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| **Carbamazepine** | | | |
| **Synonyms** | |  | Tegretol |
| **Clinical Indication** | |  | Carbamazepine (CBZ) is an anti-epileptic drug, used for tonic-clonic seizures. Monitoring may assist dose changes. Concomitant therapy may affect levels by inducing liver metabolism.  Used for patients on carbamazepine therapy.  In overdose cases an information sheet is available from the National Poisons Service ([Toxbase](https://www.toxbase.org/" \t "_blank)) |
| **Part of Profile / See Also** | |  |  |
| **Request Form** | |  | Combined Pathology manual Blood form or ICE request |
| **Availability / Frequency of Analysis** | |  | On request  Carbamazepine analysis available at Southend and Basildon Hospital only. |
| **Turnaround Time** | |  | Same day |
| **Patient Preparation** | |  | Time of collection is not critical but due to the relatively short half-life CBZ levels can vary quite markedly across the dosage interval; collection at a similar time, usually before next dose, may help long-term monitoring. |
| **Sample Requirements** | |  |  |
| **Specimen Type** |  | Serum |
| **Volume** |  | 1 ml |
| **Container** |  | Yellow top (SST) tube  Or  Paediatric green top (lithium-heparin)  Or  Paediatric orange top (lithium heparin) |
| **Reference Range & Units** | |  | 4 - 12 mg/L  Ref: Pathology Harmony  Unit Conversion: To convert from umol/L to mg/L multiply by 0.236 |
| **Interferences** | |  |  |
| **Interpretation & Clinical**  **Decision Value (if applicable)** | |  | Dizziness and visual disturbances are increasingly frequent at CBZ levels above 10 mg/L. A generalized erythematous rash may occur in 3-5% of patients. Long-term effects are few but water retention and hyponatraemia may occur as a late complication |
| **References** | |  |  |
| **Test code** | |  | CARB |
| **Lab Handling** | |  | Analysed from primary sample and stored at 4°C |

