

Localization of Biogenic Amines in the Foregut of *Aplysia californica*: Catecholaminergic and Serotonergic Innervation

Clarissa Martínez-Rubio, Geidy E. Serrano, and Mark W. Miller*

Supplemental Figure 2. Magenta-green. Corresponds to Text Figure 8.

Fiber tract tracing indicates that aminergic afferents are associated with the proximal foregut. (A1) Biocytin fill (magenta) of the En toward the periphery labeled a few fibers in En1. When examined approximately 1 cm from the buccal ganglion, tyrosine hydroxylase-like immunoreactive fibers (green) and small cell bodies (arrowheads) were prevalent in the region surrounding En1, but no THIi fibers were observed in the nerve itself. (A2) Nerve tracing (red) experiment conducted as in A1, but with serotonin-like immunohistochemistry (green). Image was captured at approximately the same distance from the buccal ganglion as A1. Note comparatively little 5HTli on the esophagus (see Figs. 6 & 7). No 5HTli fibers were detected in En1. (B1) Biocytin fill (red) of the En toward the periphery labeled fibers in En2. Image was captured in the region of the salivary gland (S.G.), using the large peripheral salivary afferent neuron (arrow) as a landmark. Many THIi immnoreactive fibers (green) were present in En2. While the majority of these THIi fibers were not filled by the biocytin, fibers with a yellow appearance (arrowhead) were observed, indicative of the presence of THIi afferents in this region. (B2) Forward-fill (red) conducted in combination with 5HTli labeling (green). Image captured in the same region as B1 (large peripheral salivary afferent neuron, arrow). Note higher level of serotonergic innervation, compared to more posterior foregut regions, e.g. image A2. Several serotonergic fibers were present in En2, including a few (arrowhead) that had a yellow appearance, indicative of double labeling. Calibration bar = 100 um, applies to all panels.