

## Alpha-Fetoprotein (tumour marker)

Please note that for monitoring purposes results from Basildon and Southend are comparable, but results from other laboratories may differ due to methodological differences

### Synonyms

AFP

### Clinical Indication

AFP tumour production mainly confined to 3 malignancies: Non-seminomatous germ cell tumours (NSGCT) of testis, ovary and other sites, hepatocellular carcinoma and hepatoblastoma (in children, extremely rare in adults). In addition, AFP may be occasionally elevated in patients with various adenocarcinomas.

In cirrhosis or chronic hepatitis to rule out hepatocellular carcinoma. Known or clinically suspected hepatocellular or testicular carcinoma. AFP should not be used to screen for liver metastasis.

### Part of Profile / See Also

N/A

### Request Form

Combined Pathology manual Blood form or ICE request

### Availability / Frequency of Analysis

On request if specific criteria met or requested by a Consultant Gastroenterologist.

### Turnaround Time

Same day (Monday to Friday)

### Patient Preparation

Samples should not be taken from patients receiving therapy with high biotin doses (i.e. > 5 mg/day) until at least 8 hours following the last biotin administration.

### Sample Requirements

#### Specimen Type

Serum

#### Volume

1 ml

#### Container



Yellow top (SST) tube



Or paediatric orange top (lithium-heparin)

### Reference Range & Units

<7.4 ku/L

### Interferences

None

### Interpretation & Clinical

Half-life in serum is approx. 5 days.

### Decision Value (if applicable)

AFP elevated in 70-90% of patients with hepatocellular cancers with levels

between 1,000 and 100,000, and 40-60% of patients with germ cell tumours of the testis. Benign conditions associated with elevated AFP include hepatitis, cirrhosis, biliary tract obstruction, alcoholic liver disease and ataxia telangiectasia.

Rate of change of AFP level is important, an increasing rate suggests malignancy in the liver.

AFP levels in term babies may be up to 100,000. Levels decline to adult reference range at 6 months. (ref: ARUP laboratories).

Roche Method insert

## References

## Test code

TAFP

## Lab Handling

Analysed from primary tube and stored at 4°C. Sample stable for 7 days at 2 - 4°C.