

# Recombinant Human C1qTNF9 protein (His tag)

Catalog Number:PDEH100153



**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

## Description

<b>Synonyms</b>	AQL1;C1q and tumor necrosis factor related protein 9;C1qTNF9;CTRP9;MGC48915;C1QTNF9A
<b>Species</b>	Human
<b>Expression Host</b>	E.coli
<b>Sequence</b>	Gln 0-Pro 333
<b>Accession</b>	P0C862
<b>Calculated Molecular Weight</b>	34.4 kDa
<b>Observed molecular weight</b>	35 kDa
<b>Tag</b>	N-His

## Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	Please contact us for more information.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01 % Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

## Background

C1qTNF9, also known as CTRP9, is an approximately 40 kDa member of the C1q and TNF-related protein family. Like all members of this protein family, C1qTNF9 consists of a short variable region, a collagenous domain that can be hydroxylated, and a C1q-like globular domain. Human C1qTNF9 shares 85% amino acid sequence identity with the mouse and rat orthologs. Both the mouse and human C1qTNF9 proteins are expressed in adipose tissue, but the mouse protein has also been detected in the heart, lung, muscle, kidney, testis, lymph node, smooth muscle, prostate, thymus, and uterus. They have both also been shown to be secreted as trimers and higher order multimers and also to form hetero-oligomers with Adiponectin. Mouse C1qTNF9 can stimulate the phosphorylation of AMPK, Akt, and eNOS. Also in mice, C1qTNF9 may have an important role in cardiac and metabolic health. Its expression has a cardioprotective effect following acute myocardial infarction that may be dependent on AMPK activation. Additionally, transgenic mice overexpressing C1qTNF9 are resistant to high fat diet-induced obesity. This metabolic role may be conserved, since C1qTNF9 serum levels have been shown to inversely correlate with metabolic syndrome in humans.

## For Research Use Only

A Reliable Research Partner in Life Science and Medicine

Toll-free: 1-888-852-8623

Web: [www.elabscience.com](http://www.elabscience.com)

Tel: 1-832-243-6086

Email: [techsupport@elabscience.com](mailto:techsupport@elabscience.com)

Fax: 1-832-243-6017