
Lab Dept: Chemistry

Test Name: SIROLIMUS, WHOLE BLOOD (MAYO TRANSPLANT PATIENTS ONLY)

General Information

Lab Order Codes: SIRO

Synonyms: Rapamune Mayo; Rapamycin Mayo; SIIRO; Sirolimus MML Transplant

CPT Codes: 80195 - Sirolimus

Test Includes: Sirolimus blood level reported in ng/mL

Logistics

Test indications: Monitoring whole blood sirolimus concentration during therapy for Mayo Transplant patients ONLY that must have the assay completed at Mayo Clinic Laboratory. Consider the in-house assay [SIRC](#) for other purposes.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Mayo Clinic Laboratories (MML: SIIRO)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily

Turnaround Time: 1 – 3 days

Special Instructions: Draw blood immediately before a scheduled dose.

Specimen

Specimen Type: Whole blood

Container: Lavender-top (EDTA) tube

Draw Volume: 3 mL (Minimum: 1.0 mL) blood

Processed Volume: Same as Draw Volume

Collection: Routine blood collection, typically timed.

Special Processing:	Lab Staff: Do NOT centrifuge or aliquot. Store and ship whole blood refrigerated in original tube. Forward promptly. Specimen stable refrigerated (preferred), ambient or frozen for 28 days.
Patient Preparation:	For therapeutic range monitoring, blood should be drawn immediately before dose.
Sample Rejection:	Specimens collected in incorrect anticoagulant; unlabeled or mislabeled specimens.

Interpretive

Reference Range:	4-20 ng/mL (Trough) Target steady-state trough concentrations vary depending on the type of transplant, concomitant immunosuppression, clinical/institutional protocols, and time post-transplant. Results should be interpreted in conjunction with this clinical information and any physical signs/symptoms of rejection/toxicity.
Critical Values:	N/A
Limitations:	The recommended therapeutic range applies to trough specimens collected immediately before a dose. Blood drawn at other times will yield higher results.
Methodology:	High-Performance Liquid Chromatography-Tandem Mass Spectrometry (HPLC-MS/MS)
References:	Mayo Clinic Laboratories (March 2024)
Updates:	3/7/2024: Initial entry. Previous version of the Lab Test Directory was adapted when the assay was brought in-house.