Clinical Use
• Diagnose somatostatin-producing tumors

Reference Range
Adults 10-22 pg/mL

Interpretive Information
• Somatostatinoma
• Medullary thyroid carcinoma
• Pheochromocytoma
• Following vagotomy

Clinical Background
Somatostatin, also referred to as somatotropin release inhibiting factor (SRIF), is a neurohormone produced as a 14-amino acid peptide in the brain and hypothalamus and as a 28-amino acid N-extended product in the gastrointestinal tract. In the pituitary gland, SRIF inhibits secretion of growth hormone, TSH, and, under certain conditions, prolactin and ACTH. It exerts inhibitory effects on all endocrine and exocrine secretions of the pancreas and gut and a variety of endocrine-secreting tumors including insulinomas, glucagonomas, VIPomas, carcinoid tumors, and gastrinomas. Pancreatic somatostatinomas cause mild diabetes mellitus, cholelithiasis, steatorrhea, indigestion, and hypochlorhydria secondary to the inhibitory effects of secreted SRIF. SRIF may also be secreted by medullary thyroid carcinomas or pheochromocytomas.

Method
• Extraction and radioimmunoassay (RIA)
• Analytical sensitivity: 10 pg/mL

Specimen Requirements
1.8 mL frozen EDTA plasma
0.6 mL minimum
Draw in pre-chilled lavender-top tube. Separate and freeze plasma immediately.