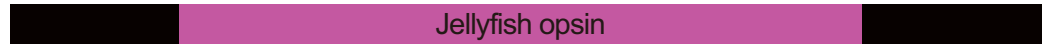


Third intracellular loop

Zebrafish Opn3	198	<b>PVGVMVYCYG</b> NILYTVKMLRS-----IQDLQTVQTIKILRYEKKVA <b>VMFLMMISCF</b>	248
Pufferfish Opn3	196	<b>PVGIMIYCYG</b> NILYAVQMIRS-----IQDLQTVQIIKILRYEKKV <b>VMFFLMISCF</b>	246
Anole Opn3	219	<b>PVGIMAYCYG</b> HILHAIRMLRC-----VEDLQSIQVIKILRYEKKVA <b>KMCFLMVTF</b>	269
Chicken Opn3	207	<b>PVVIMAYCYG</b> HILYAVRMLRC-----VEDFQTSQVIKLLKYEKKVA <b>KMCFLMISTF</b>	257
Mouse Opn3	212	<b>PVGIIAHCYG</b> HILYSVRMLRC-----VEDLQTIQVIKMLRYEKKVA <b>KMCFLMAFVF</b>	262
Human Opn3	214	<b>PLGVIAHCYG</b> HILYSIRMLRC-----VEDLQTIQVIKILKYEKKLA <b>KMCFLMIFTF</b>	264
Mosquito Opn3	200	<b>PLIVIVYSYT</b> NIIVYMRNSA-----RVGRINRAEQRVT <b>SMVAVMIVAF</b>	243
Spider rhodopsin	226	<b>PLFIIIICYA</b> FIVMQVAHEKSLREQAKMNIKSLRSNEDNKKASAEFRLA <b>KVAFMTICCW</b>	286
Bovine rhodopsin	215	<b>PLIVIFFCYG</b> QLVFTVKEAAA-----QQQESATTQKAEKEVTR <b>RMVIIMVIAF</b>	261

Opsin-JiL3 mutants



Jellyfish opsin	184	<b>PVLLMVATYV</b> <b>LVQ</b> GEMKNMRG <b>RAAQ</b> ----- <b>LFGSESE</b> AALK <b>NIKA</b> EKR <b>HTRL</b> VFVMILSF	238
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S1 Fig Sugihara et al.