**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 |
**Collection:** Routine venipuncture

**Special Processing:** Keep sample at room temperature and forward promptly to the laboratory. Do not centrifuge, refrigerate, or freeze sample.

**Patient Preparation:** None

**Sample Rejection:** 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

**Reference Range:** Age-dependant reference ranges provided with results.

**Critical Values:** N/A

**Limitations:** Poor specimen quality will adversely affect the test results (see Specimen section).

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.

**Methodology:** Single-platform 4 color direct immunofluorescence method FDA approved for in-vitro diagnostic usage. Flow cytometric analysis based on CD45 gating strategy.

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.

**References:**


MultiTEST™ IMK Kit Package Insert, Becton Dickinson Immunocytometry Systems, December 2000

**Updates:** 10/26/2016: Updated Draw Volume