**Figure 5 – source data 1: Wild type and Chimeric CaVβ amino acid sequences.**

|  |  |
| --- | --- |
| Protein name  | Amino Acid Sequence |
| *Exaiptasia diaphana*CaVβ1 (EdCaVβ1) | MAQDFALSNRDIELDSLEHDSTGSSTPSEIQRWHMYSDRSGRVVCKDSEPAYRASDTSSVDEDKETSRRELERRAWEALQAARSKPVAFAVRTNIAYEGSEDDDSPVHGAAVSFNVKDFLHVKEKFNDDWWIGRVVKEGCDIGFIPTPSKLKSLQQVGPATGGRPVRGSSKTVFHFNDMVNQAQSPTNTSPSRHSSASVDAENGMEYNEEEQHSPTSPTSKTSTLPRSASGNTVTSQSAPGQQGKSKKAFFKKQEQLPPYDVVPSMRPIVLVGPSLKGYEVTDMMQKALFDYMKHQFSGRVLISRVTSDISLAKRSNLANPSKRNIIERSNSKNSGLAEVQQEIERIFELSRGLNLVVLDCDTVNHPTQLAKTSLAPLVVYVKISAPKVLQRLIKTRGKTQSRALNVQLVAAEKLAQCSEDLYDLILDETQLQDACHHLGEFLESYWRATHPPNQPGSRPPNMQQSTPQYNVIEAGERPSVYL |
| *Exaiptasia diaphana*CaVβ2 (EdCaVβ2) | MGNTDSVQSFTKDSEPAYRASDTSSVDEDKETSRRELERRAWEALQAARSKPVAFAVRTNIAYEGSEDDDSPVHGAAVSFNVKDFLHVKEKFNDDWWIGRVVKEGCDIGFIPTPSKLKSLQQVGPATGGRPVRGSSKTVFHFNDMVNQAQSPTNTSPSRHSSASVVDAENGMEYNEEEQHSPTSPTSKTSTLPRSASGNTVTSQSAPGQQGKSKKAFFKKQEQLPPYDVVPSMRPIVLVGPSLKGYEVTDMMQKALFDYMKHQFSGRVLISRVTSDISLAKRSNLANPSKRNIIERSNSKNSGLAEVQQEIERIFELSRGLNLVVLDCDTVNHPTQLAKTSLAPLVVYVKISAPKVLQRLIKTRGKTQSRALNVQLVAAEKLAQCSEDLYDLILDETQLQDACHHLGEFLESYWRATHPPNQPGSRPPNMQQSTPQYNVIEAGERPSVYL |
| *Cyanea* *Capillata* CaVβ(CcCaVβ) | MWFGTKKSKDSERRKRQPIDVYREQALSVNPAYIWGDDLDSRKTSGTSSEYGEDDIEQIRVQALEQLAAARVKPVAFAMRANYGYNGAEDDDSPIHGMALSFEPKDFLHIKEKFNNDWLIGRVVREGCDIGFIPSPSKLESLRLSGLAGRKMRQSSTSSNLHLQDAFSASSPSEDRQNSFDDESLPPSSPVKSVNPGVIGQPNSKTAKKGIFKKNDSLPPYDVVPSMRPVIFVGPSLKGYEVTDMMQKALFDYLKHRFQGRIVITRVTADISTAKKSTIQNLAKKPIIKERGATQASQEVNQEIERIFELCRNLQLVVLDSYTVNYPAQVAKTSLAPIIVYIKISSPKVLTRLVKSRGKSQSKNLNVQLVAAVKLGQCSEDMYDVVLDETQLEDACEHLGEFLEAYWRAAHPSQSNFGAAGAPGSFTANGQPVVVNYNSMDPFSAQSPTRHLRTAQV |
| *Physalia physalis* CaVβ (PpCaVβ) | MVTASYNVPLDNTSATHSFNYPHAFLLTHSSCSYHSNEGFINSSTEVDIVDENDFKPLFEGNSNEPHCQKKVISFSSLLDNVVAPIWYFFEMGDEFDSRKTSGTSSEYGEEDVEALRVQALEQLAAAASKPVAFAVRANYGYNGSEDEDCPVNGMAVSFEAKDCLHIKVKFNNDWWIGRVVKEGHDIGFIPSASRLDNIRQSGISGKLKLRQSSTSSNMNLEDQSQPLSREQDNRSPSEERGTSFDDDSPASPLRNPSGSSLTANNNNNNSNTASNVNNSQPKGKKGIFKKSENLPPYDVVPSMRPIIFVGPSLKGYEVTNMMQKALFDYLKHRFQGRIVITRVGADISLAKRSAFQHPGKQPVIQKKGNTQSGIVEVQQEIERIFELCRSMQLVVLDCESINHPSQVAKTSLAPIIAMIRIASPKVLTRLIKSRGKSQTKHLNFQLVAAEKLNQCTEDMFDVILDENQLEDACEHLGDFLEAYWRSAVPPRRPYVNSDNRSYNNAGGQSIGNYNGGGQYNGTPQRHLRTAQV |
| *Cassiopea xamachana* CaVβ (CxCaVβ) | MVQKSGMSRGPYPPSQEIPMEVFDPSPQGKYSKRKGRFKRSDGSTSSDTTSNSFVRQGSAESYTSRPSDSDVSLEEDREALRKEAERQALAQLEKAKTKPVAFAVRTNVGYNPSPGDEVPVQGVAITFEPKDFLHIKEKYNNDWWIGRLVKEGCEVGFIPSPVKLDSLRLLQEQTLRQNRLSSSKSGDNSSSSLGDVVTGTRRPTPPASAKQKQKSTEHVPPYDVVPSMRPIILVGPSLKGYEVTDMMQKALFDFLKHRFDGRISITRVTADISLAKRSVLNNPSKHIIIERSNTRSSLAEVQSEIERIFELARTLQLVALDADTINHPAQLSKTSLAPIIVYIKITSPKVLQRLIKSRGKSQSKHLNVQIAASEKLAQCPPEMFDIILDENQLEDACEHLAEYLEAYWKATHPPSSTPPNPLLNRTMATAALAASPAPVSNLQGPYLASGDQPLDRATGEHASVHEYPGELGQPPGLYPSNHPPGRAGTLRALSRQDTFDADTPGSRNSAYTEPGDSCVDMETDPSEGPGPGDPAGGGTPPARQGSWEEEEDYEEEMTDNRNRGRNKARYCAEGGGPVLGRNKNELEGWGQGVYIR |
| *Clytia hemisphaerica* CaVβ (ChCaVβ) | MMHGSQTEPAISSMTSERNHKNLSHGSRTSINSQRSTNKKVNSHVSFDESTAAPSSKKPGALSAAGGKKSVDDNFSSSVLQTVFALRWQKKAAQKKKKPDDFQQMYMHSMSGALGSIIGDEFDGRKTSGTSSEYGDGEDLEALRILALEKLQAARTRPVAFAVRANYGYNGSEDDDSPVHGMAVSFEKDDCLHIKDKFNKDWWIGRVVKEGHNIGFVPSPDKLESIRQSGVSGKLKMRQSSTSSNMNLHDDPQNQRSPLGEAGGNNSFDDETVNSPVRNVSTESNNTNNNNTTNSLNAQKGKKGIFKKNEQLHPYYVIPSMRPIIFVGPSLKGYEVTDMMQKALFDYLKHRFSERIIFTRVNADISLAKRSNLNNQNRQPNFPKKSNGQAGLAEVQEEVNRIFELCRSSQLVVLDCDTINNPSQVIKTSLAPIIVAIKIASPKVLTRLIKSRGKNQVKHLNIQMIAADKLSQCNEEMFDVVLDENQLEDACEHLGEFLEAYWRAAVPGAQEGLISQENGGFVNQGGPNGAGYNGVDQYGTPQRNLRTAQV |
| *Nematostella vectensis*cacnb2.1(NVE β) | MEPEPGLSEQDIELDSLEQVSTASSFHSDIQRHYNDGREASRFIGADDFNRDSDPAYRASDTSSIEEDRETSRRELERRAWDALQAARSKPVAFAVRTNLRYDGSEDDDSPVHGAAVSFEAKDFLHVKEKFNDDWWIGRVVKEGCDIGFIPTPSKLKSLQQIGGTASGRGMRNSKRDVFQFDMVNQAQSPTNTSPSRHSSTSVDAENGVEYDDDQQSPTSPTNKTLPRSASGTTVSSQPGTATGTQGKPKKGLFKKQEQLPPYDVVPSMRPIVLVGPSLKGYEVTDMMQKALLDFMKHRFSGRVLIARVTSDISLAKRTNMSNPGKQTIMERTKNKNTGLAEVQQEIERIFELARGLNLVVLDCETVNHPTQLAKTSLAPMIVYIKIAAPKVLQRLIKTRGKSQSRNLSIQLVAAEKLAQCSEDMYDLVLEETQLDDACEHLGEFLESYWRATHPPNQPGSRPPNVQPSNSTPQYNVIEGGERPSVYL |
| Rat cacnb2a(Rat β) | MQCCGLVHRRRVRVSYGSADSYTSRPSDSDVSLEEDREAVRREAERQAQAQLEKAKTKPVAFAVRTNVRYSAAQEDDVPVPGMAISFEAKDFLHVKEKFNNDWWIGRLVKEGCEIGFIPSPVKLENMRLQHEQRAKQGKFYSSKSGGNSSSSLGDIVPSSRKSTPPSSAIDIDATGLDAEENDIPANHRSPKPSANSVTSPHSKEKRMPFFKKTEHTPPYDVVPSMRPVVLVGPSLKGYEVTDMMQKALFDFLKHRFEGRISITRVTADISLAKRSVLNNPSKHAIIERSNTRSSLAEVQSEIERIFELARTLQLVVLDADTINHPAQLSKTSLAPIIVYVKISSPKVLQRLIKSRGKSQAKHLNVQMVAADKLAQCPPQESFDVILDENQLEDACEHLADYLEAYWKATHPPSSNLPNPLLSRTLATSTLPLSPTLASNSQGSQGDQRTDRSAPRSASQAEEEPCLEPVKKSQHRSSSATHQNHRSGTGRGLSRQETFDSETQESRDSAYVEPKEDYSHEHVDRYVPHREHNHREESHSSNGHRHREPRHRTRDMGRDQDHNECSKQRSRHKSKDRYCDKEGEVISKRRSEAGEWNRDVYIRQ |
| Rat β with NVE Hook | MQCCGLVHRRRVRVSYGSADSYTSRPSDSDVSLEEDREAVRREAERQAQAQLEKAKTKPVAFAVRTNVRYSAAQEDDVPVPGMAISFEAKDFLHVKEKFNNDWWIGRLVKEGCEIGFIPSPSKLKSLQQIGGTASGRGMRNSKRDVFQFDMVNQAQSPTNTSPSRHSSTSVDAENGVEYDDDQQSPTSPTNKTLPRSASGTTVSSQPGTATGTQGKPKKGLFKKQEQLPPYDVVPSMRPVVLVGPSLKGYEVTDMMQKALFDFLKHRFEGRISITRVTADISLAKRSVLNNPSKHAIIERSNTRSSLAEVQSEIERIFELARTLQLVVLDADTINHPAQLSKTSLAPIIVYVKISSPKVLQRLIKSRGKSQAKHLNVQMVAADKLAQCPPQESFDVILDENQLEDACEHLADYLEAYWKATHPPSSNLPNPLLSRTLATSTLPLSPTLASNSQGSQGDQRTDRSAPRSASQAEEEPCLEPVKKSQHRSSSATHQNHRSGTGRGLSRQETFDSETQESRDSAYVEPKEDYSHEHVDRYVPHREHNHREESHSSNGHRHREPRHRTRDMGRDQDHNECSKQRSRHKSKDRYCDKEGEVISKRRSEAGEWNRDVYIRQ |
| NVE β with Rat Hook | MEPEPGLSEQDIELDSLEQVSTASSFHSDIQRHYNDGREASRFIGADDFNRDSDPAYRASDTSSIEEDRETSRRELERRAWDALQAARSKPVAFAVRTNLRYDGSEDDDSPVHGAAVSFEAKDFLHVKEKFNDDWWIGRVVKEGCDIGFIPTPVKLENMRLQHEQRAKQGKFYSSKSGGNSSSSLGDIVPSSRKSTPPSSAIDIDATGLDAEENDIPANHRSPKPSANSVTSPHSKEKRMPFFKKTEHTPPYDVVPSMRPIVLVGPSLKGYEVTDMMQKALLDFMKHRFSGRVLIARVTSDISLAKRTNMSNPGKQTIMERTKNKNTGLAEVQQEIERIFELARGLNLVVLDCETVNHPTQLAKTSLAPMIVYIKIAAPKVLQRLIKTRGKSQSRNLSIQLVAAEKLAQCSEDMYDLVLEETQLDDACEHLGEFLESYWRATHPPNQPGSRPPNVQPSNSTPQYNVIEGGERPSVYL |
| Rat β with NVE GK domain | MQCCGLVHRRRVRVSYGSADSYTSRPSDSDVSLEEDREAVRREAERQAQAQLEKAKTKPVAFAVRTNVRYSAAQEDDVPVPGMAISFEAKDFLHVKEKFNNDWWIGRLVKEGCEIGFIPSPVKLENMRLQHEQRAKQGKFYSSKSGGNSSSSLGDIVPSSRKSTPPSSAIDIDATGLDAEENDIPANHRSPKPSANSVTSPHSKEKRMPFFKKTEHTPPYDVVPSMRPIVLVGPSLKGYEVTDMMQKALLDFMKHRFSGRVLIARVTSDISLAKRTNMSNPGKQTIMERTKNKNTGLAEVQQEIERIFELARGLNLVVLDCETVNHPTQLAKTSLAPMIVYIKIAAPKVLQRLIKTRGKSQSRNLSIQLVAAEKLAQCSEDMYDLVLEETQLDDACEHLGEFLESYWRATHPPNQPGSRPPNVQPSNSTPQYNVIEGGERPSVYL |
| NVE β with Rat GK domain | MEPEPGLSEQDIELDSLEQVSTASSFHSDIQRHYNDGREASRFIGADDFNRDSDPAYRASDTSSIEEDRETSRRELERRAWDALQAARSKPVAFAVRTNLRYDGSEDDDSPVHGAAVSFEAKDFLHVKEKFNDDWWIGRVVKEGCDIGFIPTPSKLKSLQQIGGTASGRGMRNSKRDVFQFDMVNQAQSPTNTSPSRHSSTSVDAENGVEYDDDQQSPTSPTNKTLPRSASGTTVSSQPGTATGTQGKPKKGLFKKQEQLPPYDVVPSMRPVVLVGPSLKGYEVTDMMQKALFDFLKHRFEGRISITRVTADISLAKRSVLNNPSKHAIIERSNTRSSLAEVQSEIERIFELARTLQLVVLDADTINHPAQLSKTSLAPIIVYVKISSPKVLQRLIKSRGKSQAKHLNVQMVAADKLAQCPPQESFDVILDENQLEDACEHLADYLEAYWKATHPPSSNLPNPLLSRTLATSTLPLSPTLASNSQGSQGDQRTDRSAPRSASQAEEEPCLEPVKKSQHRSSSATHQNHRSGTGRGLSRQETFDSETQESRDSAYVEPKEDYSHEHVDRYVPHREHNHREESHSSNGHRHREPRHRTRDMGRDQDHNECSKQRSRHKSKDRYCDKEGEVISKRRSEAGEWNRDVYIRQ |
| Rat 5’ on NVE β | MQCCGLVHRRRVRVSYGSADSYTSRPSDSDVSLEEDREAVRREAERQAQAQLEKAKTKPVAFAVRTNLRYDGSEDDDSPVHGAAVSFEAKDFLHVKEKFNDDWWIGRVVKEGCDIGFIPTPSKLKSLQQIGGTASGRGMRNSKRDVFQFDMVNQAQSPTNTSPSRHSSTSVDAENGVEYDDDQQSPTSPTNKTLPRSASGTTVSSQPGTATGTQGKPKKGLFKKQEQLPPYDVVPSMRPIVLVGPSLKGYEVTDMMQKALLDFMKHRFSGRVLIARVTSDISLAKRTNMSNPGKQTIMERTKNKNTGLAEVQQEIERIFELARGLNLVVLDCETVNHPTQLAKTSLAPMIVYIKIAAPKVLQRLIKTRGKSQSRNLSIQLVAAEKLAQCSEDMYDLVLEETQLDDACEHLGEFLESYWRATHPPNQPGSRPPNVQPSNSTPQYNVIEGGERPSVYL |
| Rat 5’ + SH3 on NVE β | MQCCGLVHRRRVRVSYGSADSYTSRPSDSDVSLEEDREAVRREAERQAQAQLEKAKTKPVAFAVRTNVRYSAAQEDDVPVPGMAISFEAKDFLHVKEKFNNDWWIGRLVKEGCEIGFIPSPSKLKSLQQIGGTASGRGMRNSKRDVFQFDMVNQAQSPTNTSPSRHSSTSVDAENGVEYDDDQQSPTSPTNKTLPRSASGTTVSSQPGTATGTQGKPKKGLFKKQEQLPPYDVVPSMRPIVLVGPSLKGYEVTDMMQKALLDFMKHRFSGRVLIARVTSDISLAKRTNMSNPGKQTIMERTKNKNTGLAEVQQEIERIFELARGLNLVVLDCETVNHPTQLAKTSLAPMIVYIKIAAPKVLQRLIKTRGKSQSRNLSIQLVAAEKLAQCSEDMYDLVLEETQLDDACEHLGEFLESYWRATHPPNQPGSRPPNVQPSNSTPQYNVIEGGERPSVYL |
| NVE 5’ + SH3 on Rat β | MEPEPGLSEQDIELDSLEQVSTASSFHSDIQRHYNDGREASRFIGADDFNRDSDPAYRASDTSSIEEDRETSRRELERRAWDALQAARSKPVAFAVRTNVRYSAAQEDDVPVPGMAISFEAKDFLHVKEKFNNDWWIGRLVKEGCEIGFIPSPVKLENMRLQHEQRAKQGKFYSSKSGGNSSSSLGDIVPSSRKSTPPSSAIDIDATGLDAEENDIPANHRSPKPSANSVTSPHSKEKRMPFFKKTEHTPPYDVVPSMRPVVLVGPSLKGYEVTDMMQKALFDFLKHRFEGRISITRVTADISLAKRSVLNNPSKHAIIERSNTRSSLAEVQSEIERIFELARTLQLVVLDADTINHPAQLSKTSLAPIIVYVKISSPKVLQRLIKSRGKSQAKHLNVQMVAADKLAQCPPQESFDVILDENQLEDACEHLADYLEAYWKATHPPSSNLPNPLLSRTLATSTLPLSPTLASNSQGSQGDQRTDRSAPRSASQAEEEPCLEPVKKSQHRSSSATHQNHRSGTGRGLSRQETFDSETQESRDSAYVEPKEDYSHEHVDRYVPHREHNHREESHSSNGHRHREPRHRTRDMGRDQDHNECSKQRSRHKSKDRYCDKEGEVISKRRSEAGEWNRDVYIRQ |
| NVE 5’ on Rat β | MEPEPGLSEQDIELDSLEQVSTASSFHSDIQRHYNDGREASRFIGADDFNRDSDPAYRASDTSSIEEDRETSRRELERRAWDALQAARSKPVAFAVRTNLRYDGSEDDDSPVHGAAVSFEAKDFLHVKEKFNDDWWIGRVVKEGCDIGFIPTPVKLENMRLQHEQRAKQGKFYSSKSGGNSSSSLGDIVPSSRKSTPPSSAIDIDATGLDAEENDIPANHRSPKPSANSVTSPHSKEKRMPFFKKTEHTPPYDVVPSMRPVVLVGPSLKGYEVTDMMQKALFDFLKHRFEGRISITRVTADISLAKRSVLNNPSKHAIIERSNTRSSLAEVQSEIERIFELARTLQLVVLDADTINHPAQLSKTSLAPIIVYVKISSPKVLQRLIKSRGKSQAKHLNVQMVAADKLAQCPPQESFDVILDENQLEDACEHLADYLEAYWKATHPPSSNLPNPLLSRTLATSTLPLSPTLASNSQGSQGDQRTDRSAPRSASQAEEEPCLEPVKKSQHRSSSATHQNHRSGTGRGLSRQETFDSETQESRDSAYVEPKEDYSHEHVDRYVPHREHNHREESHSSNGHRHREPRHRTRDMGRDQDHNECSKQRSRHKSKDRYCDKEGEVISKRRSEAGEWNRDVYIRQ |
| EdCaVβ2 with NVE β NTerm  | MEPEPGLSEQDIELDSLEQVSTASSFHSDIQRHYNDGREASRFIGADDFNRDSDPAYRASDTSSIEEDRETSRRELERRAWDALQAARSKPVAFAVRTNLRYDGSEDDDSPVHGAAVSFEAKDFLHVKEKFNDDWWIGRVVKEGCDIGFIPTPSKLKSLQQVGPATGGRPVRGSSKTVFHFNDMVNQAQSPTNTSPSRHSSASVVDAENGMEYNEEEQHSPTSPTSKTSTLPRSASGNTVTSQSAPGQQGKSKKAFFKKQEQLPPYDVVPSMRPIVLVGPSLKGYEVTDMMQKALFDYMKHQFSGRVLISRVTSDISLAKRSNLANPSKRNIIERSNSKNSGLAEVQQEIERIFELSRGLNLVVLDCDTVNHPTQLAKTSLAPLVVYVKISAPKVLQRLIKTRGKTQSRALNVQLVAAEKLAQCSEDLYDLILDETQLQDACHHLGEFLESYWRATHPPNQPGSRPPNMQQSTPQYNVIEAGERPSVYL |
| EdCaVβ2 with CcCaVβ NTerm | MWFGTKKSKDSERRKRQPIDVYREQALSVNPAYIWGDDLDSRKTSGTSSEYGEDDIEQIRVQALEQLAAARVKPVAFAMRANYGYNGAEDDDSPIHGMALSFEPKDFLHIKEKFNNDWLIGRVVREGCDIGFIPSPSKLKSLQQVGPATGGRPVRGSSKTVFHFNDMVNQAQSPTNTSPSRHSSASVVDAENGMEYNEEEQHSPTSPTSKTSTLPRSASGNTVTSQSAPGQQGKSKKAFFKKQEQLPPYDVVPSMRPIVLVGPSLKGYEVTDMMQKALFDYMKHQFSGRVLISRVTSDISLAKRSNLANPSKRNIIERSNSKNSGLAEVQQEIERIFELSRGLNLVVLDCDTVNHPTQLAKTSLAPLVVYVKISAPKVLQRLIKTRGKTQSRALNVQLVAAEKLAQCSEDLYDLILDETQLQDACHHLGEFLESYWRATHPPNQPGSRPPNMQQSTPQYNVIEAGERPSVYL |
| EdCaVβ2 with PpCaVβ NTerm | MVTASYNVPLDNTSATHSFNYPHAFLLTHSSCSYHSNEGFINSSTEVDIVDENDFKPLFEGNSNEPHCQKKVISFSSLLDNVVAPIWYFFEMGDEFDSRKTSGTSSEYGEEDVEALRVQALEQLAAAASKPVAFAVRANYGYNGSEDEDCPVNGMAVSFEAKDCLHIKVKFNNDWWIGRVVKEGHDIGFIPSPSKLKSLQQVGPATGGRPVRGSSKTVFHFNDMVNQAQSPTNTSPSRHSSASVVDAENGMEYNEEEQHSPTSPTSKTSTLPRSASGNTVTSQSAPGQQGKSKKAFFKKQEQLPPYDVVPSMRPIVLVGPSLKGYEVTDMMQKALFDYMKHQFSGRVLISRVTSDISLAKRSNLANPSKRNIIERSNSKNSGLAEVQQEIERIFELSRGLNLVVLDCDTVNHPTQLAKTSLAPLVVYVKISAPKVLQRLIKTRGKTQSRALNVQLVAAEKLAQCSEDLYDLILDETQLQDACHHLGEFLESYWRATHPPNQPGSRPPNMQQSTPQYNVIEAGERPSVYL |
| EdCaVβ2 with Rat β NTerm | MQCCGLVHRRRVRVSYGSADSYTSRPSDSDVSLEEDREAVRREAERQAQAQLEKAKTKPVAFAVRTNVRYSAAQEDDVPVPGMAISFEAKDFLHVKEKFNNDWWIGRLVKEGCEIGFIPSPSKLKSLQQVGPATGGRPVRGSSKTVFHFNDMVNQAQSPTNTSPSRHSSASVVDAENGMEYNEEEQHSPTSPTSKTSTLPRSASGNTVTSQSAPGQQGKSKKAFFKKQEQLPPYDVVPSMRPIVLVGPSLKGYEVTDMMQKALFDYMKHQFSGRVLISRVTSDISLAKRSNLANPSKRNIIERSNSKNSGLAEVQQEIERIFELSRGLNLVVLDCDTVNHPTQLAKTSLAPLVVYVKISAPKVLQRLIKTRGKTQSRALNVQLVAAEKLAQCSEDLYDLILDETQLQDACHHLGEFLESYWRATHPPNQPGSRPPNMQQSTPQYNVIEAGERPSVYL |
| EdCaVβ2 with CxCaVβ NTerm | MVQKSGMSRGPYPPSQEIPMEVFDPSPQGKYSKRKGRFKRSDGSTSSDTTSNSFVRQGSAESYTSRPSDSDVSLEEDREALRKEAERQALAQLEKAKTKPVAFAVRTNVGYNPSPGDEVPVQGVAITFEPKDFLHIKEKYNNDWWIGRLVKEGCEVGFIPSPSKLKSLQQVGPATGGRPVRGSSKTVFHFNDMVNQAQSPTNTSPSRHSSASVVDAENGMEYNEEEQHSPTSPTSKTSTLPRSASGNTVTSQSAPGQQGKSKKAFFKKQEQLPPYDVVPSMRPIVLVGPSLKGYEVTDMMQKALFDYMKHQFSGRVLISRVTSDISLAKRSNLANPSKRNIIERSNSKNSGLAEVQQEIERIFELSRGLNLVVLDCDTVNHPTQLAKTSLAPLVVYVKISAPKVLQRLIKTRGKTQSRALNVQLVAAEKLAQCSEDLYDLILDETQLQDACHHLGEFLESYWRATHPPNQPGSRPPNMQQSTPQYNVIEAGERPSVYL |
| EdCaVβ2 with ChCaVβ NTerm | MMHGSQTEPAISSMTSERNHKNLSHGSRTSINSQRSTNKKVNSHVSFDESTAAPSSKKPGALSAAGGKKSVDDNFSSSVLQTVFALRWQKKAAQKKKKPDDFQQMYMHSMSGALGSIIGDEFDGRKTSGTSSEYGDGEDLEALRILALEKLQAARTRPVAFAVRANYGYNGSEDDDSPVHGMAVSFEKDDCLHIKDKFNKDWWIGRVVKEGHNIGFVPSPSKLKSLQQVGPATGGRPVRGSSKTVFHFNDMVNQAQSPTNTSPSRHSSASVVDAENGMEYNEEEQHSPTSPTSKTSTLPRSASGNTVTSQSAPGQQGKSKKAFFKKQEQLPPYDVVPSMRPIVLVGPSLKGYEVTDMMQKALFDYMKHQFSGRVLISRVTSDISLAKRSNLANPSKRNIIERSNSKNSGLAEVQQEIERIFELSRGLNLVVLDCDTVNHPTQLAKTSLAPLVVYVKISAPKVLQRLIKTRGKTQSRALNVQLVAAEKLAQCSEDLYDLILDETQLQDACHHLGEFLESYWRATHPPNQPGSRPPNMQQSTPQYNVIEAGERPSVYL |
| EdCaVβ2 with EdCaVβ1 NTerm  | MAQDFALSNRDIELDSLEHVSTGSSTPSEIQRWHMYSDRSGRVVCKDSEPAYRASDTSSVDEDKETSRRELERRAWEALQAARSKPVAFAVRTNIAYEGSEDDDSPVHGAAVSFNVKDFLHVKEKFNDDWWIGRVVKEGCDIGFIPTPSKLKSLQQVGPATGGRPVRGSSKTVFHFNDMVNQAQSPTNTSPSRHSSASVVDAENGMEYNEEEQHSPTSPTSKTSTLPRSASGNTVTSQSAPGQQGKSKKAFFKKQEQLPPYDVVPSMRPIVLVGPSLKGYEVTDMMQKALFDYMKHQFSGRVLISRVTSDISLAKRSNLANPSKRNIIERSNSKNSGLAEVQQEIERIFELSRGLNLVVLDCDTVNHPTQLAKTSLAPLVVYVKISAPKVLQRLIKTRGKTQSRALNVQLVAAEKLAQCSEDLYDLILDETQLQDACHHLGEFLESYWRATHPPNQPGSRPPNMQQSTPQYNVIEAGERPSVYL |