MAYO CLINIC LABORATORIES

NEW TEST

Notification Date: October 6, 2026
Effective Date: November 12,2026

Interleukin 2 Receptor Alpha Soluble, Plasma

Test ID: SILRP

Note:

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.

Useful for:

Measuring the concentration of soluble interleukin 2 receptor alpha (sIL-2Ra) in plasma

Aids in the diagnosis, evaluation and monitoring of patients with hemophagocytic lymphohistiocytosis, macrophage activation syndrome, sarcoidosis, and lymphoid malignancies

Methods:

Immunoassay

Reference Values:

<18 years: Not established
> or =18 years: < or =1929 pg/mL

Specimen Requirements:

Supplies:	Sarstedt Aliquot Tube, 5 mL (T914)
Collection Container/Tube:	Lavender top (EDTA)
Submission Container/Tube:	Plastic vial
Specimen Volume:	0.5 mL Plasma
Collection Instructions:	1. Immediately after specimen collection, place the tube on wet ice. 2. Within 2 hours of collection, centrifuge at 4 degrees C, 1500 x *g* for 10 minutes, and aliquot plasma into a plastic vial.

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3. Freeze immediately.

Minimum Volume: Plasma: 0.3 mL

Note:

1. Plasma for this test cannot be shared with other tests. Submit specimen for this test in its own vial.
2. This test **cannot be** added onto a previously collected specimen.
3. If a refrigerated centrifuge is not available, it is acceptable to use a room temperature centrifuge, provided the sample is kept on ice before centrifugation and is frozen immediately afterward.

Specimen Stability Information:

Specimen Type	Temperature	Time
Plasma EDTA	Frozen	14 days

Cautions:

Soluble interleukin 2 receptor alpha (sIL-2Ra) testing should only be used in conjunction with clinical presentation and other laboratory testing as part of a patient's overall assessment. Elevations in sIL-2Ra can be seen in several inflammatory, malignancy, or infectious conditions involving activation of T cells, B cells, granulocytes or natural killer cells. Non-elevated concentration of sIL-2Ra does not exclude the possibility of infection or other inflammatory condition.

There is substantial overlap in elevated sIL-2Ra in patients with other chronic inflammatory conditions or infections.

Soluble interleukin 2 receptor alpha is a marker for lymphocyte activation and proliferation; a comprehensive cytokine evaluation such as CYTOP / Cytokine Panel, Plasma may be more useful in overall disease assessment or pathophysiology.

CPT Code:

83520

Day(s) Performed: Thursday **Report Available:** 2 to 8 days

Questions

Contact Melissa Derksen, Laboratory Resource Coordinator at 800-533-1710.

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