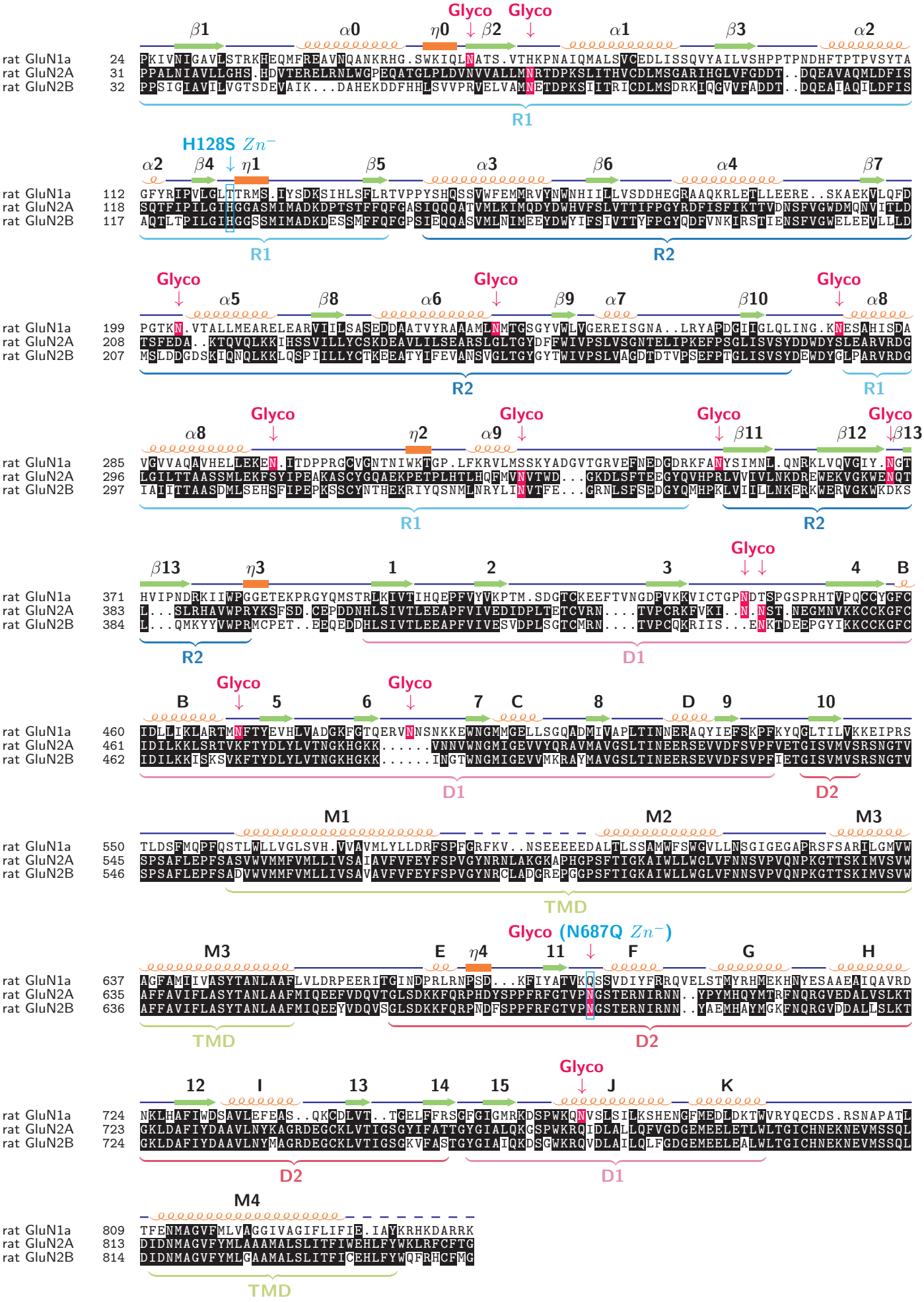
Glyco
Glyco
β1 α0 η0 β2 α1 β3 α2
rat GluN1a 24 PKIVNIGAVLSTRKHEQMFREAVNQANKRHG.SWKIQLNATS.VTHKPNAIQMALSVCEDLISSQVYAILVSHPPTPNDHFTPTPVSYTA
rat GluN2A 31 PPALNIAVLLGHS.HDVTERELRNLWGPEQATGLPLDVNVVALLMNRTDPKSLITHVCDLMSGARIHGLVFGDDT..DQEAVAQMLDFIS
rat GluN2B 32 PPSIGIAVILVGTSDEVAIK...DAHEKDDFHHLSVVPRVELVAMNETDPKSIITRICDLMSDRKIQGVVFADDT..DQEAIAQILDFIS
R1
H128S Zn⁻
α2 β4 η1 β5 α3 β6 α4 β7
rat GluN1a 112 GFYRIPVLGLTTRMS.IYSDKSIHLSFLRTVPPYSHQSSVWFEMMRVYNWNHIILLVSDDHEGRAAQKRLETLLEERE..SKAEKVLQFD
rat GluN2A 118 SQTFIPILGIHGGASMIMADKDPTSTFFQFGASIQQQATVMLKIMQDYDWHVFSLVTTIFPGYRDFISFIKTTVDNSFVGWDMQNVITLD
rat GluN2B 117 AQTLTPILGIHGGSSMIMADKDESSMFFQFGPSIEQQASVMLNIMEEYDWYIFSIVTTYFPGYQDFVNKIRSTIENSFVGWELEEVLLLD
R1
R2
Glyco
Glyco
Glyco
α5 β8 α6 β9 α7 β10 α8
rat GluN1a 199 PGTKN.VTALLMEARELEARVIILSASEDDAATVYRAAAMLNMTGSGYVWLVGEREISGNA..LRYAPDGIIGLQLING.KNESAHISDA
rat GluN2A 208 TSFEDA..KTQVQLKKIHSSVILLYCSKDEAVLILSEARSLGLTGYDFFWIVPSLVSGNTELIPKEFPSGLISVSYDDWDYSLEARVRDG
rat GluN2B 207 MSLDDGDSKIQNQLKKLQSPIILLYCTKEEATYIFEVANSVGLTGYGYTWIVPSLVAGDTDTVPSEFPTGLISVSYDEWDYGLPARVRDG
R2
R1
Glyco
Glyco
Glyco
Glyco
α8 η2 α9 β11 β12 β13
rat GluN1a 285 VGVVAQAVHELLEKEN.ITDPPRGCVGNTNIWKTGP.LFKRVLMSSKYADGVTGRVEFNEDGDRKFANYSIMNL.QNRKLVQVGIY.NGT
rat GluN2A 296 LGILTTAASSMLEKFSYIPEAKASCYGQAEKPETPLHTLHQFMVNVTWD...GKDLSFTEEGYQVHPRLVVIVLNKDREWEKVGKWENQT
rat GluN2B 297 IAIITTAASDMLSEHSFIPEPKSSCYNTHEKRIYQSNMLNRYLINVTFE...GRNLSFSEDGYQMHPKLVIILLNKERKWERVGKWKDKS
R1
R2
Glyco
β13 η3 1 2 3 4 B
rat GluN1a 371 HVIPNDRKIIWPGGETEKPRGYQMSTRLKIVTIHQEPFVYVKPTM.SDGTCKEEFTVNGDPVKKVICTGPNDTSPGSPRHTVPQCCYGFC
rat GluN2A 383 L...SLRHAVWPRYKSFSD.CEPDDNHLSIVTLEEAPFVIVEDIDPLTETCVRN....TVPCRKFVKI..N.NST.NEGMNVKKCCKGFC
rat GluN2B 384 L...QMKYYVWPRMCPET..EEQEDDHLSIVTLEEAPFVIVESVDPLSGTCMRN....TVPCQKRIIS...ENKTDEEPGYIKKCCKGFC
R2
D1
Glyco
Glyco
B 5 6 7 C 8 D 9 10
rat GluN1a 460 IDLLIKLARTMNFTYEVHLVADGKFGTQERVNNSNKKEWNGMMGELLSGQADMIVAPLTINNERAQYIEFSKPFKYQGLTILVKKEIPRS
rat GluN2A 461 IDILKKLSRTVKFTYDLYLVTNGKHGKK.....VNNVWNGMIGEVVYQRAVMAVGSLTINEERSEVVDFSVPFVETGISVMVSRSNGTV
rat GluN2B 462 IDILKKISKSVKFTYDLYLVTNGKHGKK.....INGTWNGMIGEVVMKRAYMAVGSLTINEERSEVVDFSVPFIETGISVMVSRSNGTV
D1
D2
M1 M2 M3
rat GluN1a 550 TLDSFMQPFQSTLWLLVGLSVH.VVAVMLYLLDRFSFFGRFKV..NSEEEEEDALTLSSAMWFSWGVLLNSGIGEGAPRSFSARILGMVW
rat GluN2A 545 SPSAFLEPFSASVWVMMFVMLLIVSAIAVFVFEYFSPVGYNRNLAKGKAPHGPSFTIGKAIWLLWGLVFNNSVPVQNPKGTTSKIMVSVW
rat GluN2B 546 SPSAFLEPFSADVWVMMFVMLLIVSAVAVFVFEYFSPVGYNRCLADGREPGGPSFTIGKAIWLLWGLVFNNSVPVQNPKGTTSKIMVSVW
TMD
Glyco (N687Q Zn⁻)
M3 E η4 11 F G H
rat GluN1a 637 AGFAMIIVASYTANLAAFLVLDRPEERITGINDPRLRNPSD...KFIYATVKQSSVDIYFRRQVELSTMYRHMEKHNYESAAEAIQAVRD
rat GluN2A 635 AFFAVIFLASYTANLAAFMIQEEFVDQVTGLSDKKFQRPHDYSPPFRFGTVPNGSTERNIRNN..YPYMHQYMTRFNQRGVEDALVSLKT
rat GluN2B 636 AFFAVIFLASYTANLAAFMIQEEYVDQVSGLSDKKFQRPNDFSPPFRFGTVPNGSTERNIRNN..YAEMHAYMGKFNQRGVDDALLSLKT
TMD
D2
Glyco
12 I 13 14 15 J K
rat GluN1a 724 NKLHAFIWDSAVLEFEAS..QKCDLVT..TGELFFRSGFGIGMRKDSPWKQNVSLSILKSHENGFMEDLDKTWVRYQECDS.RSNAPATL
rat GluN2A 723 GKLDAFIYDAAVLNYKAGRDEGCKLVTIGSGYIFATTGYGIALQKGSPWKRQIDLALLQFVGDGEMEELETLWLTGICHNEKNEVMSSQL
rat GluN2B 724 GKLDAFIYDAAVLNYMAGRDEGCKLVTIGSGKVFASTGYGIAIQKDSGWKRQVDLAILQLFGDGEMEELEALWLTGICHNEKNEVMSSQL
D2
D1
M4
rat GluN1a 809 TFENMAGVFMLVAGGIVAGIFLIFIE.IAYKRHKDARRK
rat GluN2A 813 DIDNMAGVFYMLAAAMALSLITFIWEHLFYWKLRFCFTG
rat GluN2B 814 DIDNMAGVFYMLGAAMALSLITFICEHLFYWQFRHCFMG
TMD