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**Lab Dept:** Chemistry

**Test Name:** 5-FLUOROCYTOSINE LEVEL

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***General Information***

**Lab Order Codes:** 5FC

**Synonyms:** Antifungal Level, Fluorcytosine

**CPT Codes:** 80299 – Quantitation of drug; not elsewhere specified

**Test Includes:** 5-Fluorocytosine level reported in ug/mL.

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***Logistics***

**Test Indications:** This anti-fungal drug is ordinarily used with amphotericin B for life-threatening fungal infections, such as fungal meningitis or other invasive disease.

**Lab Testing Sections:** Chemistry - Sendouts

**Referred to:** Fairview University Diagnostic Laboratories (Test: 5CFL)

**Phone Numbers:** MIN Lab: 612-813-6280

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 1 - 3 days, test performed Monday - Friday

**Special Instructions:** May be tested in the presence of amphotericin B. Specify other antifungal agents patient is currently receiving; some antifungal agents cannot be tested in the presence of others. To reduce turnaround, notify laboratory as soon as intent to collect titer is known so organism can be prepared.

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***Specimen***

**Specimen Type:** Blood

**Container:** Red top (plain, no gel) tube

**Draw Volume:** Blood: 6 mL (Minimum: 3 mL)

CSF: 1 mL (Minimum: 1 mL)

<b>Processed Volume:</b>	Serum: 2 mL (Minimum 1 mL) CSF: 1 mL (Minimum 1 mL)
<b>Collection:</b>	Designate which specimens are peak and trough. Trough specimens are collected just prior to the next dose. Peak specimen collections should be collected 1 ½ - 2 hours after oral dose.
<b>Special Processing:</b>	Lab Staff: Centrifuge blood and aliquot) serum. Store and ship frozen. Order an MBAT is CSF is submitted.
<b>Patient Preparation:</b>	None
<b>Sample Rejection:</b>	Mislabeled or unlabeled specimens

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### ***Interpretive***

<b>Reference Range:</b>	30 – 45 ug/mL with a 2 g PO dose 60 – 80 ug/mL with a 100 mg/kg/day PO dose
<b>Critical Values:</b>	>100 ug/mL may be toxic
<b>Limitations:</b>	For bioassay measurements, the presence of other antimicrobial agents may interfere with the assay. Other factors that may influence antimicrobial levels include inherent differences among patients and their underlying physical conditions as well as the dose and route of administration of the antimicrobial agent.
<b>Methodology:</b>	Bioassay
<b>References:</b>	Fairview University Diagnostic Laboratories Laboratory Web Page <a href="http://labguide.fairview.org/diagnostic.asp">http://labguide.fairview.org/diagnostic.asp</a> (September 2017) <a href="#">ARUP Laboratories</a> (September 2017)
<b>Update:</b>	9/29/2017: Updated specimen requirements and reference ranges.