

Parathyroid hormone receptors in GtoPdb v.2025.3

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Abstract

The parathyroid hormone receptors (**nomenclature as agreed by the NC-IUPHAR Subcommittee on Parathyroid Hormone Receptors [50]**) are class B G protein-coupled receptors. The parathyroid hormone (PTH)/parathyroid hormone-related protein (PTHrP) receptor (PTH1 receptor) is activated by : [PTH](#) (84 amino acids), and [PTHrP](#) (141 amino-acids) and related N-terminal peptides (PTH-(1-34), [PTHrP-\(1-36\)](#)). The parathyroid hormone 2 receptor (PTH2 receptor) is activated by the precursor-derived peptide [TIP39](#) (39 amino acids) and PTH. [¹²⁵I]PTH may be used to label both PTH1 and PTH2 receptors. The structure of a long-active PTH analogue (LA-PTH, an hybrid of PTH-(1-13) and PTHrP-(14-36)) bound to the PTH1 receptor-G_s complex has been resolved by cryo-electron microscopy [150]. Another structure of a PTH-(1-34) analog bound to a thermostabilized inactive PTH1 receptor has been obtained with X-ray crystallography [35].

Contents

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Receptors

PTH1 receptor

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