
Lab Dept: Chemistry

Test Name: INTERLEUKIN-2 RECEPTOR ALPHA SOLUBLE

General Information

Lab Order Codes: SIL2R

Synonyms: IL-2R; IL-2 Receptor; sIL2R

CPT Codes: 83520 – Immunoassay for analyte other than infectious agent antibody or infectious agent antigen; quantitative, not otherwise specified

Test Includes: Concentration of soluble interleukin-2 receptor alpha (sIL-2r alpha) in plasma, reported in pg/mL

Logistics

Test indications: Aids in the diagnosis and evaluation of patients for lymphoproliferative disorders, including autoimmune lymphoproliferative syndrome, hemophagocytic lymphohistiocytosis, and macrophage activation syndrome.

May help monitor patients with sarcoidosis or hematologic malignancies with elevated sIL-2r alpha.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Mayo Clinic Laboratories (MML Test Code: SIL2R)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 2 – 8 days, testing performed on Thursdays

Special Instructions: Must be immediately placed on WET ICE after collection

Specimen

Specimen Type: Blood

Container: Lavender top EDTA tube ON WET ICE

Draw Volume: 1.5 mL (Minimum: 0.9 mL) blood

Processed Volume:	0.5 mL (Minimum: 0.3 mL) plasma
Collection:	Routine blood collection ON WET ICE
Special Processing:	<p>Lab Staff: Immediately after specimen collection, place tube on wet ice. Centrifuge at 4°C, 1500 x g (RCF) for 10 minutes. Aliquot plasma into plastic vial. Freeze specimen within 2 hours of collection.</p> <p>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.</p> <p>Specimen stable frozen for 21 days.</p>
Patient Preparation:	N/A
Sample Rejection:	Mislabeled or unlabeled specimens; refrigerated specimens; heat-inactivated specimens; gross hemolysis, lipemia, or icterus.

Interpretive

Reference Range:	<p><18 years: Not established</p> <p>> or =18 years: <959 pg/mL</p>
Critical Values:	N/A
Limitations:	<p>Soluble interleukin-2 receptor alpha (sIL-2r alpha) 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-2r alpha 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-2r alpha does not exclude the possibility of infection or other inflammatory condition.</p> <p>There is substantial overlap in elevated sIL-2r alpha in patients with other chronic inflammatory conditions or infections</p> <p>Soluble interleukin-2 receptor alpha is marker for lymphocyte activation and proliferation; a comprehensive cytokine evaluation, such as a Cytokine Panel, may be more useful in overall disease assessment or pathophysiology.</p>
Methodology:	Bead-Based Multiplex Immunoassay
References:	Mayo Clinic Laboratories March 2025
Updates:	3/13/2025: Initial entry. Replaces obsolete IL2R