
Lab Dept: Chemistry

Test Name: OSMOLALITY

General Information

Lab Order Codes: OSM

Synonyms: Osmo

CPT Codes: 83930 – Osmolality; blood

Test Includes: Osmolality concentration reported in mOsm/kg.

Logistics

Test Indications: Determination of osmolality can be useful in the assessment of electrolyte and acid/base disorders. Comparisons can determine the status of renal water regulation settings of severe electrolyte disturbances, as might occur in diabetes insipidus.

Lab Testing Sections: Chemistry

Phone Numbers: MIN Lab: 612-813-6280

STPLab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 4 hours

Special Instructions: N/A

Specimen

Specimen Type: Blood

Container: Green top (Li Heparin) tube, **preferred**
Alternate tube: Red, marble or gold top tube

Draw Volume: 0.6 mL blood

Processed Volume: 0.2 mL plasma/serum

Special Processing: Lab Staff: Centrifuge specimen, remove serum/plasma aliquot into plastic sample cup. Run within 4 hours or store at refrigerated temperatures.

Patient Preparation: None

Sample Rejection: Mislabeled or unlabeled specimen

Interpretive

Reference Range: 275 - 295 mOsm/kg

Critical Values: N/A

Limitations: N/A

Methodology: Freezing point depression

References: Advanced Instruments Osmometer Model 2020 User's Guide, 2025 Rev16, 081508, Two Technology Way, Norwood, MA 02062

Tietz Textbook of Clinical Chemistry and Molecular Diagnostics (2006)
Elsevier Saunders Company, pp 991 - 994

Jacobs & DeMott Laboratory Test Handbook Lexi-Comp, Inc (2001)
Hudson, OH, 5th Edition, pp 236-237

Updates: 2/9/2016: Update alt tube type