

FKBP10 Rabbit pAb

Catalog # AP98795

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q96AY3
Other Accession	Q96AY3
Reactivity	Rat, Human, Mouse
Predicted	Pig, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	64245
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human FKBP10
Epitope Specificity	31-130/582
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 EF-hand domains. Contains 4 PPIase FKBP-type domains.
Post-translational modifications	Glycosylated and phosphorylated.
DISEASE	Defects in FKBP10 are the cause of osteogenesis imperfecta type 6 (OI6) [MIM:610968]. OI6 is a moderate to severe, autosomal recessive form of osteogenesis imperfecta characterized by increased serum alkaline phosphatase levels and bone histology exhibiting a fish scale-like lamellar pattern. Osteogenesis imperfecta defines a group of connective tissue disorders characterized by bone fragility and low bone mass.
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. Immunophilins have also been implicated in protein folding and trafficking within the endoplasmic reticulum (ER). FKBP10 (FK506-binding protein 10), also known as peptidyl-prolyl cis-trans isomerase, PPIase, Rotamase, 65kDa FK506-binding protein or FKBP65, is a 582 amino acid immunophilin localized to the ER lumen and found in many tissues including heart, spleen, brain, testis and lung. FKBP10 contains two EF-hand calcium-binding domains and four PPIase FKBP-type domains, suggesting an enzymatic role in protein folding by catalyzing the cis-trans isomerization of proline imidic peptide bonds in oligopeptides. FKBP10 also acts as a receptor for the immunosuppressants FK506 and rapamycin, which inhibit FKBP10 activity. FKBP10 is thought to interact with the Raf-1/HSP 90 heterocomplex during signal transduction processes, and may associate with elastin during elastin protein folding and transport. With a valine-24 addition to human FKBP10, human and mouse FKBP10 are almost identical.

Additional Information

Gene ID	60681
Other Names	BRKS; BRKS1; FKBP65; OI11; OI6; PPIASE; TLH1; hFKBP65; FKB10_HUMAN; FKBP10; PPIase FKBP10; 65 kDa FK506-binding protein (65 kDa FKBP FKBP-65); FK506-binding protein 10 (FKBP-10); Immunophilin FKBP65; Rotamase; 5.2.1.8; FKBP prolyl isomerase 10; FK506 binding protein 10 (65 kDa); FK506 binding protein 10, 65 kDa; FK506 binding protein 10
Dilution	WB=1:500-2000,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	FKBP10
Synonyms	FKBP65
Function	PPIases accelerate the folding of proteins during protein synthesis.
Cellular Location	Endoplasmic reticulum lumen {ECO:0000255 PROSITE- ProRule:PRU10138}

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