



# DIRECTORY OF SERVICES

## AmpliChip CYP450 Genotyping Test

**Test Number: 000596**

### CPT

83891; 83892; 83894; 83896 (x29); 83900; 83903; 83912

### Related Information

### Synonyms

### Specimen Type

EDTA anticoagulated whole blood

### Volume Requirement

7 mL whole blood

### Minimum Volume Requirement

3 mL whole blood

### Collection Container

Lavender-top (EDTA) tube

### Storage Instructions

Maintain specimen at room temperature (maximum of 3 days) or refrigerate (maximum of 21 days).

### Causes for Rejection

Frozen specimen; hemolysis; quantity not sufficient for analysis; improper container

### Use

The Roche AmpliChip CYP450 test is intended to identify a patient's CYP2D6 and CYP2C19 genotype from genomic DNA. Information about CYP2D6 and CYP2C19 genotype may be used as an aid to clinicians in determining therapeutic strategy and treatment doses for therapeutics that are metabolized by the CYP2D6 or CYP2C19 gene product.

### Limitations

The metabolism of drugs is also influenced by ethnicity, diet, and other medications.

### Methodology

Cytochrome AmpliChip P450 2D6/2C19 Genotyping and Phenotyping assay is performed on a Roche/Affymetrix microarray platform. The PCR amplified products are fragmented, biotin-labeled, hybridized to oligonucleotides located on the AmpliChip CYP450 Microarray then stained with a streptavidin-conjugated fluorescent dye. The microarrays are scanned and the CYP450 genotype and predicted phenotype is determined by analysis of the oligo probe patterns. This analysis includes identification of CYP2D6 \*1, \*2, \*2XN, \*3, \*4, \*4XN, \*5, \*6, \*7, \*8, \*9, \*10, \*10XN, \*11, \*15, \*17, \*17Xn, \*19, \*20, \*29, \*35, \*35XN, \*36, \*40, \*41, \*41XN and CYP2C19 \*1, \*2, and \*3.