Lab Dept:	**Serology**
Test Name:	**INTRINSIC FACTOR BLOCKING ANTIBODY**

General Information

Lab Order Codes:	IFB
Synonyms:	Anti-Intrinsic Factor; IF Blocking; Intrinsic Factor Blocking Ab, Serum; Type I Intrinsic Factor Antibody
CPT Codes:	86340 – Intrinsic factor antibodies
Test Includes:	Intrinsic Factor Blocking Antibody reported as Negative, Indeterminate or Positive.

Logistics

Test Indications:	Useful in confirming the diagnosis of pernicious anemia.
Lab Testing Sections:	Serology - Sendouts
Referred to:	Mayo Medical Laboratories (MML Test: IFBA)
Phone Numbers:	MIN Lab: 612-813-6280 STP Lab: 651-220-6550
Test Availability:	Daily, 24 hours
Turnaround Time:	1 - 3 days, test is set up Monday - Saturday
Special Instructions:	This test should not be ordered on patients who have received a radioisotope (either diagnostically or therapeutically) or vitamin B 12 injection within the last 2 weeks.

Specimen

Specimen Type:	Blood
Container:	SST (Gold, marble or red)
Draw Volume:	3 mL (Minimum: 1.5 mL) blood
Processed Volume:	1 mL (Minimum: 0.5 mL) serum
Collection:	Routine blood collection

Special Processing:	Lab Staff: Centrifuge specimen and refrigerate serum in a screw top plastic vial. Ship specimen at refrigerated temperatures. Forward promptly.
Patient Preparation:	This test should not be ordered on patients who have received a radioisotope (either diagnostically or therapeutically) or vitamin B injection within the previous week.
Sample Rejection:	Warm/ambient specimens; specimens other than serum; mislabeled or unlabeled specimens; gross hemolysis

Interpretive

Reference Range:	Negative (reported as positive, negative, or indeterminate) Reference values apply to all ages.
Critical Values:	N/A
Limitations:	Do not order IFBA testing in patients who have received a vitamin B12 injection within the last 2 weeks. High free serum vitamin B12 levels, as may be seen within the first 2 weeks after a vitamin B12 injection, can interfere in the IFBA assay, leading to false-positive results. In spiking experiments, the minimum concentration of free B12 that will cause as significant increment in measured IFBA values is 444 ng/L. This corresponds approximately to a total serum vitamin B12 level (bound and free) of > or =800 ng/L to 1,000 ng/L in a real patient specimen. We therefore reflex all positive IFBA tests that have not been ordered through the Pernicious Anemia Cascade to vitamin B12 measurement. If this yields a level >800 ng/L, we append a comment to the report indicating a possible false-positive result. Some patients with other autoimmune diseases may have positive IFBA assays without suffering from Pernicious Anemia. This is reported in particular patients with autoimmune thyroid disease or type I diabetes mellitus. In the validation of this assay, 24 individuals with these autoimmune endocrine diseases were tested, and all were IFBA negative. However, 5 of 15 patients with rheumatoid arthritis were IFBA positive during the validation of this assay. The literature suggests such individuals may in fact be at risk of later development of Pernicious Anemia. Since this is a competitive assay, the risk of heterophile antibody interference is low. During validation, 24 human anti-mouse antibody (HAMA) positive specimens and 25 specimens with other heterophile antibodies were tested and all were IFBA negative. However, if the clinical picture does not agree with the IFBA test result, the laboratory should be consulted for advice.
Methodology:	Immunoenzymatic assay
Contraindications:	This test is not to be used if the patient has received radioisotopes or B12 injection within the last 2 weeks.

References: Mayo Medical Laboratories Web Page January 2018

Updates:
1/9/2006: Method change previously listed as RIA.
6/21/2010: Storage temp changed from frozen to refrigerate.
1/17/2018: Collection container update.