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Anti-FKBP51 Monoclonal Antibody

Catalog # ABO14711

Product Information

Application	WB, IHC, IF, ICC, IP, FC
Primary Accession	Q13451
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human
Clonality	Monoclonal
Format	Liquid
Description	Anti-FKBP51 Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Rat.

Additional Information

Gene ID	2289
Other Names	Peptidyl-prolyl cis-trans isomerase FKBP5, PPIase FKBP5, 5.2.1.8, 51 kDa FK506-binding protein, 51 kDa FKBP, FKBP-51, 54 kDa progesterone receptor-associated immunophilin, Androgen-regulated protein 6, FF1 antigen, FK506-binding protein 5, FKBP-5, FKBP54, p54, HSP90-binding immunophilin, Rotamase, FKBP5, AIG6, FKBP51 {ECO:0000303|PubMed:28147277}
Calculated MW	51212
Application Details	WB 1:500-1:2000 IHC 1:50-1:200 ICC/IF 1:50-1:200 IP 1:50 FC 1:50
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: AFBE-6
Immunogen	A synthesized peptide derived from human FKBP51
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Protein Information

Name	FKBP5
Synonyms	AIG6, FKBP51 {ECO:0000303|PubMed:2814727
Function	Immunophilin protein with PPIase and co-chaperone activities (PubMed:11350175). Component of unligated steroid receptors heterocomplexes through interaction with heat-shock protein 90 (HSP90). Plays a role in the intracellular trafficking of heterooligomeric forms of steroid hormone receptors maintaining the complex into the cytoplasm when unliganded (PubMed:12538866). Acts as a regulator of Akt/AKT1 activity by promoting the interaction between Akt/AKT1 and PHLPP1, thereby enhancing dephosphorylation and subsequent activation of Akt/AKT1 (PubMed:28147277, PubMed:28363942). Interacts with IKBKE and IKBKB which facilitates IKK complex assembly leading to increased IKBKE and IKBKB kinase activity, NF-kappa-B activation, and IFN production (PubMed:26101251, PubMed:31434731).
Cellular Location	Cytoplasm {ECO:0000250|UniProtKB:Q64378}. Nucleus {ECO:0000250|UniProtKB:Q64378}
Tissue Location	Widely expressed, enriched in testis compared to other tissues

Images

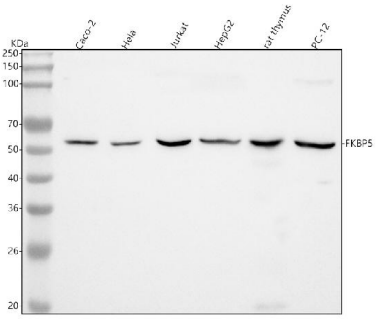
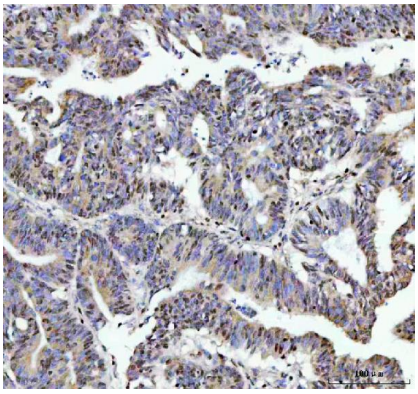


Figure 1. Western blot analysis of FKBP5 using anti-FKBP5 antibody (M04182).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human CACO-2 whole cell lysates,
Lane 2: human Hela whole cell lysates,
Lane 3: human Jurkat whole cell lysates,
Lane 4: human HepG2 whole cell lysates,
Lane 5: rat thymus tissue lysates,
Lane 6: rat PC-12 whole cell lysates.
After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-FKBP5 antigen affinity purified monoclonal antibody (Catalog # M04182) at 1:500 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:500 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for FKBP5 at approximately 51 kDa. The expected band size for FKBP5 is at 51 kDa.

Figure 2. IHC analysis of FKBP5 using anti-FKBP5 antibody (M04182).
FKBP5 was detected in a paraffin-embedded section of human colorectal adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked



with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-FKBP5 Antibody (M04182) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

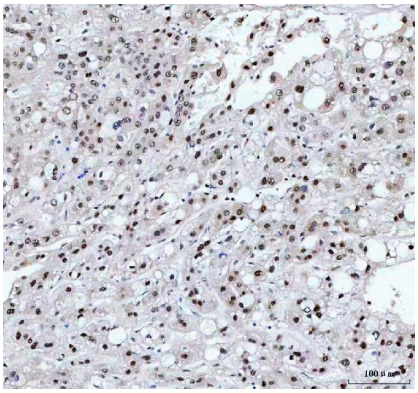


Figure 3. IHC analysis of FKBP5 using anti-FKBP5 antibody (M04182).
FKBP5 was detected in a paraffin-embedded section of human liver cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-FKBP5 Antibody (M04182) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

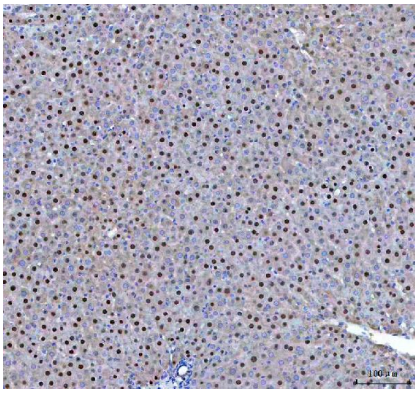


Figure 4. IHC analysis of FKBP5 using anti-FKBP5 antibody (M04182).
FKBP5 was detected in a paraffin-embedded section of rat liver tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1:50 rabbit anti-FKBP5 Antibody (M04182) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.