Vasoactive Intestinal Polypeptide (VIP)

**Clinical Use**
- Diagnose watery diarrhea syndrome (WDS)
- Assess patients with suspected multiple endocrine neoplasia (MEN)

**Reference Range**
Adults and children <50 pg/mL

**Interpretive Information**
- VIPoma/watery diarrhea syndrome
- MEN type 1

**Clinical Background**
Vasoactive intestinal polypeptide (VIP) is a 28-amino acid neuropeptide produced by neural stimulation in a variety of tissues. It has broad biological effects on the cardiovascular, gastrointestinal, and respiratory systems. These effects include increased secretion of bicarbonate and electrolytes and decreased absorption of electrolytes and water.

VIPomas can occur as part of the type 1 multiple endocrine neoplasia (MEN) syndrome. VIP is the principal mediator of the watery diarrhea syndrome (also known as pancreatic cholera, Werner-Morrison syndrome, or diarrheogenic islet cell tumor). Watery diarrhea syndrome, with elevated VIP, has also been associated with neurogenic tumors (ganglioneuroma, neuroblastoma, pheochromocytoma), bronchogenic tumors, and islet cell hyperplasia.

**Method**
- Extraction, radioimmunoassay (RIA)
- Analytical sensitivity: 12.5 pg/mL

**Specimen Requirements**
- 3 mL frozen EDTA plasma
- 1.1 mL minimum