

AMMONIA, PLASMA

Orderable - AMM

Turn Around Time: 3 hours

STAT: 60 minutes

Specimen:

Adult	Pediatric
4 mL K ₂ or K ₃ EDTA Lavender top Vacutainer tube	0-2 years: 2 mL Lavender top (must be venous draw) 2-10 years: 3 mL Lavender top (must be venous draw).
NICU ONLY – Micropick specimens are acceptable – Use the CBC Microtainer tube, put on ice and deliver to Core Laboratory immediately.	



Laboratory:
Core Lab



Requisition:
GENERAL LABORATORY
REQUISITION



Method of Analysis:
Enzymatic Kinetic assay



Test Schedule:
As required

Collection Information:

Very unstable.

Specimens for ammonia must be received in the lab ON ICE within 30 minutes of being drawn.

Sample **must** be a venous draw.

Sample cannot be exposed to air.

Plasma may be sent from outside laboratories. Plasma must be sent FROZEN.

Reference Ranges:

Male:	15-55 µmol/L
Female:	11-48 µmol/L

Interpretive Comments:

Therapeutic concentration of Cefoxitin, Acetaminophen (paracetamol), Ibuprofen, Sulfasalazine and Temozolomide interfere with the assay and lead to falsely result.

Elevated in Reye's syndrome, congenital urea cycle disorders and severe liver disease. Poor correlation with hepatic encephalopathy. Often used in the workup of neonatal



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coma.

Special Processing:

SRA VH: Centrifuge immediately in cold and analyze ASAP.

SRA UH/SJ: Centrifuge immediately in cold, and keep aliquoted plasma at 4°C. Send to VH **within 2 hours** during regular courier hours. **After hours:** STAT courier must be called.

Micropick specimens acceptable from **NICU only**. Centrifuge without delay in cold centrifuge if possible, aliquot and load on the correct Roche analyzer immediately after centrifugation

Comments:

Hemolyzed samples are not acceptable as lysed red blood cells may elevate ammonia concentration.

Hemolysis interferes with result. Hemolyzed samples will have a comment attached to the result for children < 18. For adults ≥18, a comment will be attached to the result, unless hemolysis is >201, in which case the test will be canceled.

Lipemia may also cause interference.

Storage and Shipment:

Centrifuge at 4°C and transport aliquoted plasma on ice (minimize time of exposure to air).

Plasma may be stored at 4°C for up to 3 hours in an air-tight container, if necessary.

Freeze for long term.