

Protein sequence alignment between *Aplysia* AChBP and chick $\alpha 4$ and $\beta 2$ nAChR subunits

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alpha-4      MGFLVSKGNLLLLLCCASIFPAFGHVETRAHAEERLLKKLFS--GYNKWSR 48
beta-2      MALLR-----VLCLLAALRRSL-----CTDTEERLVEYLLDPTRYNKLIR 40
AChBP      -----HSQANLMRLKSDLFN----RSPMY 20
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alpha-4      PVANISDVVLVRFGLSIAQLIDVDEKNQMMTTNVVVKQEWHDYKLRWDPQ 98
beta-2      PATNGSQLVTVQLMVSLAQLISVHEREQIMTTNVWLTQEWEDYRLTWKPE 90
AChBP      PGPTKDDPLTVTLGFTLQDIVKADSSTNEVDLVYEQQRWKLNSLMWDPN 70
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alpha-4      EYENVTSIRIPSELIWRPDIIVLYNNADGDFAVTHLTKAHLFYDGRKIKWP 148
beta-2      DFDNMKKVRLPSKHIWLPDVVLYNNADGMYEVSFYSNAVISYDGSIFWLP 140
AChBP      EYGNITDFRTSAADIWTPDITAYSSTR-PVQVLSPQIAVVTHDGSVMFIP 119
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alpha-4      PAIYKSSCSIDVTFPPFDQQNCKMKFGSWTYDKAKIDLVSMSHSHVDQLDY 198
beta-2      PAIYKSACKIEVKHFPPFDQQNCTMKFRSWTYDRTEIDLVLKSEVASLDDF 190
AChBP      AQRLSFMCDPGTGVDS-EEGATCAVKFGSWVYSGFEIDLKTDTDQVDLSSY 168
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alpha-4      WESGEWVIINAVGNYSKKEYECCTEIPDITYSFIIRRLPLFYTINLIIP 248
beta-2      TPSGEWDIVALPGRRENPNDDST---YVDITYDFIIRRKPLFYTINLIIP 237
AChBP      YASSKYEILSATQTRQVQHYSCCPEPYIDVNLVVKFRER----- 207
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alpha-4      CLLISCLTVLVFYLPSCEGKITLCSVLLSLTVFLLLITEIIPSTSLVI 298
beta-2      CILITSLAILVFLYLPSDCGEKMTLCSVLLLALTVFLLLISKIVPPTSLDV 287
AChBP      -----

alpha-4      PLIGEYLLFTMIFVTLSEIIITVFLNVVHHRSPRTHTMPDWVRRVFLDIVP 348
beta-2      PLVGKYLMTMVLVTFISIVTSVCVFLNVVHHRSPRTHTMPDWVRRVFLDIVP 337
AChBP      -----RAGNGFFRNLFD---- 219
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alpha-4      RLLFMKRPSTVKDNCKKLIESMHKLTNSPRLWSETDMEPNFTTSSSPSPQ 398
beta-2      ALLFMKQP---QQNCAR-----QLRQR-----Q 359
AChBP      -----

alpha-4      SNEPSPTSSFAHLEEPKPMCKSPSGQYSMLHPEPPQVTCSSPKPSCHP 448
beta-2      TQERAAAATLFLRAGARACACYANPG----- 385
AChBP      -----

alpha-4      LSDTQTTSISKGRSLSVQQMYSFNKTEEGSIRCRSRSIQYCYLQEDSSQT 498
beta-2      -----AAKAEGLNGYRER----- 398
AChBP      -----

alpha-4      NGHSSASPASQRCHLNEEQPQHKPHQCKCKCRKGAAAGTPTQGSKSHSNK 548
beta-2      QGQGPDPAPCGGLEE----- 415
AChBP      -----

alpha-4      GEHLVLMSPALKLAVEGVHYIADHLRAEDADFSVKEDWKYVAMVIDRIFL 598
beta-2      -----AVEGVRFIADHMRSEDDDDQVSEDDWKYVAMVIDRIFL 452
AChBP      -----

alpha-4      WMFIIIVCLLGTVGLFPPWLAGMI----- 622
beta-2      WIFVFCVFGTVGMFLQPLFQNYATNSLLQLGQGTPTSK 491
AChBP      -----

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