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Cholecystokinin receptors in GtoPdb v.2023.1

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Abstract

Cholecystokinin receptors (**nomenclature as agreed by the NC-IUPHAR Subcommittee on CCK receptors [90]**) are activated by the endogenous peptides cholecystokinin-8 (CCK-8), CCK-33, CCK-58 and gastrin (gastrin-17). There are only two distinct subtypes of CCK receptors, CCK_1 and CCK_2 receptors [64, 124], with some alternatively spliced forms most often identified in neoplastic cells. The CCK receptor subtypes are distinguished by their peptide selectivity, with the CCK_1 receptor requiring the carboxyl-terminal heptapeptide-amide that includes a sulfated tyrosine for high affinity and potency, while the CCK_2 receptor requires only the carboxyl-terminal tetrapeptide shared by each CCK and gastrin peptides. These receptors have characteristic and distinct distributions, with both present in both the central nervous system and peripheral tissues.

Contents

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CCK_2 receptor

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