

---

**Lab Dept:** Flow and Immunology

**Test Name:** CD4/CD8 PANEL, BLOOD

---

***General Information***

**Lab Order Codes:** C48P

**Synonyms:** Helper/Suppressor Ratio; T- cells; T-cell subsets; T-cell phenotyping

See also: Immune Status Panel and Comprehensive Immune Status Panel

**CPT Codes:** 86359 – T cells, total count  
86360 – T cells; absolute CD4 and CD8 count, including ratio

**Test Includes:** CD4(CD3+) and CD8(CD3+) relative percentages, absolute values and a calculated Helper/Suppressor ratio.

---

***Logistics***

**Test Indications:** This is a minimal antibody panel to monitor immune status.

**Lab Testing Sections:** Flow Cytometry

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

STP Lab: 651-220-6550

**Test Availability:** 3 times weekly determined by volume. **Transport collected specimen immediately to Flow Cytometry. Routine testing is not available on weekends or holidays. Therefore, specimens cannot be used if drawn the day before a 3 day weekend such as Memorial Day, Labor Day or major holiday that falls on a Monday or Friday.**

**Turnaround Time:** 1 – 3 days

**Special Instructions:** See [Test Availability](#)

---

***Specimen***

**Specimen Type:** Whole blood

**Container:** Lavender top (EDTA) tube

**Draw Volume:** 2 mL blood in a 2 mL Lavender (EDTA) tube  
Minimum volume: 0.5 mL in an EDTA microtainer

<b>Collection:</b>	Routine venipuncture
<b>Special Processing:</b>	Keep sample at room temperature and forward promptly to the laboratory. Do not centrifuge, refrigerate, or freeze sample.
<b>Patient Preparation:</b>	None
<b>Sample Rejection:</b>	Specimens will not be processed that are clotted; hemolyzed; greater than 72 hours old; collected in the wrong tube type (0.5 mL in a 2 mL tube), or that have been held or handled at a temperature other than room temperature

---

### ***Interpretive***

<b>Reference Range:</b>	Age-dependant reference ranges provided with results.
<b>Critical Values:</b>	N/A
<b>Limitations:</b>	<p>Poor specimen quality will adversely affect the test results (see Specimen section).</p> <p>The single platform method is linear when the WBC count of the specimen is between 0.2 k/uL and 29.7 k/uL, and its lymphocyte concentration is between 0.1 k/uL and 9.0 k/uL.</p>
<b>Methodology:</b>	<p>Single-platform 4 color direct immunofluorescence method FDA approved for in-vitro diagnostic usage. Flow cytometric analysis based on CD45 gating strategy.</p> <p>In cases where the WBC count of the specimen exceeds the linearity limits of the single platform method, an alternative two-platform method will be used.</p>
<b>References:</b>	<p>Centers for Disease Control (2003) Guidelines for performing CD4+ T-cell determinations with CD45 Gating in persons with immunodeficiency virus (HIV). MMWR, 52 (No. RR-2): 1-18</p> <p>MultiTEST™ IMK Kit Package Insert, Becton Dickinson Immunocytometry Systems, December 2000</p>
<b>Updates:</b>	10/26/2016: Updated Draw Volume