

### **Supplemental Figure Legends:**

**Figure 1:** Representative thionin-stained coronal sections through NTS of a rat that was injected with 100% DMSO into the 4<sup>th</sup> ventricle 20 min before transcardial perfusion with PBS followed by 4% paraformaldehyde.

**Figure 2:** Representative images of coronal sections through NTS of rats that received 4<sup>th</sup>-ventricle injection of either saline (A) or 66% DMSO and 3.4% hydroxypropyl- $\beta$  cyclodextrin in sterile deionized water (B) prior to IP injection of 5  $\mu$ g/kg amylin 90 min before transcardial perfusion with PBS followed by 4% paraformaldehyde. These sections were immunostained for dopamine beta-hydroxylase (DbH, green) and c-Fos (red). Rats treated with 4<sup>th</sup>-icv DMSO had previously been in a behavioral study in which they received at least two 4<sup>th</sup>-icv DMSO and SB334867 (dissolved in the DMSO vehicle) injections. DMSO treatment had no impact on DbH expression or c-Fos induction by amylin. DMV = dorsal motor nucleus of the vagus nerve.