# Article information:

Crystal structure of oligomeric β1-adrenergic G protein-coupled receptors in ligand-free basal state - PubMed
<https://pubmed.ncbi.nlm.nih.gov/23435379/>

# Article summary:

1. The crystal structure of the ligand-free basal state of a G protein-coupled receptor (GPCR) in a lipid membrane-like environment has been determined.

2. Oligomeric turkey β1-adrenergic receptors display two dimer interfaces, one involving the transmembrane domain and the other engaging residues from intracellular and extracellular loops.

3. Structural comparisons show that this ligand-free state is in an inactive conformation, providing the structural basis of GPCR dimerization and oligomerization.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article is generally reliable and trustworthy as it provides detailed information about the crystal structure of the ligand-free basal state of a G protein-coupled receptor (GPCR). The authors provide evidence for their claims by presenting figures that illustrate their findings, as well as by comparing their results to those obtained from previous studies. Furthermore, they also present data from experiments conducted to support their conclusions.

However, there are some potential biases in the article that should be noted. For example, the authors do not explore any counterarguments or alternative explanations for their findings. Additionally, they do not discuss any possible risks associated with their research or its implications for future studies. Finally, while they present evidence to support their claims, they do not provide any evidence to refute them or present both sides equally.

# Topics for further research:

* G protein-coupled receptor structure
* GPCR ligand binding
* GPCR structure-function relationships
* GPCR activation mechanisms
* GPCR drug design
* GPCR signaling pathways

# Report location:

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