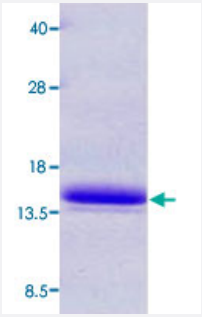
Bioactive Full-Length

FKBP1A (Human) Recombinant Protein

Catalog # P3484 Size 100 ug

Applications



Specification

Product Description	Human FKBP1A (NP_463460, 1 a.a. - 108 a.a.) full-length recombinant protein with His tag expressed in *Escherichia coli*.
Sequence	MGSSHHHHHHSSGLVPRGSHMGVQVETISPGDGRTFPKRGQTCVVHYTGMLEDGKKFDSSRDRNKPFKFMLGKQEVIRGWEEGVAQMSVGQRAKLTISPDYAYGATGHPGIIPPHATLVFDVELLKLE
Host	Escherichia coli
Theoretical MW (kDa)	14.1
Form	Liquid
Preparation Method	*Escherichia coli* expression system
Purification	Conventional Chromatography
Concentration	1 mg/mL
Purity	> 95% 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, 100 mM NaCl, pH 8.0 (1 mM DTT, 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 — FKBP1A

Entrez GeneID	2280
Protein Accession#	NP_463460
Gene Name	FKBP1A
Gene Alias	FKBP-12, FKBP1, FKBP12, FKBP12C, PKC12, PKCI2, PPIASE
Gene Description	FK506 binding protein 1A, 12kDa
Omim ID	186945
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. The protein is a cis-trans prolyl isomerase that binds the immunosuppressants FK506 and rapamycin. It interacts with several intracellular signal transduction proteins including type I TGF-beta receptor. It also interacts with multiple intracellular calcium release channels, and coordinates multi-protein complex formation of the tetrameric skeletal muscle ryanodine receptor. In mouse, deletion of this homologous gene causes congenital heart disorder known as noncompaction of left ventricular myocardium. Multiple alternatively spliced variants, encoding the same protein, have been identified. The human genome contains five pseudogenes related to this gene, at least one of which is transcribed. [provided by RefSeq
Other Designations	FK506-binding protein 1|FK506-binding protein 12|FK506-binding protein 1A (12kD)|FK506-binding protein, T-cell, 12-kD|OTTHUMP00000029978|immunophilin FKBP12|peptidyl-prolyl cis-trans isomerase|protein kinase C inhibitor 2|rotamase

Disease

- Cardiovascular Diseases
- Diabetes Mellitus
- Edema
- Kidney Failure