

TEST CHANGE

Pseudocholinesterase, Dibucaine Inhibition

0020159, PCHE PHENO

Specimen Requirements:

Patient Preparation:	Specimen must be drawn prior to surgery or more than two days following surgery. Do not draw in recovery room.
Collect:	Serum separator tube, plain red , green (sodium or lithium heparin), lavender (EDTA), or pink (K2EDTA).
Specimen Preparation:	Allow specimen to clot completely at room temperature. Separate serum or plasma from cells ASAP or within 2 hours of collection. Transport 1 mL serum or plasma. (Min: 0.25 mL)
Transport Temperature:	Refrigerated.
Unacceptable Conditions:	Lt. blue (sodium citrate) or gray (oxalate/fluoride). Whole blood.

Remarks:

Stability: **Room Temperature** ~~Ambient~~: 4 hours; Refrigerated: 1 week; Frozen: 3 months

Methodology: Quantitative Enzymatic Assay

Performed: Mon-Fri

Reported: 1-5 days

Note: Patients with acute or chronic liver disease, organophosphate poisoning, chronic renal disease, in late stages of pregnancy, or on estrogen therapy may have markedly decreased PChE activities.

CPT Codes: 82638; 82480

New York DOH Approval Status: This test is New York DOH approved.

Interpretive Data:

The dibucaine number (DN) is the percent of pseudocholinesterase (PChE) enzyme activity that is inhibited by dibucaine. Together, the DN and the PChE enzyme activity results can help to identify individuals at risk for prolonged paralysis following the administration of succinylcholine. ~~2~~ Decreased PChE enzyme activity in conjunction with a DN less than 30 suggests high risk for prolonged paralysis. Normal to decreased PChE enzyme activity in conjunction with a DN 30-79 suggests variable risk. Although decreased PChE activity in conjunction with DN greater than or

equal to 80 suggests variable risk, these results may be caused by exposure to organophosphates, the presence of liver disease, pregnancy, or circulating succinylcholine. Specimens should be collected 48 hours after the administration of succinylcholine.

~~This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA-certified laboratory and is intended for clinical purposes.~~

Reference Interval:

Test Number	Components	Reference Interval
	Pseudocholinesterase, Total	2,900-7,100 U/L
	Dibucaine Number	Greater than or equal to 80