

Recombinant human Desert Hedgehog/Dhh (C23II) protein

Catalog Number: ATGP2221

PRODUCT INFORMATION

Expression system

E.coli

Domain

23-198aa

UniProt No.

O43323

NCBI Accession No.

NP_066382

Alternative Names

Desert hedgehog protein, desert hedgehog, GDXYM, HHG-3, SRXY7

PRODUCT SPECIFICATION

Molecular Weight

22.4 kDa (201aa) confirmed by MALDI-TOF

Concentration

0.25mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 7.5) containing 0.15M NaCl, 10% glycerol, 1mM DTT

Purity

> 90% by SDS-PAGE

Endotoxin level

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

Tag

His-Tag

Application

SDS-PAGE

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

DHH is a member of the hedgehog family. The hedgehog gene family encodes signaling molecules that play an important role in regulating morphogenesis. This protein is predicted to be made as a precursor that is autocatalytically cleaved; the N-terminal portion is soluble and contains the signalling activity while the C-terminal portion is involved in precursor processing. More importantly, the C-terminal product covalently

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attaches a cholesterol moiety to the N-terminal product, restricting the N-terminal product to the cell surface and preventing it from freely diffusing throughout the organism. Defects in this protein have been associated with partial gonadal dysgenesis (PGD) accompanied by minifascicular polyneuropathy. This protein may be involved in both male gonadal differentiation and perineurial development. Recombinant human DHH protein, fused to His-tag at N-terminus, was expressed in *E. coli* and purified by using conventional chromatography techniques.

Amino acid Sequence

MGSSHHHHHH SSSLVPRGSH MGSMIIGPGR GPVGRRRYAR KQLVPLLYKQ FVPGVPERTL GASGPAEGRV ARGSERFRDL
VPNYNPDIIIF KDEENSGADR LMTERCKERV NALAIAVMMN WPGVRLRVTE GWDEDGHHAQ DSLHYEGRAL DITTSRDRN
KYGLLARLAV EAGFDWVYYE SRNHVHVSVK ADNSLAVRAG G

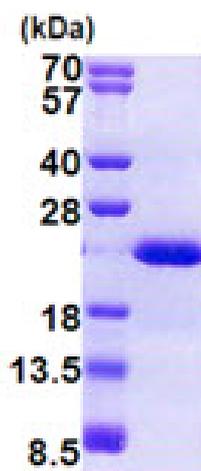
General References

Chen YJ, et al. (2007). *Cell Cycle*. 6(15):1826-30.

Van den Brink GR., et al. (2007). *Physiol Rev*. 87(4):1343-75

DATA

SDS-PAGE



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

15% SDS-PAGE (3ug)