



CPAL

Central Pennsylvania Alliance Laboratory

Technical Bulletin

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Inhibin A Tumor Marker Available

Starting Date:

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Contact:

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Explanation:

Currently Inhibin A is assayed at CPAL using the Diagnostic Systems Laboratories, Inc. (DSL) Active® Inhibin A Enzyme-Linked Immunosorbant Assay (ELISA) as one of four analytes measured in the prenatal quadruple marker screen. The measurement of Inhibin A may also be useful for *in vitro* use as an aid in the diagnosis and monitoring of various hormonal reproductive disorders and **can now be ordered separately from the quad screen.**

Background:

Inhibins are heterodimeric protein hormones secreted by granulosa cells of the ovary in the female and Sertoli cells of the testis in the male. They selectively suppress the secretion of pituitary follicle stimulating hormone (FSH) and also have local paracrine actions in the gonads. The fully processed form of the Inhibin molecule has a molecular weight of approximately 32kD and consists of the two distinct chains (α and β), linked by sulfide bridges. Higher molecular weight forms, with precursor forms of the α -subunit, also occur in follicular fluid and serum. In addition, free α -subunit form, unassociated with a β -subunit, and lacking Inhibin bioactivity, are also present.

Inhibin A consists of an α -subunit and a β_A -subunit. Measurements of Inhibin A are shown to be useful in studying its role in human reproductive physiology. Several published report indicate the utility of Inhibin A measurement as an endocrine marker for monitoring ovarian function. Until, recently it was not possible to distinguish between circulating functional dimeric Inhibin and free α -subunit in the normal menstrual cycle. However, by using the highly characterized pair of antibodies, the DSL two-site sandwich ELISA is found to be able to specifically measure only the dimeric Inhibin A.

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For questions about this and other information, call Central Pennsylvania Alliance Laboratory at 1-888-480-1422.

Reference Ranges for Inhibin A:

Females

Premenopausal: Less than 98 pg/ml

Postmenopausal: Less than 10 pg/ml

Males

Less than 21 pg/ml

Important Additional Notes:

- An Inhibin A level within the reference ranges does not rule out malignancy.
- This test is performed using the DSL ACTIVE (R) Inhibin-A ELISA method that has been approved by the FDA strictly for *in vitro* use as an aid in the diagnosis and monitoring of various hormonal reproductive disorders.
- The Inhibin A test should not be used as a diagnostic procedure for granulosa cell tumors without confirmation of the diagnosis by another established product or procedure.
- A diagnosis of malignancy should be based on cytologic and/or histologic criteria taking the entire clinical setting into account.
- Inhibin A values will vary within the reference range during various stages of the menstrual cycle in normally cycling females.
- Test results may vary by laboratory; therefore, for trending purposes, use sequential results from a single source.