

2014699

Maternal T Cell Engraftment in SCID

STR-SCID

Specimen Required: Collect: Lavender (EDTA), Pink (K₂EDTA), or Yellow (ACD Solution A).

Specimen Preparation: Transport 3 mL whole blood. (Min: 3 mL) Increase the amount of blood submitted for patients with low cell counts.

Storage/Transport Temperature: Room temperature. Ship overnight. Specimens should be received within 24 hours of collection for **optimal** isolation of T cells.

Remarks: Please provide the results and date of the patient's most recent WBC and differential counts.

Unacceptable Conditions: Clotted or hemolyzed specimens.

Stability (collection to initiation of testing): Ambient: 48 hours; Refrigerated: 48 hours; Frozen: Unacceptable

Interpretive Data:**Background Information for Maternal T Cell Engraftment in SCID:**

Indication: Severe combined immunodeficiency (SCID) patients lack T cells and cannot recognize and reject maternal T cells from maternal-fetal transfusion. Maternal T cell can proliferate in the absence of host T cells, leading to difficulty in determining the host T cell numbers required for the diagnosis of SCID and/or can cause graft-versus-host **disease-line (GVHD) presentation.**

Methodology: PCR followed by capillary electrophoresis. Specimens are analyzed using 15 autosomal markers (D8S1179, D21S11, D7S820, CSF1PO, D3S1358, TH01, D13S317, D16S539, D2S1338, D19S433, vWa, TPOX, D18S51, D5S818, and FGA) and one gender marker (amelogenin).

Kit Used: AmpFLSTR Identifiler PCR Amplification Kit, Applied Biosystems.

Limit of Detection: 2 percent of minor cell population.

See Compliance Statement B: www.aruplab.com/CS

Note: To complete Maternal T Cell Engraftment in SCID testing, samples should be collected to perform the following three tests: (1) A buccal swab or brush collected from the patient for Maternal T Cell Engraftment in SCID, Pre-Engraftment Specimen (ARUP test code 2014694), used as a genetic baseline for the patient. (2) A peripheral blood sample from the biological mother for Maternal T Cell Engraftment in SCID, Maternal Specimen (ARUP test code 2014704), used as a genetic baseline for the mother. (3) A peripheral blood sample collected from the patient for Maternal T Cell Engraftment in SCID, (ARUP test code 2014699). T cells isolated from the blood sample will be genotyped for comparison to the patient and biological mother baseline genotypes. If T cell sorting is not completed on the blood sample before submission, BMT Cell Isolation (ARUP test code 2005498) will be added. Additional charges apply.