
Lab Dept: Chemistry

Test Name: PSEUDOCHOLINSTERASE, TOTAL, SERUM

General Information

Lab Order Codes: PSEUD

Synonyms: Cholinesterase (Pseudo), Total; Pseudochol

CPT Codes: 82480 – Cholinesterase, Serum

Test Includes: Pseudocholinesterase reported in U/L.

Logistics

Test Indications: Monitoring exposure to organophosphorus insecticides; monitoring patients with liver disease, particularly those undergoing liver transplantation; identifying patients who are homozygous or heterozygous for an atypical gene and have low levels of pseudocholinesterase.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Mayo Medical Laboratories (MML Test: 8518/PCHES)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 - 2 days, performed daily

Special Instructions: N/A

Specimen

Specimen Type: Blood

Container: Red top tube

Draw Volume: 1.5 mL (Minimum: 1 mL) blood

Processed Volume: 0.5 mL (Minimum: 0.25 mL) serum

Collection: Routine venipuncture

Special Processing: Lab Staff: Centrifuge specimen, remove serum into a screw-capped plastic vial. Store and ship and refrigerated temperatures.

Patient Preparation: For cases of prolonged apnea following surgery, wait 24 hours before obtaining a specimen.

Sample Rejection: Specimens other than serum; warm specimens; hemolysis; lipemia; mislabeled or unlabeled specimens

Interpretive

Reference Range:

Males:	3100 – 6500 U/L
Females:	
<18 years:	Not established
18 – 49 years:	1800 – 6600 U/L
> or = 50 years:	2550 – 6800 U/L

Critical Values: N/A

Limitations: There are some homozygous and heterozygous individuals who are sensitive to although their total pseudochoolinesterase values are normal. A dibucaine inhibition test is necessary to confirm the presence of the abnormal allele in these individuals. Not useful for the differential diagnosis of jaundice. Certain drugs and anesthetic agents inhibit pseudochoolinesterase activity. Therefore, it is recommended that blood specimens be drawn 24 – 48 hours post-operatively on those patients who have experienced prolonged apnea after surgery.

Methodology: Photometric, Acetylthiocholine Substrate

References: [Mayo Medical Laboratories](#) September 2012