



Phenobarbital

Alternate Name:	Luminal
Performing Lab:	New Hanover
Specimen Container:	Red top tube (Avoid use of serum separator tube)
Minimum Volume Required:	1.0 mL
Testing Availability	Routine: 24 hours/day Stat: Yes
Turnaround Time:	Routine: 4 hours Stat: < 1 hour
Special Handling:	Draw just prior to dose
Patient Preparation:	None
Specimen Stability:	
Reference Range:	15 – 40 ug/mL
Critical Value:	> 59 ug/mL
CPT Code:	80184
HED Test Group:	Test Group – LAB at NH site
HED Test Name:	Test Group – CLAB at CF site Test Name - Phenobarbital
Testing Methodology:	Competitive Chemiluminescent Immunoassay
Causes for Specimen Rejection:	Improper labeling
Other Comments:	
Clinical Significance:	Phenobarbital, a long-acting barbiturate, is effective in generalized tonic-clonic and simple partial seizures. Higher plasma concentrations may be required to control the latter. Complex partial seizures do not respond as well, and absence seizures are not relieved and may be exacerbated. Phenobarbital frequently is used in the treatment of neonatal seizures and may be the initial drug employed in young

children; however, because of increasing concern about adverse neuropsychological reactions to sedative/hypnotic antiepileptic drugs, many neurologists prefer less sedating drugs, such as carbamazepine, phenytoin, or valproate. The prophylactic use of phenobarbital in infants with febrile seizures has been challenged. Phenobarbital also is useful in seizures caused by barbiturate withdrawal in dependent individuals. The sodium salt is administered parenterally as part of the treatment regimen for status epilepticus.