

Available receptor templates	FFA1 GPR40	FFA2 GPR43	FFA3 GPR41
Amine Family			
β adrenergic 1 (β_1)	18	18	15
β adrenergic 2 (β_2)	16	17	17
dopamine (D_3)	18	22	23
histamine1 (H_1)	16	19	18
muscarinic acetylcholine 2 (M_2)	16	22	21
muscarinic acetylcholine 3 (M_3)	15	21	21
serotonin ($5HT_{1B}$)	14	21	18
serotonin ($5HT_{2B}$)	22	22	19
Peptide Family			
angiotensin (AT_1)	26	22	25
chemokine ($CXCR_4$)	23	25	25
chemokine ($CCR5$)	24	23	27
chemokine ($CX3CR1$)	24	24	27
neurotensin (NTS_1)	16	21	22
nociceptin (NOP)	21	22	28
δ opioid (δ -OP)	21	22	24
κ opioid (κ -OP)	18	26	24
μ opioid (μ -OP)	19	22	25
orexin (OX_2)	19	20	23
protease-activated (PAR_1)	26	28	33
Nucleotide Family			
adenosine (A_{2A})	17	17	18
purine ($P2Y_{12}$)	20	30	26
purine ($P2Y_1$)	19	23	28
Lysosphingolipid Family			
lysophosphatidic acid (LPA_1)	13	19	19
sphingosine 1-phosphate ($S1P_1$)	16	17	17
Free Fatty Acid Family			
free fatty acid (FFA1)		32	33
Rhodopsin (rho, opsin)	16	22	22

Additional Table 1S. Sequence identity (%) in the transmembrane helices of the FFA receptors and 26 GPCRs with available crystal structures. High identity is highlighted in bold.