## **PRODUCT INFORMATION**

**Expression system** E.coli

**Domain** 16-243 aa

**UniProt No.** Q9BXJ0

NCBI Accession No. NP\_001265360

Alternative Names Complement C1q tumor necrosis factor-related protein 5, CTRP5, MFRP

# **PRODUCT SPECIFICATION**

**Molecular Weight** 26.4 kDa (253aa) confirmed by MALDI-TOF

**Concentration** 0.25mg/ml (determined by BCA assay)

Formulation Liquid in. 20mM Tris-HCl buffer (pH8.5) containing 30% glycerol, 0.2M NaCl

Purity > 85% 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

CTRP5, also known as Complement C1q tumor necrosis factor-related protein 5, encodes a short-chain collagen which is strongly expressed in sub-retinal pigment epithelium (sub-RPE), ciliary epithelium and adipose tissue. CTRP5 is increased in mtDNA-depleted myocytes and that it stimulates the phosphorylation of AMP activated protein kinase. CTRP5 plays an important role in the adhesion of the retinal pigment epithelium (RPE) to the



Bruch Membrane, and mutations are thought to impair the adhesion, resulting in sub-RPE deposits. Recombinant human CTRP5, fused to His-tag at N-terminals, was expressed in E. coli and purified by conventional chromatography techniques.

#### **Amino acid Sequence**

MGSSHHHHHH SSGLVPRGSH MGSHMSPPLD DNKIPSLCPG HPGLPGTPGH HGSQGLPGRD GRDGRDGAPG APGEKGEGGR PGLPGPRGDP GPRGEAGPAG PTGPAGECSV PPRSAFSAKR SESRVPPPSD APLPFDRVLV NEQGHYDAVT GKFTCQVPGV YYFAVHATVY RASLQFDLVK NGESIASFFQ FFGGWPKPAS LSGGAMVRLE PEDQVWVQVG VGDYIGIYAS IKTDSTFSGF LVYSDWHSSP VFA

#### **General References**

Park SY., et al. (2009) J Biol Chem. 284(41):27780-9. Hayward C., et al. (2003) Hum Mol Genet. 12(20):2657-67. Ayyagari R., et al. (2005) Invest Ophthalmol Vis Sci. 46(9):3363-71.

### DATA



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