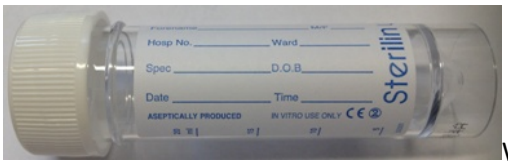
CSF Total Protein

Synonyms	
Clinical Indication	CSF normally contains little protein since serum proteins do not cross the blood-brain barrier. Most of the protein that is normally present is albumin. CSF Protein concentration may rise for two reasons: 1. Increased permeability of blood brain barrier allowing more protein and higher molecular weight proteins to enter the CSF 2. Proteins may be synthesised within the cerebrospinal canal by inflammatory or other invading cells.
Part of Profile / See Also	
Request Form	Combined Pathology manual Blood form or ICE request
Availability / Frequency of Analysis	On request
Turnaround Time	Same day
Patient Preparation	None required
Sample Requirements	
Specimen Type	CSF
Volume	Minimum of 0.5 ml.
Container	 White Capped Universal.
Reference Range & Units	<1m (0.15 - 1.30) >1m (0.15 - 0.45) Reference: Beckman kit insert The normal CSF protein concentration ranges from 0.23 to 0.38 g/L in adults. CSF protein concentrations in premature and term neonates normally range between 0.2 and 1.7 g/L. The CSF protein concentration may be mildly elevated in patients with diabetes mellitus.
Interferences	CSF protein results on bloodstained samples are unreliable. Samples are not analysed and a comment is issued on the report indicating unsuitable for analysis
Interpretation & Clinical Decision Value (if applicable)	Elevations in CSF total protein concentration can occur in both infectious and non-infectious conditions, including conditions associated with obstruction of CSF flow. CSF protein can also be elevated by a subarachnoid haemorrhage or a traumatic LP. CSF total protein elevations may persist for weeks or months following recovery from meningitis and have little utility in assessing cure or the response to therapy
References	Greenlee JE, Carrol KC. Cerebrospinal fluid in CNS infections. In: Infections of the Central Nervous System, 2nd ed, Scheld WM, Whitley RJ, Durack DT (Eds), Lippincott-Raven Publishers, Philadelphia 1997.

Sarff LD, Platt LH, McCracken GH. CSF evaluation in neonates: comparison of high-risk infants with and without meningitis. J Pediatr. 1976;88(3):473.
Beckman kit insert.

Test code	CTP
Lab Handling	Centrifuge universal and aliquot. Store at -20°C. Samples stable for 6 days at 4°C.