

FKBP4 Human

Description: 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.

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

Source: Escherichia Coli.

Physical Appearance: Sterile filtered colorless solution.

Amino Acid Sequence: MGSSHHHHHH SSGLVPRGSH MTAEEKKATE SGAQSAPLPM
EGVDISPKQD EGVLKVIKRE GTGTEMPMIG DRVVHYTGW LLDGTFDSS
LDRKDKFSFDLGKGEVIKAW DIAIATMKVG EVCHITCKPE YAYGSAGSPP KIPP NATLVF
EVELFEFKGE DLTEEDGGI IIRRIQTRGEG YAKPNEGAIV EVALEGYYKDKLFDQRELRF
EIGEGENLDL PYGLERAIQR MEKG

Purity: Greater than 90.0% as determined by SDS-PAGE.

Formulation:

The FKBP4 protein solution contains 20mM Tris-HCl, pH-8 and 10% glycerol.

Stability:

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.

Usage:

NeoBiolab's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

Introduction:

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.

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.

Catalog #:ENPS-419

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