

Recombinant human APP/Protease Nexin II protein

Catalog Number: ATGP4122

PRODUCT INFORMATION

Expression system

HEK293

Domain

18-701aa

UniProt No.

P05067

NCBI Accession No.

NP_000475.1

Alternative Names

ABPP, APPI, Alzheimer disease amyloid A4 protein homolog, Alzheimer disease amyloid protein, Amyloid precursor protein, Amyloid-beta precursor protein, Amyloid-beta A4 protein, Cerebral vascular amyloid peptide, CVAP, PreA4, Protease nexin-II, PN-II, A4, AD1, beta-amyloid peptide, beta-amyloid precursor protein, testicular tissue protein Li 2, AAA, ABETA, alpha-sApp, CTF gamma, PN2

PRODUCT SPECIFICATION

Molecular Weight

78.2kDa (690aa)

Concentration

0.5mg/ml (determined by Absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 90% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity

The IC50 value is ≤ 1 nM, The inhibitory function of APP on activity of trypsin was measured by a fluorometric assay using Mca-RPKPVE-Nval-WRK(Dnp)-NH2 at pH 7.5 at 37C.

Tag

His-Tag

Application

SDS-PAGE, Enzyme Activity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

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BACKGROUND

Description

APP, also known as amyloid beta A4 protein, functions as a cell surface receptor and transmembrane precursor protein that is cleaved by secretases to form a number of peptides. It has been implicated as a regulator of synapse formation, neural plasticity, antimicrobial activity, and iron export. Some of these peptides are secreted and can bind to the acetyltransferase complex APBB1/TIP60 to promote transcriptional activation, while others form the protein basis of the amyloid plaques found in the brains of patients with Alzheimer disease. Mutations in this gene have been implicated in autosomal dominant Alzheimer disease and cerebral arterial amyloidosis. Recombinant human APP, fused to His-tag at C-terminus, was expressed in HEK293 cell and purified by using conventional chromatography techniques.

Amino acid Sequence

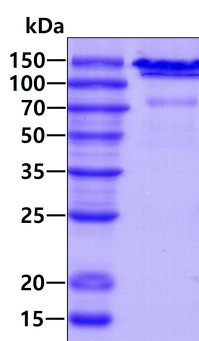
LEVPTDGNAG LLAEPQIAMF CGRLNMHMNV QNGKWDS DPS GTKTCIDTKE GILQYCQEVY PELQITNVVE ANQPVTIQNW
CKRGRKQCKT HPHFVIPYRC LVGEFVSDAL LVPDKCKFLH QERMDVCETH LHWHTVAKET CSEKSTNLHD YGMLLPCGID
KFRGVEFVCC PLAEESDNVD SADAEEEDSD VWWGGADTDY ADGSEDKVVE VAEVEEVAEV EEEEADDDDED
DEDGDEVEEEE AEPYEEATE RTTSIATTTT TTESVEEVV REVCSEAET GPCRAMISRW YFDVTEGKCA PFFYGGCGGN
RNNFDTEEYC MAVCGSAMSQ SLLKTTQEPL ARDPVKLPTT AASTPDAVDK YLETPGDENE HAHFQKAKER LEAKHRERMS
QVMREWEAE RQAKNLPKAD KKAIVQHFQE KVESLEQEAA NERQQLVETH MARVEAMLND RRRLALENYI TALQAVPPRP
RHVFNMLKKY VRAEQKDRQH TLKHFEHVRM VDPKAAQIR SQVMTHLRVI YERMNQSLSL LYNVPAVAEE IQDEVDELLQ
KEQNYSDDLV ANMISEPRIS YGNDALMPSL TETKTTVELL PVNGEFLDD LQPWHSFGAD SVPANTENEV EPVDARPAAD
RGLTTRPGSG LTNIKTEEIS EVKMDAEFRH DSGYEVHHQK LVFFAEDVGS NKG A<HHHHHH>

General References

Kontush A., et al. (2001) Cell. Mol. Neurobiol. 21:299-315.
Walter M.F., et al. (2006) Biochem. Biophys. Res. Commun. 233:760-764.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain