

Human Recombinant FKBP1a/FKBP12

CATALOG #:	6340-100	100 µg
ALTERNATE NAMES:	FK506 binding protein 1a, 12kDa, PPlase FKBP1A, Rotamase, FKBP1, PKC12	
SOURCE:	E.Coli	
PURITY:	> 95% by SDS - PAGE	
MOL. WEIGHT:	14.1 kDa (128 aa, 1-108 aa + NT His Tag)	
FORMULATION:	1 mg/ml solution in 20 mM Tris-HCl buffer (pH 8.0) containing 100 mM NaCl, 1 mM DTT and 10% glycerol.	
ENDOTOXIN LEVEL:	< 1.0 EU per 1 µg of protein (determined by LAL method).	

STORAGE CONDITIONS:

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.

DESCRIPTION:

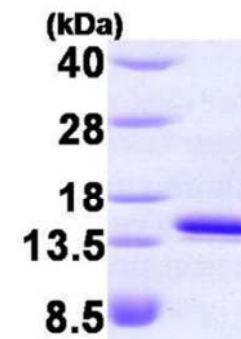
FKBP1A is part of the family of immunophilins, which have in common high affinity for immunosuppressant drugs and a peptidyl-prolyl cis-trans isomerase (PPlase). In the absence of immunosuppressive ligands, FKBP1A is involved in intracellular calcium regulation by associating with 3 types of Ca²⁺ release channel complexes: skeletal ryanodine receptors, cardiac ryanodine receptors and the inositol 1, 4, 5-triphosphate receptor. FKBP1A also interacts with TGF type I receptor exerting an inhibitory effect on the TGFβ-I signaling pathway. FKBP12 plays a role in modulation of ryanodine receptor isoform-1 (ryr-1), a component of the calcium release channel of skeletal muscle sarcoplasmic reticulum. FKBP1A increase the folding of proteins and catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides.

AMINO ACID SEQUENCE:

MGSSHHHHHH SGLVPRGSH MG VQVETISP GDGRTFPKRG QTCVVHYTGM
LEDGKKFDSS RDRNKPFFKM LGKQEVIRGW EEGVAQMSVG QRAKLTISPD
YAYGATGHPG IIPPHATLVF DVLLKLE

BIOLOGICAL ACTIVITY:

Specific activity is > 300 nmoles/min/mg, and is defined as the amount of enzyme that cleaves 1 µmole of suc-AAFP-pNA per minute at 25°C in Tris HCl pH 8.0 using chymotrypsin.



15% SDS-PAGE (3µg)

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RELATED PRODUCTS:

- FKBP12 Antibody (Cat. No. 3635-100)
- FKBP12 Blocking Peptide (Cat. No. 3635BP-50)
- FKBP38 Antibody (Cat. No. 3666-100)
- FKBP38 Blocking Peptide (Cat. No. 3666BP-50)
- FKBP52/Hsp56 Antibody (Cat. No. 3880-100)
- FKBP52/Hsp56 Blocking Peptide (Cat. No. 3880BP-50)
- Human recombinant FKBP1B (Cat. No. 6341-100)
- Human recombinant FKBP3 (Cat. No. 6342-100)
- Human recombinant FKBP4 (Cat. No. 6343-100)
- Human recombinant FKBP6 (Cat. No. 6344-100)
- Human recombinant FKBP1 (Cat. No. 6345-100)

FOR RESEARCH USE ONLY! Not to be used in humans.