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FKBP51 Rabbit pAb

Catalog # AP98887

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q13451
Other Accession	Q13451
Reactivity	Rat, Mouse
Predicted	Human, Rabbit, Chicken, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	51212
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human FKBP51
Epitope Specificity	201-300/457
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 2 PPIase FKBP-type domains. Contains 3 TPR repeats.
Post-translational modifications	Phosphorylated upon DNA damage, probably by ATM or ATR.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The immunophilins are a highly conserved family of cis-trans peptidyl-prolyl isomerases that bind to and mediate the effects of immunosuppressive drugs, such as cyclosporin, FK506 and rapamycin (1). Several related immunophilins, FKBP12, FKBP51 and FKBP52, are characterized as cytosolic FK506-binding proteins, and following ligand binding, they functionally inhibit the phosphatase activity of calcineurin (2,3). The ubiquitously expressed FKBP12 also associates with the cytoplasmic domain of the TGF?type I receptor, where it stabilizes the inactive conformation of the receptor and blocks the activation of the TGF?pathway (4). FKBP51 and FKBP52 are two highly related proteins (5,6). FKBP51 is predominantly expressed in T cells and is induced by glucocorticoids (5). FKBP51 mediates the effects of FK506 and rapamycin by inhibiting intracellular calcineurin activity, and by blocking T-cell activation and proliferation (7). FKBP52, known also as FKBP-59 or heat shock protein 56, is expressed in a variety of tissues and can also associate with the heat shock protein (hsp90) in mature steroid receptor complexes (6,8).

Additional Information

Gene ID	2289
Other Names	AIG6; FKBP51; FKBP54; P54; PPIase; Ptg-10; D17Ertd592e; Dit1; FKBP-5; FKBP5_HUMAN; FKBP5; PPIase FKBP5; 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; 5.2.1.8; FKBP5_MOUSE; FKBP prolyl isomerase 5; FK506-binding protein 5; FK506 binding protein 5
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

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