Prolactin receptor ligands bind the prolactin receptor

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Introduction

Reactome is open-source, open access, manually curated and peer-reviewed pathway database. Pathway annotations are authored by expert biologists, in collaboration with Reactome editorial staff and cross-referenced to many bioinformatics databases. A system of evidence tracking ensures that all assertions are backed up by the primary literature. Reactome is used by clinicians, geneticists, genomics researchers, and molecular biologists to interpret the results of high-throughput experimental studies, by bioinformaticians seeking to develop novel algorithms for mining knowledge from genomic studies, and by systems biologists building predictive models of normal and disease variant pathways.

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Literature references


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Stable identifier: R-HSA-976991

Type: binding

Compartments: extracellular region, plasma membrane

Human PRLR binds at least 3 related peptide ligands namely prolactin, placental lactogen (PL) and growth hormone (GH). In non primates, GH is not able to bind the PRLR. Human GH binding to the PRLR is zinc-dependent (Cunningham et al. 1990). All three ligands bind the extracellular domain and have apparently identical actions. Two disulfide-linked cysteines in the D1 subdomain are involved in ligand binding while the WSXWS motif in the D2 subdomain is probably required for folding and cellular trafficking.

Literature references


Editions

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