

Name of the test

Inhibin B

Alternative name(s) of the test

None

What is this test used for?

Inhibins are hormones; in women they are secreted by granulosa cells of the ovary and in men - by Sertoli cells of the testis.

Inhibins suppress secretion of FSH. Their molecule consists of two subunits - alpha subunit and beta A or beta B subunit. So, there are two types of inhibins:

1. Inhibin A - consists of alpha and beta A subunits;
2. Inhibin B - consists of alpha and beta B subunits.

This test measures the amount of inhibin B in the blood.

Inhibin B is mainly produced by small developing follicles. The level of inhibin B is significantly increased during the follicular phase of menstrual cycle and decreases by the end of this phase. The levels become elevated again for a short period during the midcycle. The levels are low during the luteal phase of the cycle.

Inhibin B levels are very low or undetectable at menopause.

When is the test ordered?

Inhibin B test may be ordered to:

- evaluate infertility
- assess ovarian reserve
- diagnose certain types of ovarian cancer and monitor their treatment

Inhibin B levels are elevated about 60-fold over the normal range in 89-100% of patients with ovarian granulosa cell tumors.

The amount of inhibin B is also increased in 55-60% of patients with epithelial tumors of the mucinous type.

Inhibin B cannot be used as a marker for other types of tumors, but in the above mentioned cases, it shows better performance compared to CA 125.

It has to be noted, that using inhibin B as a marker has some limitations, as its levels fluctuate during the menstrual cycle and because of that, interpretation of the test results and linking them with presence of tumor is difficult.

Inhibin B test is also used to evaluate ovarian reserve and it is often performed with other tests (FSH and AMH tests) to find the causes of infertility.

As a woman ages, ovarian reserve becomes decreased as well. The lower the reserve, the lower the chance of conception or successful in-vitro fertilization.

Inhibin B levels are also low in men with infertility and abnormal spermatogenesis.

How is this test performed?

A blood sample is taken.

How to prepare for the test

It is essential to contact your doctor and get detailed information about the test, including about any preparation needed.

Interpretation of results

Inhibin B levels fluctuate during the menstrual cycle and so before menopause, the results should be interpreted with caution.

Inhibin B levels are elevated in 89-100% of patients with ovarian granulosa cell tumors and in 55-60% with epithelial tumors of the mucinous type. Normal levels of inhibin B do not rule out presence of a tumor.

Inhibin B test can be also used to monitor the patients who have been diagnosed with ovarian cancer. After successful treatment inhibin B levels are very low or undetectable. If the levels become high again, this may be a sign of recurrence and in this case, abnormal amounts of inhibin B are seen before there is any clinical symptom of the disease. Inhibin B levels are normal during remission.

It is impossible to diagnose or rule out cancer based only on inhibin B test results.

When this test is performed to evaluate infertility, low level of inhibin B indicates decreased ovarian reserve.