
Lab Dept: Chemistry

Test Name: GASTRIC PEPSIN ASSAY

General Information

Lab Order Codes: PEPAS

Synonyms: Gastric Pepsin A; Pepsin A

CPT Codes: 83516 – Immunoassay for analyte other than infectious agent antibody or infectious agent antigen; qualitative or semiquant, multiple step method
84157 – Protein, other source
82657 – Enzyme activity in blood cells, cultured cells, or tissue, not elsewhere specified; nonradioactive substrate, each specimen

Test Includes: pH, Protein reported in mg/mL, Pepsin A Units reported in ng/mL

Logistics

Test Indications: Gastric pepsin detected in the airway of patients is a specific and sensitive marker to assess pulmonary aspiration.

Lab Testing Sections: Chemistry – Sendouts

Referred to: Mayo Clinic Laboratories, forwarded to Nemours Children's Health-Gastroenterology (MML Test: FPEPA)

Phone Numbers: MIN Lab: 612-813-6280
STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 2 days, test performed Monday - Thursday

Special Instructions: N/A

Specimen Type: Tracheal or Bronchial Fluid
(BAL, Bronchial Brushing, Bronchial Washing, Bronchial Fluid and Tracheal Fluid are acceptable)

Container: Screw-capped vial

Draw Volume: 1 mL (Minimum: 0.5 mL) tracheal or bronchial fluid

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| Processed Volume: | Same as Draw Volume. |
| Collection: | <p>Tracheal aspirate: Attach a LUKI trap to a suction catheter, pass the catheter down the endotracheal tube, and apply suction to the catheter as the catheter is withdrawn. If the secretion is too thick to be withdrawn, instill saline (2 mL) to the tracheal tube prior to aspirating the secretion.</p> <p>Bronchial Fluid: Bronchial secretion can be collected using a standard collection protocol.</p> <p>Avoid over-diluting specimen with a large amount of saline during collection.</p> <p>Transfer to a small, tightly capped plastic tube immediately after collection. Send to lab.</p> |
| Special Processing: | <p>Lab Staff: Send 1 mL (Minimum: 0.5 mL) in a tightly capped vial. Freeze as soon as possible. Forward to reference lab at frozen temperatures.</p> <p>Frozen specimen is stable for 30 days.</p> |
| Patient Preparation: | N/A |
| Sample Rejection: | Specimens received not frozen by reference lab; mislabeled or unlabeled specimens. |

Interpretive

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| Reference Range: | <p>Pepsin A Reference Range (ng/mL):</p> <p><12.5 negative 12.5-100 weak to moderate positive >100 strong positive</p> <p>Protein Unit: mg/mL Pepsin A Unit: ng/mL</p> |
| Critical Values: | N/A |
| Limitations: | N/A |
| Methodology: | Enzymatic method |
| References: | Mayo Clinic Laboratories June 2025 |
| Updates: | <p>8/10/2017: CPT update to include pH and protein</p> <p>4/2/2024: Updated reference range, CPT code, methodology, and turnaround time. Clarified acceptable specimen types. Added specimen stability.</p> <p>6/18/2025: Updated turnaround time, display name, days performed.</p> |

