

Product datasheet for **AR09172PU-L**

FKBP4 (1-459, His-tag) Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	FKBP4 (1-459, His-tag) human recombinant protein, 0.5 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	<u>MGSSHHHHHH</u> <u>SSGLVPRGSH</u> MTAEEMKATE SGAQSAPLPM EGVDISPKQD EGVLKVIKRE GTGTEMPMIG DRVFVHYTGW LLDGTFKFDSS LDRKDKFSFD LGKGEVIKAW DIAIATMKVG EVCHITCKPE YAYGSAGSPP KIPP NATLVF EVELFEFKGE DLTEEDGGI IRIQTRGEG YAKPNEGAIV EVALEGYYKD KLFQDRELRF EIGEGENLDL PYGLERAIQR MEKGEHSIVY LKPSYAFGSV GKEKFIQPPN AELKYELHLK SFEKAKESWE MNSEEKLEQS TIVKERGTVY FKEGKYKQAL LQYKKIVSWL EYESSFSNEE AQKAQALRLA SHLNLAMCHL KLQAFSAAIE SCNKALELDS NNEKGLFRRG EAH LAVNDFE LARADFQKVL QLYPNNKAAK TQLAVCQQR I RRQLAREKKL YANMFERLAE EENKAKAEAS SGDHP TDTEM KEEQKSNTAG SQSQVETEA
Tag:	His-tag
Predicted MW:	53.9 kDa
Concentration:	lot specific
Purity:	>95% by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl (pH 8.0) buffer containing 10% Glycerol
Bioactivity:	Biological: Specific Activity is > 700 nmoles/min/mg, defined as the amount of enzyme that cleaves 1 μ mole of suc-AAPF-pNA per minute at 37°C in Tris-HCl pH 8.0 using Chymotrypsin.
Endotoxin:	< 1.0 EU per 1 μ g of protein (determined by LAL method).
Preparation:	Liquid purified protein



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Applications:	Protocol: Activity Assay <ol style="list-style-type: none">1. Prepare 170 µl 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 10 µl of recombinant FKBP4 protein with 1 µg 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 20 µl 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.
Protein Description:	Recombinant Human FKBP4 protein, fused to <i>His-tag</i> at N-terminus, was expressed in <i>E.coli</i> and purified by using conventional chromatography.
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	NP_002005
Locus ID:	2288
UniProt ID:	Q02790
Cytogenetics:	12p13.33
Synonyms:	FKBP51; FKBP52; FKBP59; HBI; Hsp56; p52; PPlase
Summary:	The protein encoded by this gene is a member of the immunophilin protein family, which play a role in immunoregulation and basic cellular processes involving protein folding and trafficking. This encoded protein is a cis-trans prolyl isomerase that binds to the immunosuppressants FK506 and rapamycin. It has high structural and functional similarity to FK506-binding protein 1A (FKBP1A), but unlike FKBP1A, this protein does not have immunosuppressant activity when complexed with FK506. It interacts with interferon regulatory factor-4 and plays an important role in immunoregulatory gene expression in B and T lymphocytes. This encoded protein is known to associate with phytanoyl-CoA alpha-hydroxylase. It can also associate with two heat shock proteins (hsp90 and hsp70) and thus may play a role in the intracellular trafficking of hetero-oligomeric forms of the steroid hormone receptors. This protein correlates strongly with adeno-associated virus type 2 vectors (AAV) resulting in a significant increase in AAV-mediated transgene expression in human cell lines. Thus this encoded protein is thought to have important implications for the optimal use of AAV vectors in human gene therapy. The human genome contains several non-transcribed pseudogenes similar to this gene. [provided by RefSeq, Sep 2008]
Protein Families:	Druggable Genome

Product images:

