Neurotensin is a tridecapeptide that exhibits antinociceptive, pro-inflammatory, and gastrointestinal motility modulating activities. Neurotensin induces contractions in smooth muscle cells, playing a role in regulating digestive activity in vitro and in vivo. Additionally, neurotensin induces intracellular Ca2+ release, activating non-selective cation channels and altering pacemaker currents involved in gastrointestinal and colonic motility. In animal models, neurotensin displays sympathoinhibitory activity, decreases blood pressure and heart rate. Neurotensin exerts its actions through activation of neurotensin receptors; activation of these receptors also stimulates orexin neurons, suggesting a role for neurotensin in mediation of reward, feeding, and wakefulness.