

Galanin receptors in GtoPdb v.2025.3

Andrew L. Gundlach¹ and Philip J. Ryan¹

1. University of Melbourne, Australia

Abstract

Galanin receptors (**provisional nomenclature as recommended by NC-IUPHAR [57]**) are activated by the endogenous peptides [galanin](#) and [galanin-like peptide](#). Human [galanin](#) is a 30 amino-acid non-amidated peptide [52]; in other species, it is 29 amino acids long and C-terminally amidated. Amino acids 1-14 of galanin are highly conserved in mammals, birds, reptiles, amphibia and fish. Shorter peptide species (*e.g.* human galanin-1-19 [21] and porcine galanin-5-29 [171]) and N-terminally extended forms (*e.g.* N-terminally seven and nine residue elongated forms of porcine galanin [22, 171]) have been reported. More recently, the newly-identified peptide, spexin (SPX), has been reported to activate human GAL2 and GAL3 (but not GAL1) receptors in heterologous expression systems; and to alter GAL2/3 receptor-related behaviours in animals [90]. Galanin and spexin neuropeptides are important regulators of energy homeostasis [58].

Contents

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