

32-2328: FKBP4 Recombinant Protein

Alternative Name : HBI,p52,Hsp56,FKBP52,FKBP59,PPlase,FKBP4,FK506-binding protein 4,Peptidyl-prolyl cis-trans isomerase,HSP-binding immunophilin,FKBP52 protein,52 kDa FK506-binding protein,p59 protein.

Description

Source : Escherichia Coli. FKBP4 produced in E.Coli is a single,non-glycosylated polypeptide chain containing 479 amino acids (1-459 a.a.) and having a molecular mass of 53.9 kDa.FKBP4 is fused to 20 amino acid His Tag at N-terminus and purified by proprietary chromatographic techniques. FKBP4 is part of the immunophilin protein family, which takes part in immunoregulation and necessary cellular processes concerning protein folding and trafficking. FKBP4 is a cis-trans prolyl isomerase that connects to the immunosuppressants FK506 and rapamycin. FKBP4 has high structural and functional similarity to FKBP1A, though, FKBP4 does not have immunosuppressant activity when complexed with FK506. FKBP4 interacts with interferon regulatory factor-4 and is involved in immunoregulatory gene expression in B and T lymphocytes. FKBP4 is known to connect with phytanoyl-CoA alpha-hydroxylase. FKBP4 associates with HSP90 & HSP70 thus takes part in the intracellular trafficking of hetero-oligomeric forms of the steroid hormone receptors. FKBP4 highly associates with adeno-associated virus type 2 vectors (AAV) resulting in a considerable increase in AAV-mediated transgene expression in human cell lines. FKBP4 is involved in the optimal use of AAV vectors in human gene therapy.

Product Info

Amount : 50 µg
Purification : Greater than 90.0% as determined by SDS-PAGE.
Content : The FKBP4 protein solution contains 20mM Tris-HCl, pH-8 and 10% glycerol.
Storage condition : Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.
Amino Acid : MGSSHHHHHH SSGLVPRGSH MTAEEMKATE SGAQSAPLPM EGVDISPKQD EGVLKVIKRE
GTGTEMPMIG DRVVFHYTGW LLDGTFDSS LDRKDKFSFDLGKGEVIKAW DIAIATMKVG EVCHITCKPE
YAYGSAGSPP KIPPNATLVF EVELFEFKGE DLTEEDGGI IRRIQTRGEG YAKPNEGAIV
EVALEGYYKDKLFDQRELRF EIGEGENLDL PYGLERAIQR MEKGEHSIVY LKPSYAFGSV GKEKFQIPPN
AELKYELHLK SFEKAKESWE MNSEEKLEQS TIVKERGTVYFKEGKYKQAL LQYKKIVSWL EYESSFSNEE
AQKAQALRLA SHLNLAMCHL KLQAFSAIE SCNKALELDS NNEKGLFRRG EAHLAVNDFE
LARADFQKVLQLYPNKAAK TQLAVCQORI RRQLAREKKL YANMFERLAE EENKAKAEAS SGDHPDTEM
KEEQSNTAG SQQVETEA.

Application Note

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.