
Lab Dept: Chemistry

Test Name: TUMOR NECROSIS FACTOR, ALPHA, HIGHLY SENSITIVE

General Information

Lab Order Codes: TNF

Synonyms: Tumor Necrosis Factor Alpha, Cytokines

CPT Codes: 83520 - Immunoassay, analyte, quantitative; not otherwise specified

Test Includes: Tumor necrosis factor, concentration reported in pg/mL.

Logistics

Test Indications: Tumor necrosis factor (TNF- α , cachectin) was described based on the observation of hemorrhagic necrosis of tumors in animals and humans, as well as in patients with cachexia. It is produced by mononuclear phagocytes, lymphocytes, natural killer cells, and some human tumor cells. Its effects have been studied in many cell types, including polymorphonuclear leukocytes, B- and T-lymphocytes, vascular endothelial cells, fibroblasts, hematopoietic tissues, adipocytes, hepatocytes, and bone and cartilage cells.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Mayo Medical Laboratories forward to Quest Diagnostics Nichols Institute (MML test: FFTUM, Quest test: 34485)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 8 – 18 days, test performed on Monday

Special Instructions: Obtain Red NO GEL tube from the laboratory.

Note: Cytokine levels may demonstrate diurnal variation. Recommend cytokine levels be determined at the same time of day for improved longitudinal comparison.

Specimen

Specimen Type: Blood

Container:	Red top (NO GEL) tube
Draw Volume:	3 mL (Minimum: 1.5.mL) blood
Processed Volume:	1 mL (Minimum: 0.5 mL) serum
Collection:	Routine venipuncture
Special Processing:	Lab Staff: Allow specimen to clot for 10 - 15 minutes at room temperature. Specimens must be processed within 30 minutes of collection. Centrifuge and aliquot 1 mL (Minimum: 0.5 mL) serum into screw-capped round bottom plastic vials. Store in freezer. Ship frozen. Forward promptly.
Patient Preparation:	None
Sample Rejection:	Thawed specimens; mislabeled or unlabeled specimens

Interpretive

Reference Range:	0.56 – 1.40 pg/mL TNF- Alpha is not to be used as a diagnostic procedure without confirmation of the diagnosis by another established product or procedure. The reference range is intended to be used for blood samples only. Reference ranges for body fluids other than blood have not been established.
Critical Values:	N/A
Limitations:	N/A
Methodology:	Immunoassay
References:	Mayo Medical Laboratories December 2017
Updates:	3/11/2004: Testing moved from Fairview Diagnostic Laboratories to Mayo Medical Laboratories forward to ARUP. 6/27/2007: Test moved to Forward to Quest from Mayo. Note new reference range and method. 12/20/2017: Updated reference range