cellsciences.com

TNF, Adipoq
Recombinant Human Multimeric TNF-alpha

Catalog No.	CRH022	**Quantity:**	10 µg

Alternate Names: Tumor necrosis factor, Cachectin, TNF-alpha, Tumor necrosis factor ligand superfamily member 2, TNF-a

Description: Human TNF-alpha aa 85-233 is fused at the N-terminus to mouse collagen domain of ACRP30 (aa18-111) and a FLAG tag.

Tumor necrosis factor (TNF, cachexin or cachectin and formerly known as tumor necrosis factor-α) is a cytokine involved in systemic inflammation and is a member of a group of cytokines that stimulate the acute phase reaction. Multimeric TNF-α is a high activity construct in which two trimeric TNF-α ligands are artificially linked via the collagen domain of mouse ACRP30 (adiponectin, Adipoq). The receptor TNF-R1 is activated by both the membrane-bound and soluble trimeric forms of TNF-α, whereas the receptor TNF-R2 only responds to the membrane-bound form of TNF-α. Since Multimeric TNF-α mimics the membrane-bound form (forms oligomers higher than trimer), it is the only TNF-α protein that can activate the TNF-R2. For TNF-R1 activation, either "regular" recombinant TNF-α or Multimeric TNF-α can be used.

UniProt ID: Human TNF-alpha: P01375
Mouse ACRP30 (adiponectin): Q60994

Gene ID: Human TNF-alpha: 7124
Mouse ACRP30 (adiponectin): 11450

Source: HEK 293 cells

Molecular Weight: ~34 kDa, apparent by SDS-PAGE

Formulation: Lyophilized solution containing PBS.

Purity: ≥95% (SDS-PAGE)

Endotoxin Level: <0.02 EU/µg purified protein as determined by LAL test (Lonza).

Specificity: Binds to human and mouse TNF-R1 and TNF-R2.

Biological Activity: ED_{50} = 0.05 ng/ml, Activates human and mouse TNF-R1 and TNF-R2. Induces cell death of WEHI 164 cells at a concentration range of 0.01-10 ng/ml.

Specific Activity: 2×10^7 Units/mg

Amino Acid Sequence: FLAG tag + mouse collagen domain of ACRP30 (aa 18-111) + Human TNF-alpha (aa 85 -233)

Reconstitution: Reconstitute with 100µl sterile water to 0.1 mg/ml.

Storage & Stability: Store at -20°C to -80°C for at least 6 months. After reconstitution, prepare aliquots and store -20°C to -80°C for up to 3 months. PBS containing at least 0.1% BSA or HSA should be used for further dilution. **Avoid repeated freeze-thaw cycles.**

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

Cell Sciences®
65 Parker Street
Unit 11
Newburyport, MA 01950

Toll Free: 888-769-1246
Phone: 978-572-1070
Fax: 978-992-0298

E-mail: info@cellsciences.com
Website: www.cellsciences.com