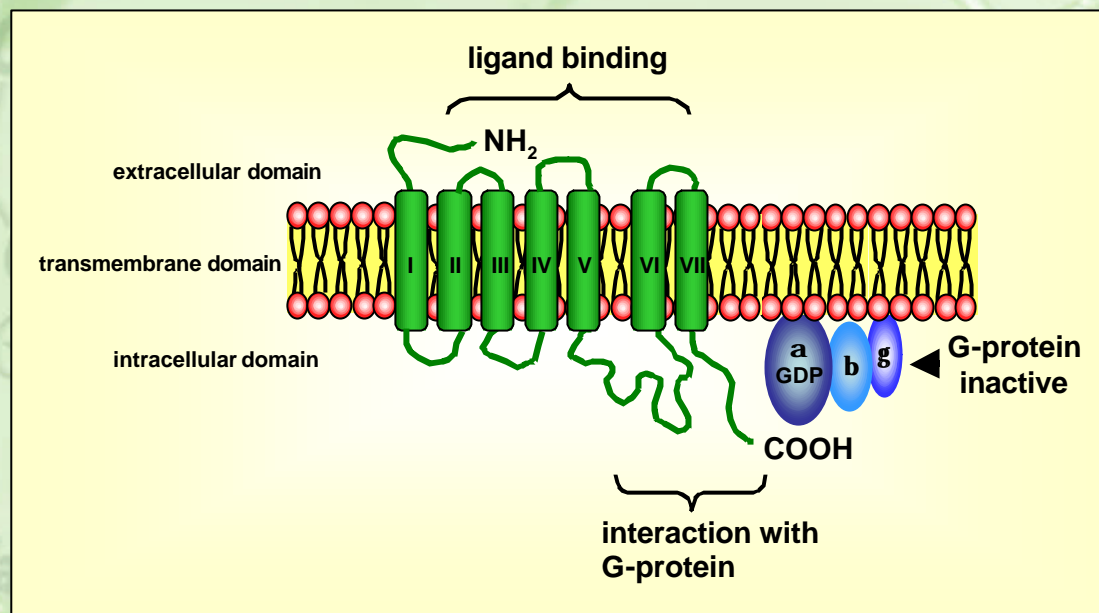


# G-protein coupled receptors – important pharmaceutical targets

▶▶▶ Jena Bioscience GmbH offers membrane suspensions from insect cells with different functionally active recombinant GPCRs. The receptors are in part fusion proteins or co-expressed with subunits of heterotrimeric G-proteins. These proteins are suitable for a large number of in vitro assay systems including

- screening strategies for the identification of GPCR inhibitors and activators
- functional screening of GPCRs by measuring intracellular calcium, cAMP or adenylate cyclase activation
- receptor-ligand interaction studies using fluorescence-based assay
- studies for detection and characterization of interaction proteins that modulate GPCR signaling



Simplified illustration of a G-protein coupled receptor (GPCR), with **seven** transmembrane segments

## References:

- Niedernberg A. et al. (2003) Comparative analysis of functional assay for characterisation of agonist ligands at G-protein coupled receptors. *J. Biomol. Screen.* 8:500  
Scheel A.A. et al. (2001) Receptor-ligand interactions studied with homogeneous fluorescence-based assays suitable for miniaturized screening. *J. Biomol. Screen.* 6:11  
Weber M. et al. (2004) A 1536-well cAMP assay for Gs- and Gi-coupled receptors using enzyme fragmentation complementation. *Assay Drug Dev. Technol.* 2:39  
Kornienko et al. (2004) Miniaturization of whole live cell-based GPCR assay using microdispensing and detection systems. *J. Biomol. Screen.* 9:186