBP38, and FKBP52 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human FKBP51 Thr2-Val457 Accession # Q13451
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS
Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.3 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below
Simple Western	3 µg/mL	See Below
Knockout Validated	FKBP51 is specifically detected in HeLa human cervical epithelial carcinoma parental cell line but is not detectable in FKBP51 knockout HeLa cell line.	

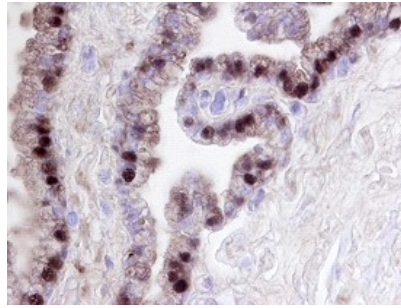
DATA

Western Blot



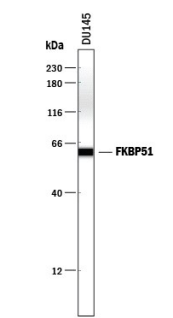
Detection of Human/Mouse/Rat FKBP51 by Western Blot. Western blot shows lysates of DU145 human prostate carcinoma cell line. PVDF membrane was probed with 0.3 µg/mL of Human/Mouse/Rat FKBP51 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4094) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). A specific band was detected for FKBP51 at approximately 51 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.

Immunohistochemistry




FKBP51 in Human Prostate. FKBP51 was detected in immersion fixed paraffin-embedded sections of human prostate using 15 µg/mL Human/Mouse/Rat FKBP51 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4094) overnight at 4 °C. Tissue was stained with the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

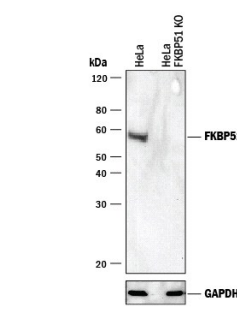
Simple Western



Detection of Human FKBP51 by Simple Western™. Simple Western lane view shows lysates of DU145 human prostate carcinoma cell line, loaded at 0.2 mg/mL. A specific band was detected for FKBP51 at approximately 61 kDa (as indicated) using 3 µg/mL of Goat Anti-Human/Mouse/Rat FKBP51 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4094) followed by 1:50 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



Knockout Validated



Western Blot Shows Human FKBP51 Specificity by Using Knockout Cell Line. Western blot shows lysates of HeLa human cervical epithelial carcinoma parental cell line and FKBP51 knockout HeLa cell line (KO). PVDF membrane was probed with 0.3 µg/mL of Goat Anti-Human/Mouse/Rat FKBP51 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4094) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). A specific band was detected for FKBP51 at approximately 32 kDa (as indicated) in the parental HeLa cell line, but is not detectable in knockout HeLa cell line. GAPDH (Catalog # AF5718) is shown as a loading control. This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 12 months from date of receipt, -20 to -70 °C as supplied.● 1 month, 2 to 8 °C under sterile conditions after reconstitution.● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

FK506 binding protein, 51 kDa molecular weight (FKBP51) is a peptidyl-prolyl isomerase that catalyzes the transition between *cis*- and *trans*- proline residues critical for proper folding of proteins. The macrolide immunosuppressants FK506 and Rapamycin are FKBP51 inhibitors. FKBP51 levels are induced by glucocorticoids. It associates with HSP90 complexes that are critical for the proper folding of steroid receptors. Single nucleotide polymorphisms in FKBP51 have been associated with major depression and hyper-responsiveness to antidepressants.