
Lab Dept: Chemistry

Test Name: ANTIDIURETIC HORMONE (ADH)

General Information

Lab Order Codes: ADH

Synonyms: Arginine Vasopressin; AVP

CPT Codes: 84588 – Vasopressin (antidiuretic hormone, ADH)

Test Includes: ADH concentration reported in pg/mL.

Logistics

Test Indications: Diagnosis and characterization of diabetes insipidus (DI). Diagnosis of psychogenic water intoxication and ectopic Arginine Vasopressin production, particularly due to bronchogenic carcinoma. As an adjunct in the diagnosis of inappropriate ADH syndrome, which results in dilutional hyponatremia.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Mayo Medical Laboratories (MML Test: 80344/AVP)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 3 - 11 days, test set up Wednesdays at 1300

Special Instructions: See [Patient Preparation](#)

Specimen

Specimen Type: Blood

Container: Lavender top (EDTA) tube

Draw Volume: 5 mL (Minimum: 3.5 mL) blood

Processed Volume: 2 mL (Minimum: 1.15 mL) plasma

Collection: Routine venipuncture

Special Processing:	Lab Staff: Centrifuge specimen at approximately 1000 G for 10 minutes in a refrigerated centrifuge, remove plasma aliquot avoiding the platelet/buffy coat. Place plasma aliquot in a screw-capped round bottom plastic vial. Store and ship at frozen temperatures. Forward promptly.
Patient Preparation:	Patient should fast and thirst for 6 hours (preferred). No liquids, including water, are allowed.
Sample Rejection:	Specimens containing radioactive isotopes; specimens warm for more than 4 hours; specimens other than plasma, mislabeled or unlabeled specimens

Interpretive

Reference Range:	Adults: <1.7 pg/mL Reference values were determined on platelet-poor EDTA plasma from individuals fasting no longer than overnight.
Critical Values:	N/A
Limitations:	Reference values were determined on platelet-poor EDTA plasma from individuals fasting no longer than overnight. A significant amount of circulating AVP is associated with platelets. Therefore, various conditions affecting platelets may also affect AVP levels. Platelet-rich specimens have been shown to have AVP levels on the order of 10 times the value of platelet-poor specimens. AVP levels obtained in the process of a water deprivation test may be difficult to interpret because of the many nonstandardized variables in this test. Expert consultation is recommended in these circumstances.
Methodology:	This method uses a cartridge extraction of acidified plasma to prepare the specimen for an in-house radioimmunoassay (RIA). After acidification, the specimen is centrifuged, applied to a phenyl cartridge, washed, and eluted. The extract is dried under nitrogen, reconstituted with assay buffer and measured for AVP by RIA.
References:	Mayo Medical Laboratories October 2014
Updates:	2/26/2004: Test moved from Specialty Laboratories to Mayo Medical Labs.