

ENTERIC NERVOUS SYSTEM (ENS)

Intrinsic Gastrointestinal Innervation – Technical Reference Chart

[DIAGRAM: CROSS-SECTION OF INTESTINAL WALL SHOWING PLEXUS LAYERS]

Myenteric Plexus

Auerbach's Plexus

Located between the longitudinal and circular muscle layers. Primary function involves the coordination of GI motility and peristaltic contractions.

Submucosal Plexus

Meissner's Plexus

Located in the submucosa layer. Regulates local epithelial transport, secretion of enzymes, and regional blood flow.

Functional Parameters

Neuron Count

Approx. 200-600 Million

Neurotransmitters

ACh, NO, VIP, Serotonin, GABA

Afferent Types

IPANs (Intrinsic Primary Afferents)

Autonomy

Independent of CNS (Vagus modulation)

Reflex Arcs

Peristaltic, Secretomotor, Vasomotor

REF: ENS-TECH-004 // NEUROGASTROENTEROLOGY DEPARTMENT // PRINTABLE SCHEMATIC