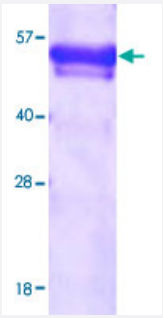
Bioactive Full-Length

FKBP4 (Human) Recombinant Protein

Catalog # P3485 Size 100 ug

Applications



Specification

Product Description	Human FKBP4 (NP_002005, 1 a.a. - 459 a.a.) full-length recombinant protein with His tag expressed in *Escherichia coli*.
Sequence	MGSSHHHHHHSSGLVPRGSHMTAEEMKATESGAQSAPLPMEGVDISPKQDEGVLKVIKREGTG TEMPMIGDRVFVHYTGWLLDGTKFDSSLDRKDKFSFDLGKGEVIKAWDIAIATMKVGEVCHITCKP EYAYGSAGSPPKIPPNATLVFEVELFEFKGEDLTEEEDGGIIRRIQTRGEGYAKPNEGAIVEVALEG YYKDKLFDQRELRFEIGEGENLDLPYGLERAIQRMEKGEHSIVYLKPSYAFGSVGKEKFQIPPNAEL KYELHLKSFEKAKESWEMNSEEKLEQSTIVKERGTVYFKEGKYKQALLQYKKIVSWLEYESSFSN EEAQKAQALRLASHLNLAMCHLKLQAFSAAIESCNKALELDSNNEKGLFRRGEAHLAVNDFELA RADFQKVLQLYPNNKAAKTQLAVCQQRIRRQLAREKKLYANMFERLAEEENKAKAEASSGDHPT DTEMKEEQKSNTAGSQSQVETEA
Host	Escherichia coli
Theoretical MW (kDa)	53.9
Form	Liquid
Preparation Method	*Escherichia coli* expression system
Purification	Conventional Chromatography
Concentration	1 mg/mL

Purity	> 90% by SDS-PAGE
Endotoxin Level	< 1.0 EU per 1 microgram of protein (determined by LAL method)
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.
Quality Control Testing	Loading 3 ug protein in 15% SDS-PAGE
Storage Buffer	In 20 mM Tris-HCl buffer, pH 8.0 (10% glycerol).
Storage Instruction	Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing.

Applications

- Functional Study
- SDS-PAGE

Gene Info — FKBP4

Entrez GeneID	2288
Protein Accession#	NP_002005
Gene Name	FKBP4
Gene Alias	FKBP52, FKBP59, HBI, Hsp56, PPIase, p52
Gene Description	FK506 binding protein 4, 59kDa
Omim ID	600611
Gene Ontology	Hyperlink

Gene 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
Other Designations	52 kD FK506 binding protein|FK506 binding protein 4 (59kD)|FK506 binding protein 52|FK506-binding protein 4 (59kD)|HSP binding immunophilin|T-cell FK506-binding protein, 59kD|p59 protein|peptidyl|prolyl cis-trans isomerase|rotamase

Disease

- Asthma
- Genetic Predisposition to Disease
- Glaucoma
- Hypospadias
- Syndrome