

Recombinant Human FK506 Binding Protein 4, 59kDa, His-tagged

Cat. No. FKBP4-514H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human FKBP4 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography. MW = 53.9 kDa (479aa).
Species	Human
Source	E.coli
Description	FKBP4, also known as FKBP52, is a member of the immunophilin protein family, which play a role in immunoregulation and basic cellular processes involving protein folding and trafficking. It is a component of unactivated mammalian steroid receptor complexes and may play a role in the intracellular trafficking of hetero-oligomeric forms of the steroid hormone receptors. It interacts with interferon regulatory factor-4 and plays an important role in immunoregulatory gene expression in B and T lymphocytes.
Amino Acid Sequence	MGSSHHHHHH SSGLVPRGSH MTAEEMKATE SGAQSAPLPM EGVDISPKQD EGVLKVIKRE GTGTEPMIG DRVFVHYTGW LLDGTKFDSS LDRKDKFSFD LGKGEVIKAW DIAIATMKVG EVCHITCKPE YAYGSAGSPP KIPPNATLVF EVELFEFKGE DLTEEDGGI IRRIQTRGEG YAKPNEGAIV EVALEGYYKD KLFDQRELRF EIGEGENLDL PYGLERAIQR MEKGEHSIVY LKPSYAFGSV GKEKFQIPP N AELKYELHLK SFEKAKESWE MNSEEKLEQS TIVKERGT VY FKEGKYKQAL LQYKKIVSWL EYESSFSNEE AKAQALRLA SHNLAMCHL KLQAFSAAIE SCNKALELDS NNEKGLFRRG EAH LAVNDFE LARADFQKVL QLYPNNAKAAK TQLAVCQQRI RRQLAREKKL YANMFERLAE EENKAKAEAS

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	SGDHPTDTEM KEEQKSNTAG SQSQVETEA.
Form	Liquid. In 20mM Tris-HCl (pH8.0) buffer containing 10% glycerol.
Purity	> 90% by SDS – PAGE.
Concentration	1 mg/ml (determined by Bradford assay).
Endotoxin Level	< 1.0 EU per 1 µg of protein (determined by LAL method).
Biological activity	Specific activity is > 300 nmoles/min/mg, and is defined as the amount of enzyme that cleaves 1umole of suc-AAFP-pNA per minute at 25°C in Tris-Hcl pH 8.0 using chymotrypsin.
Activity Assay	1. Prepare 170ul assay buffer into a suitable container and pre-chill on ice before use: The final concentrations are 200 mM Tris-Hcl, pH 8.0, and 20nM chymotrypsin.2. Add 10ul of recombinant FKBP4 protein with 1ug in assay buffer. 3. Mix by inversion and equilibrate to 1°C and monitor the A405nm until the value is constant using a spectrophotometer.4. Add 20ul pre-chilled 5mM suc-AAFP-pNA. (Substrate was dissolved in TFE that contained 460mM LiCl to a concentration of 3 mM)5. Record the increase in A405 nm for 30 minutes at 25°C.
Storage	Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

GENE INFORMATION

Gene Name	FKBP4 FK506 binding protein 4, 59kDa [Homo sapiens]
Synonyms	FKBP4; FK506 binding protein 4, 59kDa; HBI; p52; Hsp56; FKBP52; FKBP59; PPlase; FK506 binding protein 52; rotamase; p59 protein; HSP binding immunophilin;

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	52 kD FK506; binding protein; FK506-binding protein 4 (59kD); T-cell FK506-binding protein, 59Kd; peptidylprolyl cis-trans isomerase; EC 5.2.1.8
Gene ID	2288
mRNA Refseq	NM_002014
Protein Refseq	NP_002005
MIM	600611
UniProt ID	Q02790
Chromosome Location	12p13.33
Function	ATP binding; FK506 binding; GTP binding; glucocorticoid receptor binding; heat shock protein binding; isomerase activity; peptidyl-prolyl cis-trans isomerase activity; phosphoprotein binding; protein binding, bridging

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