PRODUCT INFORMATION

Expression system E.coli

Domain 20-332aa

UniProt No. Q9UBM4

NCBI Accession No. NP_055174

Alternative Names Opticin, Opticin, Opticin, OPT

PRODUCT SPECIFICATION

Molecular Weight 37.6 kDa (336aa)

Concentration 0.5mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol

Purity > 85% by SDS-PAGE

Tag His-Tag

Application SDS-PAGE, Denatured

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.

BACKGROUND

Description

Opticin belongs to class III of the small leucine-rich repeat protein (SLRP) family. Members of this family are typically associated with the extracellular matrix. Opticin is present in significant quantities in the vitreous of the eye and also localizes to the cornea, iris, ciliary body, optic nerve, choroid, retina, and fetal liver. Opticin may noncovalently bind collagen fibrils and regulate fibril morphology, spacing, and organization. The opticin gene is mapped to a region of chromosome 1 that is associated with the inherited eye diseases age-related macular degeneration (AMD) and posterior column ataxia with retinosa pigmentosa (AXPC1). Recombinant human OPTC



protein, fused to His-tag at N-terminus, was expressed in E. coli.

Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH MGS>ASLPRKE RKRREEQMPR EGDSFEVLPL RNDVLNPDNY GEVIDLSNYE ELTDYGDQLP EVKVTSLAPA TSISPAKSTT APGTPSSNPT MTRPTTAGLL LSSQPNHGLP TCLVCVCLGS SVYCDDIDLE DIPPLPRRTA YLYARFNRIS RIRAEDFKGL TKLKRIDLSN NLISSIDNDA FRLLHALQDL ILPENQLEAL PVLPSGIEFL DVRLNRLQSS GIQPAAFRAM EKLQFLYLSD NLLDSIPGPL PLSLRSVHLQ NNLIETMQRD VFCDPEEHKH TRRQLEDIRL DGNPINLSLF PSAYFCLPRL PIGRFT

General References

Friedman J.S., et al. (2002) Hum. Mol. Genet. 11:1333-1342

DATA

SDS-PAGE



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