PRODUCT INFORMATION

Expression system Baculovirus

Domain 31-243aa

UniProt No. Q96CG8

NCBI Accession No. NP_612464

Alternative Names Collagen triple helix repeat-containing protein 1 isoform 1, CTHRC1, Protein NMTC1

PRODUCT SPECIFICATION

Molecular Weight 24.1 kDa (222aa)

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)

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

CTHRC1, also known as collagen triple helix repeat-containing protein 1 isoform 1, is a secreted glycoprotein that is expressed on renal epithelium, neurons, osteoblasts, and smooth muscle cells. This protein is overexpressed in different kinds of cancer tissues and promotes tumor formation. It acts as a negative regulator of collagen matrix deposition and is involved in cell migration, motility and invasion. The hormonal functions of



CTHRC1 include regulation of lipid storage and cellular glycogen levels with potentially far-reaching implications for cell metabolism and physiology. Additionally, CTHRC1 increases bone mass as a positive regulator of osteoblastic bone formation and offers an anabolic approach for the treatment of osteoporosis. Recombinant human CTHRC1, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

<ADP>SEIPKGK QKAQLRQREV VDLYNGMCLQ GPAGVPGRDG SPGANGIPGT PGIPGRDGFK GEKGECLRES FEESWTPNYK QCSWSSLNYG IDLGKIAECT FTKMRSNSAL RVLFSGSLRL KCRNACCQRW YFTFNGAECS GPLPIEAIIY LDQGSPEMNS TINIHRTSSV EGLCEGIGAG LVDVAIWVGT CSDYPKGDAS TGWNSVSRII IEELPK<HHHH HH>

General References

Jin YR., et al. (2017) Bone. 97:153-167. He W., et al. (2018) BMC Cancer. 18:400. doi

DATA

SDS-PAGE



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

