





Pernicious Anaemia Screen

Synonyms	PA, GPC, GPCA, gastric parietal cell antibodies, Intrinsic factor antibodies
Clinical Indication	Used in patients with signs and symptoms of Vitamin B12 deficiency e.g. fatigue, paraesthesia, glossitis, mood changes, megaloblastic anaemia, etc. Patients with atrophic gastritis should also be tested. This test comprises indirect immunofluorescence test for gastric parietal cell antibodies and ELISA for intrinsic factor antibodies.
Part of Profile / See Also	Screening test for detection of IgG autoantibodies against gastric parietal cells and intrinsic factor.
Request Form	Combined Pathology manual request form or ICE request
Availability / Frequency of Analysis	Gastric parietal cell antibody assay performed daily Monday to Friday Intrinsic factor antibody assay performed 3 times a week
Turnaround Time	Tests are performed on the next routine working day after receipt of the sample
Patient Preparation	None required
Sample Requirements	*Please note a separate sample is required when Immunology tests are requested in addition to Biochemistry tests*
Specimen Type	Serum
Volume	2 ml
Container	 Yellow top (SST) tube  Paediatric Yellow top (SST) tube
Reference Range & Units	Gastric parietal cell antibodies: Sera are screened at a dilution of 1:40 (paediatric samples at 1:10). Results are reported as Negative, Weak Positive or Positive Intrinsic factor antibodies: Results are reported as Positive or Negative
Interferences	Azide and other preservatives will adversely affect the results. Grossly haemolysed or lipaemic samples should be avoided.
Interpretation & Clinical Decision Value (if applicable)	Gastric parietal cell and intrinsic factor negative: Does not support a diagnosis of Pernicious Anaemia Gastric parietal cell positive, intrinsic factor negative: A positive gastric parietal cell result in isolation is a non-specific marker of autoimmune disease

including Pernicious Anaemia. However in the absence of intrinsic factor antibodies, Pernicious Anaemia is less likely. Suggest checking B12 levels.

Gastric parietal cell and intrinsic factor positive: Suggestive of Pernicious Anaemia. However, this result should be interpreted in the context of clinical findings.

References

Devalia *et al.* Guidelines for the diagnosis and treatment of cobalamin and folate disorders. *British Journal of Haematology*, 2014, 166, 496–513

Test code

PERS

Lab Handling

Aliquot and store at 4-8°C prior to testing and at -20°C or below for up to 1 month after receipt.