SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-FKBP10/Cy5 Conjugated antibody

SL13175R-Cy5

Product Name	Anti-FKBP10/Cy5
Chinese Name	Cy5 标记的肽基脯氨酰顺反异构酶 FKBP10 抗体
Alias	65 kDa FK506 binding protein; FK506 binding protein 10 65 kDa; FK506 binding protein 10; FKBP 10; FKBP 65; hFKBP 65; Immunophilin FKBP65; Peptidyl prolyl cis trans isomerase. PPIase; Rotamase; FKB10_HUMAN.
Research Area	Cell biology Signal transduction Transporter Binding protein
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human,Mouse,Rat(predicted:Dog,Pig,Cow,Horse,Sheep)
Applications	IF=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	61kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human FKBP10
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail	**background:** 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.

Function:
FKBP10 (FK506 binding protein 10) belongs to the FKBP type peptidyl-prolyl cis/trans isomerase (PPIase) family. PPIases accelerate the folding of proteins during protein synthesis, acting as molecular chaperones. FKBP10 is located in the endoplasmic reticulum (ER) and is thought to play a role in the folding and trafficking of secretory proteins.

Subcellular Location:
Endoplasmic reticulum.

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.

Similarity:
Contains 2 EF-hand domains.
Contains 4 PPIase FKBP-type domains.

Database links:

Entrez Gene: 60681 Human

Omim: 607063 Human

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SwissProt: Q96AY3 Human

Unigene: 463035 Human

Important Note:
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.