MICHIGAN MEDICINE
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Test Update 975

Posted Date 10/21/2026
Effective Date 11/12/2026
Test Name T-Helper Cell Type 1 Cytokine Panel, Plasma
Update Type Reference range changed
CPT Code 83520 x5)

TEST ID AND REFERENCE RANGE CHANGES

T-Helper Cell Type 1 Cytokine Panel, Plasma

Order Code:	CYTH1
Fee Code:	AB171 (CPT 83520 x5)
Reference Laboratory:	Mayo CYTH1
New Reference Lab:	Mayo TH1CP

Mayo Clinic Laboratories will replace their test ID CYTH1 with test ID TH1CP effective November 12, 2026. This test is used for assessment of T-helper cell type 1-associated cytokines levels in plasma to understand the etiology of autoimmune and pro-inflammatory conditions when used in conjunction with clinical information and other laboratory testing.

Collection Instructions: Collect specimen in a lavender top (EDTA) tube. Immediately place on wet ice. Within 2 hours of collection, spin at 4 degrees C. Aliquot 0.5 mL (minimum 0.3 mL) of plasma into a screw capped plastic tube. Freeze immediately. Plasma from this test cannot be shared with other tests, and cannot be added to a previously collected specimen.

Reference Range: Age > or = 18 years: Interferon Gamma: < or =2.5 pg/mL; Interleukin 12p70: <1.5 pg/mL; Interleukin 2: <2.0 pg/mL; Tumor Necrosis Factor Alpha: < or = 11.8 pg/mL; Soluble Interleukin 2 Receptor Alpha: < or = 1929 pg/mL. Reference ranges have not been established for patients aged <18 years.

Although both serum and plasma are widely used for cytokine testing, plasma is generally the preferred matrix. Preparing serum requires clotting, during which platelets and other blood cells release cytokines into the sample in vitro, raising measured levels of many cytokines above their true circulating concentrations. Plasma, by contrast, more closely reflects endogenous in vivo levels. Comparison studies across multiple assay platforms have consistently found significant differences in many cytokines between paired serum and plasma samples, showing that the two matrices cannot be used interchangeably or share reference intervals. Because clotting introduces an additional source of pre-analytical variability, plasma measurements are also more reproducible and better suited to detecting small, disease-related changes.

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