

Lancelet NGFR/NRADD	MASNTAGRTRSGDPRDRQAGNSANSKKLSKTSSAVPRNSADSTYRDAAAATGAASDNKGEEGSGQGDKTPASRRSSAGSQGTGEQKATGTAYNNTGTRPP	100
Xenopus L NGFR	.....	0
Chicken NGFR	.....	0
Mouse NGFR	.....	0
Human NGFR	.....	0
Zebrafish NGFR	.....	0
Zebrafish NGFR like 12	.....	0
Zebrafish NGFR like 3	.....	0
Mouse NRADD	.....	0
Zebrafish NRADD	.....	0
Chicken NRADD	.....	0
Xenopus tropicalis NRADD	.....	0
Xenopus laevis NRADD	.....	0

Lancelet NGFR/NRADD	VDVQVTRDDTKADSTLFASVGVLYPPQRQGSQSTISTIPAEENISANPPRLLLLSSRAKNSGTIATSVRSNVHVIRYNYENSTLDGILKQAAEVLGGIKV	200
Xenopus L NGFR	.....	0
Chicken NGFR	.....	0
Mouse NGFR	.....	0
Human NGFR	.....	0
Zebrafish NGFR	.....	0
Zebrafish NGFR like 12	.....	0
Zebrafish NGFR like 3	.....	0
Mouse NRADD	.....	0
Zebrafish NRADD	.....	0
Chicken NRADD	.....	0
Xenopus tropicalis NRADD	.....	0
Xenopus laevis NRADD	.....	0

Lancelet NGFR/NRADD	ESIACVMHSSGGSIVCSDRLTSLNIEQSSIRDFYSTLVENHLDRSFVNARLDFLACSAVQSVESGTILQEMESLLGVSVGMAKDLSAAEISMQRIGE	300
Xenopus L NGFR	.....	0
Chicken NGFR	.....	0
Mouse NGFR	.....	0
Human NGFR	.....	0
Zebrafish NGFR	.....	0
Zebrafish NGFR like 12	.....	0
Zebrafish NGFR like 3	.....	0
Mouse NRADD	.....	0
Zebrafish NRADD	.....	0
Chicken NRADD	.....	0
Xenopus tropicalis NRADD	.....	0
Xenopus laevis NRADD	.....	0

Lancelet NGFR/NRADD	DSSTTVGELYFREEKLQQLSGSSPQTLAGFEKIRTVGKGAYGTAVLYRKKDDDSLVLKEINMHDLTASERQMALNEVKVLAMLDHPNIITYYDSFEEDG	400
Xenopus L NGFR	.....	0
Chicken NGFR	.....	0
Mouse NGFR	.....	0
Human NGFR	.....	0
Zebrafish NGFR	.....	0
Zebrafish NGFR like 12	.....	0
Zebrafish NGFR like 3	.....	0
Mouse NRADD	.....	0
Zebrafish NRADD	.....	0
Chicken NRADD	.....	0
Xenopus tropicalis NRADD	.....	0
Xenopus laevis NRADD	.....	0

Lancelet NGFR/NRADD	VLMIEMEYADGGTLAKYVGQRETPLSEKEILFMFQQIVAAIRHIHEHNILHRDLKTANIFLTKEGVIKVGDFGISKMMTSANHGANTVLGTPYYISPENC	500
Xenopus L NGFR	.....	0
Chicken NGFR	.....	0
Mouse NGFR	.....	0
Human NGFR	.....	0
Zebrafish NGFR	.....	0
Zebrafish NGFR like 12	.....	0
Zebrafish NGFR like 3	.....	0
Mouse NRADD	.....	0
Zebrafish NRADD	.....	0
Chicken NRADD	.....	0
Xenopus tropicalis NRADD	.....	0
Xenopus laevis NRADD	.....	0

Lancelet NGFR/NRADD	EGKAYNDKSDIWALGCIMYEMACLHRTFEGSNLPALVKNKIMNGQFAPVKGNYSEFKDLIQDMLQREPQYRPSANELLYHRLPELMARYEEGATEWEDEL	600
Xenopus L NGFR	.....	0
Chicken NGFR	.....	0
Mouse NGFR	.....	0
Human NGFR	.....	0
Zebrafish NGFR	.....	0
Zebrafish NGFR like 12	.....	0
Zebrafish NGFR like 3	.....	0
Mouse NRADD	.....	0
Zebrafish NRADD	.....	0
Chicken NRADD	.....	0
Xenopus tropicalis NRADD	.....	0
Xenopus laevis NRADD	.....	0

Lancelet NGFR/NRADD	SSSLDGSKQLASCKRRRTRSVLVYLDTCAMTLTPIELPAKIKIRQVAVGLEHMOVVAMERAVYTWGEGSKGQLGHGDLLGRSKPEMVEALKGKSIVRACC	700
Xenopus L NGFR	.....	0
Chicken NGFR	.....	0
Mouse NGFR	.....	0
Human NGFR	.....	0
Zebrafish NGFR	.....	0
Zebrafish NGFR like 12	.....	0
Zebrafish NGFR like 3	.....	0
Mouse NRADD	.....	0
Zebrafish NRADD	.....	0
Chicken NRADD	.....	0
Xenopus tropicalis NRADD	.....	0
Xenopus laevis NRADD	.....	0

Lancelet NGFR/NRADD	GDGFSVVFSDNGIVMTCGDGSNGCLGHGDWMSASRPRLIEPLLSVDVRAISCGPHHVAVGSDGEVFAWGRGKHGCLGLGDEEDHFSPQEVQISEPVFIR	800
Xenopus L NGFR	.....	0
Chicken NGFR	.....	0
Mouse NGFR	.....	0
Human NGFR	.....	0
Zebrafish NGFR	.....	0
Zebrafish NGFR like 12	.....	0
Zebrafish NGFR like 3	.....	0
Mouse NRADD	.....	0
Zebrafish NRADD	.....	0
Chicken NRADD	.....	0
Xenopus tropicalis NRADD	.....	0
Xenopus laevis NRADD	.....	0

Lancelet NGFR/NRADD	EVKCGVDGTMFLTDMGSVLACGNNENNKLGLNHRQGFLRAMKNLLQKVEVPGRKVPTVVRALTNHRAIDMAVGPHHTSVLVEPGKVYTFGRNLEGQLGTG	900
Xenopus L NGFR	.....	0
Chicken NGFR	.....	0
Mouse NGFR	.....	0
Human NGFR	.....	0
Zebrafish NGFR	.....	0
Zebrafish NGFR like 12	.....	0
Zebrafish NGFR like 3	.....	0
Mouse NRADD	.....	0
Zebrafish NRADD	.....	0
Chicken NRADD	.....	0
Xenopus tropicalis NRADD	.....	0
Xenopus laevis NRADD	.....	0

Lancelet NGFR/NRADD	HTKPRDAPMEVKDLSISDKTVTMLACGDMFTAVGINSENALFFWGTRYRPKDKPEENNNQSAEGAGAGEEQDHAPIGHRNSSNISITSAGSVNNIAVES	1000
Xenopus L NGFR	.....	0
Chicken NGFR	.....	0
Mouse NGFR	.....	0
Human NGFR	.....	0
Zebrafish NGFR	.....	0
Zebrafish NGFR like 12	.....	0
Zebrafish NGFR like 3	.....	0
Mouse NRADD	.....	0
Zebrafish NRADD	.....	0
Chicken NRADD	.....	0
Xenopus tropicalis NRADD	.....	0
Xenopus laevis NRADD	.....	0

Lancelet NGFR/NRADD	RAHTPTQDTNRLSVSSVGSVQRQVSSSSSLNADNTGGDGVDSRETRGRSAKRHSSHSSIGSINIGEKETELITTPTPILRCDSIIGTGGTPGAEPIPLTLT	1100
Xenopus L NGFR	.....	0
Chicken NGFR	.....	0
Mouse NGFR	.....	0
Human NGFR	.....	0
Zebrafish NGFR	.....	0
Zebrafish NGFR like 12	.....	0
Zebrafish NGFR like 3	.....	0
Mouse NRADD	.....	0
Zebrafish NRADD	.....	0
Chicken NRADD	.....	0
Xenopus tropicalis NRADD	.....	0
Xenopus laevis NRADD	.....	0

Lancelet NGFR/NRADD	HVVAHGQNLFLVQVETAAPPPRKTRKKRSFKKKMGPNLVPPRNLHHSASSNDAGDEYTSSEASEYDTQGTIPTWIKNELSTSALVSQDEQDADESEDGG	1200
Xenopus L NGFR	.....	0
Chicken NGFR	.....	0
Mouse NGFR	.....	0
Human NGFR	.....	0
Zebrafish NGFR	.....	0
Zebrafish NGFR like 12	.....	0
Zebrafish NGFR like 3	.....	0
Mouse NRADD	.....	0
Zebrafish NRADD	.....	0
Chicken NRADD	.....	0
Xenopus tropicalis NRADD	.....	0
Xenopus laevis NRADD	.....	0

Lancelet NGFR/NRADD	VTDDDDALTETEASGNDSIVSVETSIQINKELKSKDGMKAIRADWNPKPSPQVGRAKEKEALVLGEDKTQMKRVSTESSVDTFAADELDHLSSSDSSEQMA	1300
Xenopus L NGFR	.....	0
Chicken NGFR	.....	0
Mouse NGFR	.....	0
Human NGFR	.....	0
Zebrafish NGFR	.....	0
Zebrafish NGFR like 12	.....	0
Zebrafish NGFR like 3	.....	0
Mouse NRADD	.....	0
Zebrafish NRADD	.....	0
Chicken NRADD	.....	0
Xenopus tropicalis NRADD	.....	0
Xenopus laevis NRADD	.....	0

Lancelet NGFR/NRADD	VALRNASEVTKSSEGNHQARKKLSLPTVTTKEGKLAPPSSYRAQEGMKRVGPM PGVQRPLNRLRAGRCRGRAGALVPTVSEPPGGLGKSVAKPIYKTKDT	1400
Xenopus L NGFR	.....	0
Chicken NGFR	.....	0
Mouse NGFR	.....	0
Human NGFR	.....	0
Zebrafish NGFR	.....	0
Zebrafish NGFR like 12	.....	0
Zebrafish NGFR like 3	.....	0
Mouse NRADD	.....	0
Zebrafish NRADD	.....	0
Chicken NRADD	.....	0
Xenopus tropicalis NRADD	.....	0
Xenopus laevis NRADD	.....	0

Lancelet NGFR/NRADD	LITEVERLKEEKQRAEEQLEKVQETYKAQQQKLEQEQQQVVEERERKLQEEIEILRQELTIQSNALKENQNMMSLQDQLVRVQSEQLRANAREKRAASA	1500
Xenopus L NGFR	.....	0
Chicken NGFR	.....	0
Mouse NGFR	.....	0
Human NGFR	.....	0
Zebrafish NGFR	.....	0
Zebrafish NGFR like 12	.....	0
Zebrafish NGFR like 3	.....	0
Mouse NRADD	.....	0
Zebrafish NRADD	.....	0
Chicken NRADD	.....	0
Xenopus tropicalis NRADD	.....	0
Xenopus laevis NRADD	.....	0

Lancelet NGFR/NRADD	RSQPISSPLKKPERVRQAQFGPGLPARRQHPDPLQSRPGTMSPLP.VLFLYIF.....TVCVSAACPSQHYDSSGACCSQCPGEGVTTPCSDGNGTGC	1593
Xenopus L NGFR	.....MET.....PLFIILGCMAMLNAQKEPCWSGQYTAKGECCISCQVGEVVIKRCGV.NQTVC	54
Chicken NGFR	.....MAGFV..PLLLLLLPAGPTWG...SKCLTKMYTTSGECCKACNLGEGVVQPCGV.NQTVC	54
Mouse NGFR	.....MRRA.....GA.ACSAMDLR..LLLLLLLLLVSGFGAKETCSTGMYTHSGECCKACNLGEGVAQPCGA.NQTVC	67
Human NGFR	.....MGA.....GA.TGRAMDGPR..L..LLLLLVSLGGAKEACPTGLYTHSGECCKACNLGEGVAQPCGA.NQTVC	64
Zebrafish NGFR	.....MF..TVTVVFLLVGE.ALSSRDTCPSGAFTTRGECCKQCCPGEGMVKPCGA.TQTVC	53
Zebrafish NGFR like 12	.....FV..TYAFLSLQGE.ALSSRDTCPSGAFTTRGECCKQCCPGEGMVKPCGA.TQTVC	53
Zebrafish NGFR like 3	.....MDRDERM.....DEED.WRHEIGCYW..GKLLGLVSSSKL.ELAVEEECESGSFTTHSGECCVQCPGEGVVIKECGA.TQTEC	71
Mouse NRADD	.....MKGATEAL..QLCFYVL...AVKMAFGKTCCTSEQFTTKTGECCSMCAAGTGLVTS CGQ.EDTKC	0
Zebrafish NRADD	.....MQ.WGCAALRLSQA LCLLLSAPLCPQVSARSPPCPSGAYTQSGECCSSCPPGSGTAVPHGL.TSTQC	57
Chicken NRADD	.....MD.MRGP...ILTISLLIS.....KIAAEDVCESGLFTNSGKCCSLCPPGFVTVPCGV.SDTKC	65
Xenopus tropicalis NRADD	.....ME.MRGP...RLT LCLLLIS.....KIVAEDVCESGLFS.SGKCCSVCLPGFGVAVPCGV.SDTKC	56
Xenopus laevis NRADD	.....ME.MRGP...RLT LCLLLIS.....KIVAEDVCESGLFS.SGKCCSVCLPGFGVAVPCGV.SDTKC	55

Lancelet NGFR/NRADD	TACVPGQTFSNSRSHTEQCLDCTGCCANM.KVVS PCNRTHDTVCECSADFYWDE...ETSRCERCQICPPGFGAVEACSPRQDSGCVACPNMTYSDVDS	1688
Xenopus L NGFR	EPCLDSVTYSDTIISHTEACKPCTECFCHK.RMEAPCVESDDAVCACAYGYFTDK...KSGQCKLCKSCPEGFGMMMSCTNIQDTICEKCEPGTYSDEDN	149
Chicken NGFR	EPCLDSVTYSDTVSATEPCKPCTQCVLH.SMSAPCVESDDAVCRCA YGYFQDE...LSGSCKECSICEVGFGLMFP CRDSQDTVCEECEPGTFSDEAN	149
Mouse NGFR	EPCLDSVTFSDDVVSATEPCKPCTECLGLQ.SMSAPCV EADDAVCRCSYGYQDE...ETGRCEACSVCGVSGLVFSCQDKQNTVCEECEPGTYSDEAN	162
Human NGFR	EPCLDSVTFSDDVVSATEPCKPCTECLGLQ.SMSAPCV EADDAVCRCA YGYQDE...TTGRCEACRVCEAGSGLVFSCQDKQNTVCEECPDGTYSDEAN	159
Zebrafish NGFR	EPCLDSETFSENFSHKDKCLPCTQCSELM.RMLTPCTDANDALCVCDYGFFLNQ...LSGRCEACTVCPVGQGVQVPCNFERDTVCEKCEDDTYSDQDT	148
Zebrafish NGFR like 12	EPCLDSETFSENFSHKDKCLPCTQCSELM.RMLTPCTDANDALCVCDYGFFLNQ...LSGRCEACTVCPVGQGVQVPCNFERDTVCEKCEDDTYSDQDT	148
Zebrafish NGFR like 3	TQCLDSETFSATFSHTDKCKQVCTECTGLM.RMQTPCTDSND AECVCNNGYFMNV...LSSRCEPCTVCPGLGQGVDMRCELNHDTVCEECDRETYSDQEN	166
Mouse NRADD	.....GN	0
Zebrafish NRADD	QPCQDGVSFSDSESL.LSCTLCAHCPIGI.PQLARCTKTQDTRCDCGEHFFLWRDGNSTGGLCAPCRKCGPGWGVVSQACGLLGDTKCELCCKPGTYSKDTS	155
Chicken NRADD	EPCAQKKKEPQIPEQAE.....GN	83
Xenopus tropicalis NRADD	EPCTENSTFSDVRSATAKCCQPCSTCHGPSATIESTCTREQDTVCRCPEGHYLD...SYGICFPCCQVCSRGHGVVALCTQTKNTVCQLCPSGFYSEVKS	151
Xenopus laevis NRADD	APCKENSTFSDVRSATAKCCQLCSPCLLPSV.KESSCTREQDTICRCPDGQYLD...NYGICRCPCLCPKGQGVVSFCSRDKNTECQLCPSGFYSEVKS	149

Lancelet NGFR/NRADD	PSAQCVACTLCTDS.QVMLQTC TSI SDTICLDKNMPQLIGANVG...RTTP.....ADGLL..TLK	1743
Xenopus L NGFR	DRDPCLPCTICEDG.EIEAKECTFTSDIVCYDPNPRVSSVTPA..SSDFPYTGT.SVP.....PFDLSSSSATTSGDSKVL P..P	223
Chicken NGFR	FVDPCLPCTICEEN.EVMVKECTATSDAECRDLHPRWTTHTPSLAGSDSPEPIT.RDP...F...NT.....EGMATTLADIVTTVMGSSQPVV..S	231
Mouse NGFR	HVDPCLPCTVCEDT.ERQLRECTPWADAECEEIPGRWITRSTPPEGSDVTT PST.QEP...EAPPER.....DLIASTVADTVTTVMGSSQPVV..T	247
Human NGFR	HVDPCLPCTVCEDT.ERQLRECTRWADAECEEIPGRWITRSTPPEGSDSTAPST.QEP...EAPPEQ.....DLIASTVAGVVTVMGSSQPVV..T	244
Zebrafish NGFR	SFDPCLPCTVCDQP.EMEVKSCTPVSDAVCQDFDAP..NSSPSPS.APPPTPYFTSPSIIHKFSSPGSPVSVYTEKLLPDNPTESVT..TTDPGQKR..L	240
Zebrafish NGFR like 12	SFDPCLPCTVCDQP.EMEVKSCTPVSDAVCQDFDAP..NSSPSPS.APPPTPYFTSPSIIHTFSSPGSPVSVTYTEKLSPDNPTESVT..TADPLKR..I	240
Zebrafish NGFR like 3	TMDPCMPC TICEEDTEILLRNCTPTEDALCHDLWS.....PSPG.DDA...TTPKPSS.....PHFI..G	221
Mouse NRADD	.....MLYNVSKGVVYSDTALQGQDGDRE.....GMWVGAGG.....ALAPNTSSSLFPPEP	46
Zebrafish NRADD	DRKPCVPCS.RCQDEEVEIRPCLPDSDTVCMVKDLNIL.SRPSGSDGPRETPRL.QTPNEETESGISP.....APGSGAPRLTP..Q	232
Chicken NRADD	.....PPKEGSTGPT.....ASATSASTFVPPLP	107
Xenopus tropicalis NRADD	SES PCLPC RTECKETEVKIGDCVPLHDILCMDKDVPLL.KRTEGDSRGEN.....GTSPGSHHFI P..Q	212
Xenopus laevis NRADD	RES PCLPC RTECKETEVQIGDCMPQHDLILCMDKDIPIL.KPIDGDARGEN.....GTTAGSPHFIP..P	210

Lancelet NGFR/NRADD	DASGQNIIPVYCSIMGAVVVGLIVYVAVKRWKTQKPKQGTSGP.....QGT DVEAQKNQNNDSGVCVDPCTTPSGGKT.....RVSELSS	1824
Xenopus L NGFR	TCVAENLIPVYCSILAAVIAGLVAFIVFKRWNSCKQNKQGGNSH...PVNQTPSPEGEKLHSDSGISVNSDSTAEQPT....GHPQGKNDMHLHNKLSS	315
Chicken NGFR	RGTADNLIPVYCSILAAVVVGLVAYIAFKRWNSCKQNKQGANNR...PVNQTPSPEGEKLHSDSGISVDSQSLHDQQPPNQSTQGPAPKGDGSLYASLPP	328
Mouse NGFR	RGTADNLIPVYCSILAAVVVGLVAYIAFKRWNSCKQNKQGANSR...PVNQTPPEGEKLHSDSGISVDSQSLHDQQTHQTASGQALKGDGNLYSSLPL	344
Human NGFR	RGTADNLIPVYCSILAAVVVGLVAYIAFKRWNSCKQNKQGANSR...PVNQTPPEGEKLHSDSGISVDSQSLHDQQPHTQTASGQALKGDGGLYSSLPP	341
Zebrafish NGFR	HGLSDNLIPITYTSILAAVLLGLVAFIIFKRWNSCKQNKQANNRACSANPSQTPSPEGEKLHSDSGISVDSQSLQDGGPPHT...VVKIDGGSALSLPL	336
Zebrafish NGFR like 12	DRLSDNLIPITYTSILAAVLLGLVAFIIFKRWNSCKQNKQANNRACSANPSQTPSPEGEKLHSDSGISVDSQSLQDGGPPHT...VVKIDGGSALSLPL	336
Zebrafish NGFR like 3	RGLNENLIPITYCSILAAVVVGLLAYIIFKRWNSCKQNKQANNR...AATANQTPSPEGEKLHSDSGISVDSQSLQEQQAAQTQT...QAQAQHTQ....L	312
Mouse NRADD	PGASSNIIPVYCALLATVILGLLAYVAFKCRWRSKQRQQLAKAR...TVELGDPDR.DQRRGDSNVFVDSPPSLEPCIPSQG...PHPDLCQQLYLIHPQ	139
Zebrafish NRADD	DQGGNNNIIVYVSVLAAVVLGLLLYVAYKCKWKSQQKQALVKAR...VGELNNAGEGEKLHSDSGVFLDSHSLQESQPSKGS..KRDSKQDTRLYINLPP	327
Chicken NRADD	EDVGQNIIPVYCSLLAAVVVGLLAYVAFKCHHTCRQKQQLAKAR...AAELGTTAEGEKLHSDSGVFLDTHSLQEPMQMG....KATRLEARPYSSVPQ	199
Xenopus tropicalis NRADD	EDNSKNIIPVYCSILAAVVVGLIGYVAFKCYTTCKQKKQLAKAR...AGELATSGEKLHSDSGVFLDTHSLQEQQNQLS....KA.KTEPKLYINLPP	303
Xenopus laevis NRADD	ADNSKNIIPVYCSILAAVVVGLICYVAFKCYTTCKQKKQLAKAR...AGELATSAEKLHSDSGVFLDTHSLQEPMHLS....KA.KIEPKLYINLPP	301

Lancelet NGFR/NRADD	SRLRDLVFTLSL.....QHPVNWRLASELGYDIAATDEFEQNNNGPGAAKAFLVHWSRMENA..TVDNLCQALRATGRQDVIGLLQECNMGRHL	1913
Xenopus L NGFR	HKQEEVEKLISGS.....LEQTKWSLAGELGYQDEIIDSFTREE....FPVRAMLSDWSSKDSA..TTDALYALRKIQRDDIAQSLNSDSTATSP	400
Chicken NGFR	SKQEEVEKLISSS.....AEETWRQLAGELGYKEDLIDCFREE....SPARALLADWSAKETA..TLDALLVALRKIQRGDIAESLYSESTATSP	413
Mouse NGFR	TKREEVEKLLN.....GDTWRHLAGELGYQPEHIDSFTHEA....CPVRALLASWGAQDSA..TLDALLAALRRIQRADIVESLCSESTATSP	426
Human NGFR	AKREEVEKLINGS.....AGDTWRHLAGELGYQPEHIDSFTHEA....CPVRALLASWATQDSA..TLDALLAALRRIQRADLVESLCSESTATSP	426
Zebrafish NGFR	HTREEVEKLLNRTNEGEESAANEETDWCSLAGLLGYKEEHIANFKQEE...RPIQALLSHWASQDSA..NIDTLCTALKKINREDIAQSIIVKPTATSA	430
Zebrafish NGFR like 12	HTREEVEKLLNRTNEGEESAANEETDWCSLAGLLGYKEEHIANFKQEE...RPIQALLSHWASQDSA..NIDTLCTALKKINREDIAQSIIVKPTATSS	430
Zebrafish NGFR like 3	HAAEQIVVRVDGATQPDSPPAQA.....	335
Mouse NRADD	QQQEEVQRLMMGE.....PAKGWQELAGHLGYQAEAVETMACDQ....MPAYTLLRNWAAQEGNRA.TLRVLEDALAAIGREDVVQVLSSPAESSSV	227
Zebrafish NRADD	HRQEEVEGLLAEGG.....NRSWKQLAATLGYEQERVDFGRGQ....DPIHTLMTDWSQEGS..TLGLLCSALTRIERPDIITALTAPTQGVSV	412
Chicken NRADD	QRRREEVQLLES GG.....PNGDWRLAARLGYGDEAVGTFARGQ....APARTLLATWAATEGA..TVEALCRAALAMGRQDVAECLAGPGDASSV	285
Xenopus tropicalis NRADD	HKQSEVERLLADTS.....LGKDWQRLASL LGYEETIDTFGRGV...DPVHTLLTDWSSKESS..TLEVLCALVNMERADVVENLNSNDGSSV	389
Xenopus laevis NRADD	HKQSEVERLLADTS.....LGKDWQRLASL LGYEETIDTLGRGE...DPVHTLLTDWSSKESS..TLEVLCALVNMERADVVENLNSANDASSV	387

Lancelet NGFR/NRADD	V	1914
Xenopus L NGFR	V	401
Chicken NGFR	V	414
Mouse NGFR	V	427
Human NGFR	V	427
Zebrafish NGFR	V	431
Zebrafish NGFR like 12	V	431
Zebrafish NGFR like 3	.	335
Mouse NRADD	V	228
Zebrafish NRADD	V	413
Chicken NRADD	V	286
Xenopus tropicalis NRADD	V	390
Xenopus laevis NRADD	V	388

☒ non-conserved
☒ ≥ 50% conserved