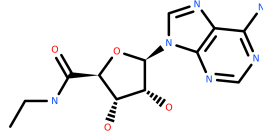
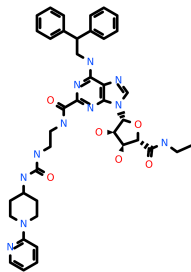
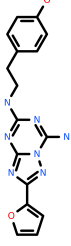
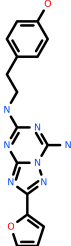
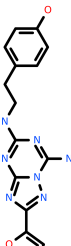
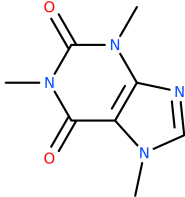
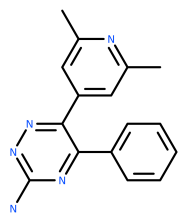
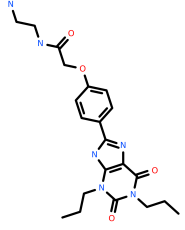
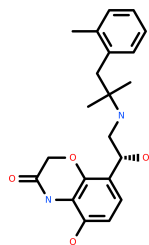
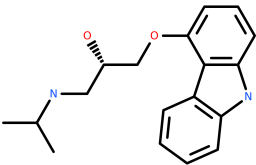
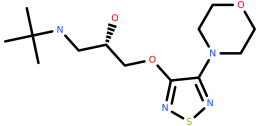
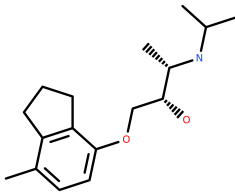


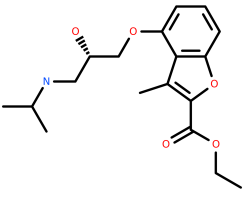
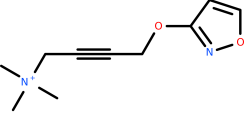
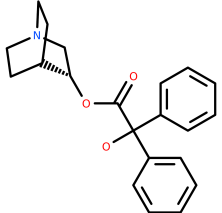
GPCR (abbreviation and full name)	Bound ligand pharma cology	PDB code	Resolution (Å)	Stabilization					Reference
				Ligand (abbreviation and full name)	Ligand structure	Mutations in the TM and ECL2-distal domain (Residues within a 4 Å radius of the bound X-ray ligand are marked in bold)	Insertion (insertion protein [1] and location)	Other protein	
AA2AR (adenosine A2a receptor)	agonist	2YDV	2.6	NEC (NECA)		L48A, A54L, T65A, Q89A	-	-	Lebon et al. 2011 [2]
		3QAK	2.7	UK (UK-432,097)		-	T4L (ICL3)	-	Xu et al. 2011 [3]

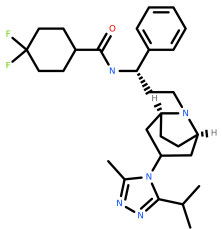
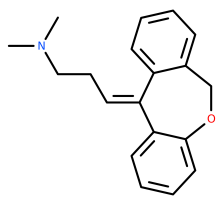
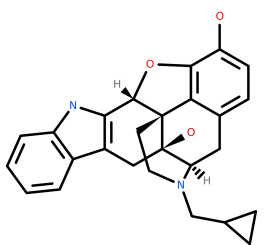
inhibitor	3PWH	3.3	ZM (ZM-241,385)		A54L, T88A, K122A, L202A, L235A, V239A, S277A	-	-	Doré et al. 2011 [4]
	4EIY	1.8	ZM (ZM-241,385)		-	BRIL (ICL3)	-	Liu et al. 2012 [5]
	3EML	2.6	ZM (ZM-241,385)		- (mutations introduced for LDM experiment 3EML-ZM to 2YDV-NEC: L48A, A54L, T65A, Q89A)	T4L (ICL3)	-	Jaakola et al. 2008 [6]

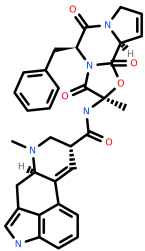
		3RFM	3.6	CAF (caffeine)		A54L, T88A, K122A, L202A, L235A, V239A, S277A	-	-	Doré et al. 2011 [4]
		3UZA	3.3	T4G (1,2,4-triazine 4g)		A54L, T88A, K122A, L202A, L235A, V239A, S277A	-	-	Congreve et al. 2012 [7]
		3REY	3.3	XAC (xanthine amine congener)		A54L, T88A, K122A, L202A, L235A, V239A, S277A	-	-	Doré et al. 2011 [4]
B2AR (beta-2 adrenergic receptor)	agonist	3POG	3.5	BI (BI-167,107)		-	-	Nanobody	Rasmusse n et al. 2011 [8]

		4LDE	2.8	BI (BI-167,107)	<p>The chemical structure of BI (BI-167,107) features a central benzimidazole ring system. It is substituted with a methyl group at the 2-position, a 2-methylphenyl group at the 4-position, and a 2-hydroxyethyl group at the 5-position. The nitrogen atoms in the benzimidazole ring are colored blue and red.</p>	-	T4L (N-term)	Nanobody	Ring et al. 2013 [9]
		4LDO	3.2	ADR (adrenaline)	<p>The chemical structure of ADR (adrenaline) consists of a benzene ring with two hydroxyl groups at the 3 and 4 positions. It is substituted at the 1 position with a 2-methylaminoethyl group. The amino group is colored blue.</p>	-	T4L (N-term)	Nanobody	Ring et al. 2013 [9]
		4LDL	3.1	ISO (hydroxybenzyl isoproterenol)	<p>The chemical structure of ISO (hydroxybenzyl isoproterenol) features a benzene ring with two hydroxyl groups at the 3 and 4 positions. It is substituted at the 1 position with a 2-isopropylaminoethyl group. The amino group is colored blue.</p>	-	T4L (N-term)	Nanobody	Ring et al. 2013 [9]

inhibitor	2RH1	2.4	CAR (carazolol)		-	T4L (ICL3)	-	Cherezov et al. 2007 [10]
	3D4S	2.8	TIM (timolol)		E122W	T4L (ICL3)	-	Hanson et al. 2008 [11]
	3NY8	2.8	ICI (ICI-118,551)		E122W	T4L (ICL3)	-	Wacker et al. 2010 [12]

		3NY9	2.8	KOL (compound 2 from Kolb et al. 2009)		E122W	T4L (ICL3)	-	Wacker et al. 2010 [12]
M2R (muscarinic acetylcholine receptor M2)	agonist	4MQS	3.5	IXO (iperoxo)		-	-	Nanobody	Kruse et al. 2013 [13]
	inhibitor	3UON	3.0	QNB (3-quinuclidinyl- benzilate)		-	T4L (ICL3)	-	Haga et al. 2012 [14]

<p>CCR5 (C-C chemokine receptor type 5)</p>	<p>inhibitor</p>	<p>4MBS</p>		<p>MRV (maraviroc)</p>	 <p>The image shows the chemical structure of Maraviroc, a CCR5 inhibitor. It features a central benzimidazole ring system with a 2,4-dimethyl-5-isopropylbenzimidazole moiety attached to one nitrogen and a 2-(2,2,2-trifluoroethyl)acetamide group attached to the other. The benzimidazole ring is also substituted with a phenyl group.</p>	<p>G163N, A233D, K303E</p>	<p>Rubredoxin (ICL3)</p>	<p>-</p>	<p>Tan et al. 2013 [15]</p>
<p>H1R (histamine H1 receptor)</p>	<p>inhibitor</p>	<p>3RZE</p>		<p>DOX (doxepin)</p>	 <p>The image shows the chemical structure of Doxepin, an H1 receptor antagonist. It consists of a central benzene ring fused to a seven-membered ring containing an oxygen atom. A propyl chain with a dimethylamino group is attached to the benzene ring, and a 2,3-dihydro-1,4-benzodioxepin moiety is attached to the seven-membered ring.</p>	<p>-</p>	<p>T4L (ICL3)</p>	<p>-</p>	<p>Shimamura et al. 2011 [16]</p>
<p>DOR (delta opioid receptor)</p>	<p>inhibitor</p>	<p>4N6H</p>		<p>NAL (naltrindole)</p>	 <p>The image shows the chemical structure of Naltrindole, a delta opioid receptor antagonist. It features a complex polycyclic core with a benzimidazole ring system, a piperidine ring, and a cyclopropylmethyl group. The structure is highly substituted with various oxygen and nitrogen atoms.</p>	<p>-</p>	<p>BRIL (N-term)</p>	<p>-</p>	<p>Fenalti et al. 2014 [17]</p>

5-HT1B (5-hydroxytryptamine receptor 1B)	inhibitor	4IAR		ERG (ergotamine)		L138W	BRIL (ICL3)	-	Wang et al. 2013 [18]
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