



Accredited to
ISO 15189:2022

Magnesium

Synonyms

Mg

Clinical Indication

Investigation of low potassium levels, bone abnormalities, patients with D&V or fluid abnormalities. Disorders of suspected magnesium depletion such as refeeding, treatment of DKA, malabsorption, renal replacement therapy and hyperparathyroidism. Suspected magnesium excess including renal failure, tumour lysis syndrome and monitoring of magnesium replacement therapy.

Part of Profile / See Also

Request Form

Combined Pathology manual Blood form or ICE request

Availability / Frequency of Analysis

On request

Turnaround Time

2 hours

Patient Preparation

None required

Sample Requirements

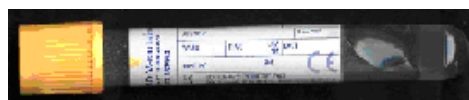
Specimen Type

Serum and plasma

Volume

2 ml

Acceptable Containers



Yellow top (SST) tube



Green top (lithium-heparin) tube



paediatric orange top (lithium-heparin)



paediatric green top (lithium-heparin)

Plain serum samples may also be used.

Reference Range & Units

<30 days old = 0.6 -1.0 mmol/L
>30 days = 0.7-1.0 mmol/L

Interferences

Haemolysed samples should not be used as erythrocytes contain higher concentrations of magnesium than serum. Serum should be separated from the clot or red blood cells as soon as possible to prevent an increase in

magnesium concentrations due to leakage from the red cells.

Interpretation & Clinical**Decision Value (if applicable)**

Critical Difference 16%

Critical phoning limit <0.4 mmol/L

>4.0 mmol/L (only in obs & gynae or during pregnancy)

References

Beckman kit insert

Pathology Harmony Group, Clinical Biochemistry Outcomes, January 2011

(www.pathologyharmony.co.uk)

Test code

MG

Lab Handling

Analysed from primary tube and stored at 4°C.

Serum and plasma stable for 7 days at 4°C.