

CSF protein

Description	Total protein concentration of the cerebrospinal fluid.
Indication	Often measured in suspected CNS infections such as meningitis and in suspected cerebral or subarachnoid haemorrhages.
Additional Info	80% of proteins found in CSF in health originate from the serum and enter the fluid by ultrafiltration/pinocytosis across the capillary endothelium and 20% by intrathecal synthesis. The lowest concentration of protein is found in ventricular fluid and increases down to the lumbar region of the spine. Diseases that interrupt the integrity of the endothelium or reduce the flow of CSF can cause an increase in CSF protein including tumours, infection, trauma, infarction, inflammation and high intracranial pressure.
Concurrent Tests	Serum total protein. Often requested along with CSF glucose. Should be measured as part of CSF xanthochromia request.
Dietary Requirements	N/A
Interpretation	Reference range 0.15 – 0.45 g/L Interpret in conjunction with CSF glucose for diagnosis of bacterial infections (meningitis). Presence of blood invalidates analysis.
Collection Conditions	N/A
Frequency of testing	As required.