**PROTEIN, URINE**

**Orderable - PRU**

**Turn Around Time:** 4 hours  
**STAT:** 1 hour

**Specimen:**

Random urine

**Collection Information:**

Collect a minimum of 5 mL of random urine in a sterile container.

**Reference Ranges:**

<table>
<thead>
<tr>
<th>Reference range for urine protein:</th>
<th>0.0 – 0.15 g/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference ranges for protein:creatinine ratio:</td>
<td></td>
</tr>
<tr>
<td>Children and adults:</td>
<td>&lt;23 mg/mmol creatinine</td>
</tr>
<tr>
<td>Pregnant women:</td>
<td>&lt;30 mg/mmol creatinine</td>
</tr>
</tbody>
</table>

**Interpretive Comments:**

Useful in the evaluation of renal disease.
Screening for monoclonal gammopathy.
Increased amounts of protein in the urine may be due to:
(1) Glomerular proteinuria: caused by defects in the glomerular filtration barrier permeability (e.g. glomerulonephritis or nephrotic syndrome);
(2) Tubular proteinuria: inadequate tubular reabsorption of proteins (e.g. interstitial nephritis);
(3) Overflow proteinuria: caused by increased plasma concentration of protein(s) (e.g. multiple myeloma, myoglobinuria); and
(4) Urinary tract inflammation or tumour

**Comments:**

Contamination of urine with menstrual blood, prostatic secretions, or semen may contribute to increased urine protein levels (false-positives).