

## FKBP4, 1-459aa, Human, His-tagged, Recombinant, *E.coli*

Cat. No. IBATGP0303

**Full name:** FK506 binding protein 4

**NCBI Accession No.:** NP\_002005

**Synonyms:** FKBP52, FKBP59, HBI, Hsp56, p52, PPlase

**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. Recombinant human FKBP4 protein, fused to His-tag at N-terminus, was expressed in *E.coli* and purified by using conventional chromatography.

**Form:** Liquid. In 20mM Tris-HCl (pH8.0) buffer containing 10% glycerol

**Molecular Weight:** 53.9 kDa (479 aa), confirmed by MALDI-TOF

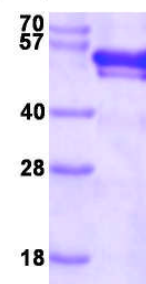
**Purity:** > 90% by SDS - PAGE

**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 25C in Tris-Hcl pH 8.0 using chymotrypsin.

(kDa)



15% SDS-PAGE (3ug)

### 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 1C 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 25C.

### Sequences of amino acids:

MGSSHHHHHH SSSLVPRGSH MTAEMKATE SGAQSAPLPM EGVDISPKQD EGVLKVIKRE GTGTEPMIG DRVVFHYTGW LLDGTFKFDSS LDRKDKFSFD  
LGKGEVIKAW DIAIATMKVG EVCHITCKPE YAYGSAGSPP KIPPNATLVF EVELPEFKGE DLTEEDGGI IRRIQTRGEG YAKPNEGAIV EVALLEGYYKD  
KLPDQRELRP EIGEGENLDL PYGLERAIQR MEKGEHSIVY LKPSYAFGSV GKEKFPQIPPN AELKYELHLK SFEKAKESWE MNSEKLEQS TIVKERTVY  
FKEGKYKQAL LQYKKIVSWL EYESSFSNEE AQKAQALRLA SHLNLAMCHL KLQAFSAAIE SCNKALELDS NNEKGLFRRG EAHLAVNDFE LARADFQKVL  
QLYPNNKAAK TQLAVCQQR I RRQLAREKKL YANMFERLAE EENKAKAEAS SGDHPDTEM KEEQKSNTAG SQSQVETEA

### General references:

Ostrow KL., *et al.* (2009) *Clin Cancer Res.* **15**(4):1184-91

Ma D., *et al.* (2008) *J Biol Chem.* **283**(38):25963-70

**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

For research use only. This product is not intended or approved for human, diagnostics or veterinary use.



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