

Rat CTHRC1 Protein (His Tag)**Cat.NO.: TP06750**

3th Edition

Synonyms:CTHRC1

Description:Collagen triple helix repeat-containing protein 1, also known as Protein NMTC1, and CTHRC1, is a secreted protein that is glycosylated and highly conserved from lower chordates to mammals. CTHRC1 expression was not detectable in normal arteries. However, it is transiently expressed in the arterial wall in response to injury where it may contribute to vascular remodeling by limiting collagen matrix deposition and promoting cell migration. A short collagen motif with 12 Gly-X-Y repeats appears to be responsible for trimerization of the CTHRC1 protein and this renders the molecule susceptible to cleavage by collagenase. CTHRC1 overexpression caused a dramatic reduction in collagen type I mRNA and protein levels. Currently available data indicate that Cthrc1 expression in vascular cells regulates transforming growth factor beta responsiveness, thereby impacting transforming growth factor beta target genes, including collagens. Additionally, CTHRC1 increases bone mass as a positive regulator of osteoblastic bone formation and offers an anabolic approach for the treatment of osteoporosis.

Form:PBS**Molecular Weight:**22.8 kDa**Sequences:**Met1-Lys230**Purity:**> 95% by HPLC**Concentration:****Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.