**Specimen:**

<table>
<thead>
<tr>
<th>Adult</th>
<th>Pediatric</th>
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</table>
| 4.5 mL Green (Lithium Heparin) top Vacutainer tube | 0-2 years: 0.5 mL Green top Microtainer  
2-10 years: 2 mL Green top Vacutainer tube |

**Collection Information:**

Collect blood aseptically in a Vacutainer tube.

Minimum volume required for a pediatric sample is 0.2 mL

**Reference Ranges:**

0.65-1.05 mmol/L

**Interpretive Comments:**

Useful in the diagnosis of hypomagnesaemia as the cause of unexplained cardiac arrhythmias, tetany, neuromuscular disorders, and refractory hypocalcaemia/hypokalaemia.

Useful to monitoring magnesium sulphate during anticonvulsant therapy (especially in pre-eclampsia) or therapy causing renal magnesium loss (e.g. cisplatinum).

Plasma/serum magnesium levels do not correlate well with intracellular levels, thus this test is not sensitive for detecting chronic deficiency because of compensatory contributions from bone.

Levels fall rapidly in response to reduced intake and may not reflect tissue levels.

**Comments:**
Reference Ranges are based on Non-Occupationally exposed population.