

Last updated 10/27/15

Certificate of Analysis

Recombinant Human TNF-alpha

Catalog #	Size	Concentration	price
PT-CF-hTNFA-001		100 ug 0.5 mg/mL	

Product Description: Tumor necrosis factor (TNF-alpha) is a key regulator of the inflammatory response. TNF-alpha is involved in a diverse range of inflammatory conditions, including rheumatoid arthritis, ankylosing spondylitis, inflammatory bowel disease and psoriasis. TNF-alpha binds to two different receptors, TNFR1 and TNFR2 to trigger immune responses. The physiological role of TNF-alpha has been highlighted by the use of anti-TNF antibody drug or soluble TNF receptor drug in inflammatory diseases.

Synonyms: Tumor necrosis factor, TNF, Cachectin, TNF- α

Sequence: GPQREEFPRDLSLISPLAQAVRSSSRTPSDKPVAVHVVANPQAEGQ
LQWLNRRANALLANGVELRDNQLVVPSEGLYLIYSQVLFKGGQCPSTHVLLTHT
ISRIAVSYQTKVNLLSAIKSPCQRETPEGAEAKPWYEPIYLGGVFQLEKGDRLSA
EINRPDYLDFAESGQVYFGIIL

Acession #: [P01375](#)

Quality control: Verified by Mass Spectrometry analyses.

Purity: >95% by SDS-PAGE gel

Product Source: TNF-alpha was produced in E. Coli cells transformed with human TNF-alpha gene. This product is sterile and does not contain any components of **animal origin**.

Formulation: Sterile filtered through a 0.2 micron filter in 50% glycerol, 10 mM Tris buffer at pH 8, 50 mM NaCl

Usage: FOR LABORATORY RESEARCH USE ONLY.

Storage/Stability: Avoid repeated freeze-thaw cycles. 12 months at -20 C to -80 C. 1 month at 2 C to 8 C.

References:

1. Bradley, J. R. (2008). TNF-mediated inflammatory disease. *The Journal of pathology*, 214(2), 149-160.
2. Song, H. Y., Régnier, C. H., Kirschning, C. J., Goeddel, D. V., & Rothe, M. (1997). Tumor necrosis factor (TNF)-mediated kinase cascades: bifurcation of nuclear factor- κ B and c-jun N-terminal kinase (JNK/SAPK) pathways at TNF receptor-associated factor 2. *Proceedings of the National Academy of Sciences*, 94(18), 9792-9796.

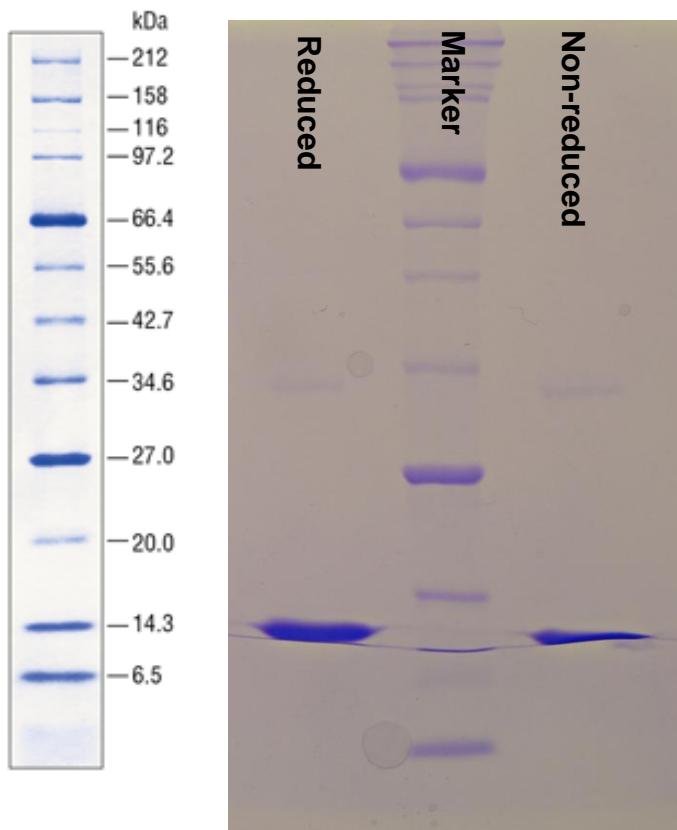


Figure 1. TNF-alpha SDS PAGE gel. Lane 1, TNF-alpha with a mass of 17 kDa on SDS-PAGE under reducing environment; Lane 2, protein marker; lane 3, TNF-alpha under non-reducing environment.