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| Protein Electrophoresis | | |
| **Synonyms** |  | SPE, EPS, SEP |
| **Clinical Indication** |  | Investigation and monitoring of myeloma and other B cell dyscrasias. Investigation of high serum globulin level, low immnoglobulins or low globulin levels in conjunction with urine BJP investigations and serum free light chains.  For investigation of suspected alpha-1 antitrypsin deficiency please request alpha-1 antitrypsin level. Not to be used for the investigation of IgG4 disease. |
| **Part of Profile / See Also** |  |  |
| **Request Form** |  | Combined Pathology manual Blood form or ICE request |
| **Availability / Frequency of Analysis** |  | On request  Minimum retesting interval is 3 months (2 weeks for haematology). |
| **Turnaround Time** |  | Five days. May be longer if additional investigations are required including immunotyping and/or immunofixation. |
| **Patient Preparation** |  | None required |
| **Sample Requirements** |  |  |
| **Specimen Type** |  | Serum |
| **Volume** |  | 2 ml |
| **Container** |  | Yellow top (SST) tube Only  Green-top Lithium heparin tubes are unsuitable for analysis due to the presence of fibrinogen.  Plain serum tubes may also be used |
| **Reference Range & Units** |  |  |
| **Interferences** |  | Haemolysis, monoclonal antibodies |
| **Interpretation & Clinical**  **Decision Value (if applicable)** |  | An interpretative report is issued. Minor non-pathological abnormalities will not be reported. Further investigations will be performed if an abnormal band is found including confirmation and identification by gel immunofixation/immunotyping and paraprotein quantitation. If appropriate a clinical comment is issued by Clinical Biochemists including advise regarding repeat investigations or referral to Clinical Haematology, if applicable |
| **References** |  |  |
| **Test code** |  | SEP |
| **Lab Handling** |  | Store at 4°C. Analysis to be performed ideally within 48 hrs of sample else may result in sample degradation. |