



**Mr. OMPARKASH GOYAL**  
 AMBALA, CHEMBUR  
 Tel No : 8607344999  
 PIN No: 133001  
 PID NO: P542100570353  
 Age: 50.0 Year(s) Sex: Male



**Reference: Dr.VINAY CHOPRA**  
 Sample Collected At:  
 Dr vinay kumar chopra  
 Kos diagnostic lab, 6349/i, nicholson road,  
 ambala cantt, hry 133001.  
 PROCESSING LOCATION:- Metropolis  
 Healthcare Ltd, Unit No. 409- 416, 4th  
 Floor, Commercial Building-1, Kohinoor  
 Mall, Mumbai-70

**VID: 54213320015820**  
 Registered On:  
 16/06/2021 04:23 PM  
 Collected On:  
 18/06/2021 3:36AM  
 Reported On:  
 20/06/2021 10:52 PM

<u>Investigation</u>	<u>Observed Value</u>	<u>Unit</u>	<u>Biological Reference Interval</u>
<b><u>Beta-Trace protein(BTP) CSF leakage in body fluid*</u></b>			
<b>Beta Trace protein in fluid</b> (Body Fluid,Nephelometry)	<b><u>50.5</u></b>	mg/L	< 1.11
<b>Beta Trace protein in serum</b> (Serum,Nephelometry)	<b><u>1.16</u></b>	mg/L	< 0.70
<b>BTP Fluid / BTP serum Ratio</b>	<b><u>43.53</u></b>		< 4.9

**Interpretation -**

- Beta-Trace protein(BTP)-also known as prostaglandin D2 synthase.it is mainly synthesized in the central nervous system and forms one of the principal constituents of CSF. It is the second most abundant protein in CSF and has the highest CSF/serum ratio(34:1) of all CSF proteins, making BTP a very specific marker for CSF.
- Due to the significantly higher concentration of BTP in CSF ,a leakage even when masked with blood –will show a concentration above the highest normal serum concentration.
- A negative BTP result rules out leakage ,while a positive result(>1.11 mg/l) and BTP secretion/serum ratio(>4.9) requires additional studies like CT,MRI to localize and treat the disruption of the blood-brain membrane.
- BTP provides a quick, easy ,and accurate alternative to Beta2 transferrin for screening and detection of CSF leakage, enabling rapid clinical decision making.
- at a cut off 1.11 mg/l ,the specificity was 100% with a sensitivity of 93%.
- This assay when compared with electro immunoassay (Electrophoresis) has 92% sensitivity.
- A limitation of the Beta trace protein assay is that in patients with renal insufficiency and bacterial meningitis levels may substantially increase in serum and decrease in CSF respectively .Hence its use in such instances should be associated with cautious interpretation of the results.

**-- End of Report --**