

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	ESIACVMHSSGGSIYVCSDRLLTSLNIEQSSIRDFYSTLVENHLDRSFVNARLDFLACSAVQSVESGTILQEMESLLGVSVGMAKDLSAAEISMQRIGE	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	EGKAYNDKSDIWALGCIMYEMACLHRTFEGSNLPA LVNKIMNGQFAPVKGNY SHEFKDLIQDMLQREPQYRPSANELLYHRLPELMARYEEGATEWEDEL	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	GDGFSVFVSDNGIVMTCGDGSNGCLGHGDWMSASRPRLIEPLLSVDVRAISCGPHHVAVGSDGEVFAWGRGKHGCLGLGDEEDHFSPQEVQISEPVFIR	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	RAHTPTQDTNRLSVSSVGSVQRQVSSSSSLNADNTGGDGVDSRETRGRSAKRHSSHSSSIGSINIGEKETELITTPTPILRCDSIIIGTGGTPGAEPIPLTLT	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.....TVCVSAACP	SGQHYDSSGACCSQCP	PGEVVTTPCSDGNGTGC	1593	
Xenopus L NGFR	.....MET.....PLFIILGCMAMLNAQKEPCW	SGQYTAKGECCISCQV	GEGVIKRCGV.NQTVC	54
Chicken NGFR	.....MAGFV..PLLLLLLPAGPTWG...SKCLTKMYTTS	SGECCACNLGEGVVQPCGV.NQTVC		54
Mouse NGFR	.....MRRA.....GA.ACSAMDLR..LLLLLLLLLVGSFSGAKET	CSTGMYTHSGECCACNLGEGVAQPCGA.NQTVC		67
Human NGFR	.....MGA.....GA.TGRAMDGPR..L.LLLLLLVSLGGAKEACPTGLYTHSGECCACNLGEGVAQPCGA.NQTVC			64
Zebrafish NGFR	.....MF..TVTVVFLLVGE.ALSSRDTCP	SGAFTTRGECCKQCP	PGEVMVKPCGA.TQTVC	53
Zebrafish NGFR like 12	.....FV..TYAFLSLQGE.ALSSRDTCP	SGAFTTRGECCKQCP	PGEVMVKPCGA.TQTVC	53
Zebrafish NGFR like 3	.....MDRDERM.....DEED.WRHEIGCYW..GKLLGLVSSSKL.ELAVEEECESGSFTTHSGECCVQCP	PGEVVIKECGA.TQTEC		71
Mouse NRADD	.....MKGATEAL..QLCFYVL...AVKMAFGKTC	TSEQFTKTGECCSMCAAGTGLVTS	CGQ.EDTKC	57
Zebrafish NRADDMQ.WGCAALRLSQA	LCLLLSAPLCPQVSARSPP	CPSGAYTQSGECCSSCP	PGSGTAVPHGL.TSTQC	65
Chicken NRADD	.....MD.MRGP....ILTISLLIS.....KIAAEDV	CESGLFTNSGKCCSLCP	PGFGVTVPCGV.SDTKC	56
Xenopus tropicalis NRADD	.....ME.MRGP....RLTLC	LLIS.....KIVAEDV	CESGLFS.SGKCCSVCLPGFGVAVPCGV.SDTKC	55

Lancelet NGFR/NRADD	TACVPGQTFSNSRSHTEQCLDCTGCGANM.KVVS	PCNRTHDTVCECSADFYWDE...ETSRCERCQICPPGFGAVEAC	SPRQDSGCVACPNMTYSDVDS	1688		
Xenopus L NGFR	EPCLDSVTYSDTIISHTEACKPCTECFCHK.RMEAPCVESDDAVCACAYGYFTDK...KSGQCKLCKSC	PEGFGMMMSCTNIQDTICEK	CPEGTYSDEDN	149		
Chicken NGFR	EPCLDSVTYSDTVSAEPCKPCTQCQVGLH.SMSAPCVESDDAVCRCAAYGYFQDE...LSGSCKECS	SICEVGFGLMFP	CRDSQDTVCEECP	EGTFSDEAN	149	
Mouse NGFR	EPCLDSVTFSDDVVSATEPCKPCTECLGLQ.SMSAPCVESDDAVCRCSYGYQDE...ETGRCEACS	VCVGSGLVFS	CQDKQNTVCEECP	EGTYSDEAN	162	
Human NGFR	EPCLDSVTFSDDVVSATEPCKPCTECLGLQ.SMSAPCVESDDAVCRCAAYGYQDE...TTGRCEACR	VCEAGSGLVFS	CQDKQNTVCEECP	PDGTYSDAN	159	
Zebrafish NGFR	EPCLDSETFSENFSHKDKCLPCTQCSELM.RMLTPCTDANDALCVCDYGFFLNQ...LSGRCEACT	VCPVGGVQVPCN	FERDTVCEKCEDD	TYSDQDT	148	
Zebrafish NGFR like 12	EPCLDSETFSENFSHKDKCLPCTQCSELM.RMLTPCTDANDALCVCDYGFFLNQ...LSGRCEACT	VCPVGGVQVPCN	FERDTVCEKCEDD	TYSDQDT	148	
Zebrafish NGFR like 3	TQCLDSETFSSATFSHTDKCQVCTECTGLM.RMQTPCTDSND	AEVCNNGYFMNV...LSSRCEPCTVCP	LGQGVDMRCELNHD	TVCEECD	ETYSQEN	166
Mouse NRADD	QPCQDGVSFSDSESL.LSCTLCAHCP	IGI.PQLARCTKTQDTRCD	CGEHFFLWRDGNSTGGLCAPCRKCGPGWGV	SQACGLLGDTKCELCKP	GTYSKDTS	0
Zebrafish NRADD	EPCAQKKEPQIPEQAE.....GN					155
Chicken NRADD	EPCTENSTFSDVRSATAKCCQPCSTCHGPSATIESTCTREQDTVCR	CPEGHYLD...SYGICFPCCQVCSR	GHGVVALCTQTKN	TVCQLCPSG	FYSEVKS	151
Xenopus tropicalis NRADD	APCKENSTFSDVRSATAKCCQLCSPCLLPSV.KESSCTREQDTICR	CPDGGYLD...NYGICR	PCQLCPKGGVVSFCSR	DKNTECQLCPSG	FYSEVKS	149

Lancelet NGFR/NRADD	PSAQCVACTLCTDS.QVMLQCTCTISDITICLDKNMPQLIGANVG...RTTP				1743	
Xenopus L NGFR	DRDPCLPCTICEDG.EIEAKECTFTSDIVCYDPNPRVSSVTPA..SSDFPYTGT.SVP					223
Chicken NGFR	FVDPCLPCTICEEN.EVMVKECTATSDAECRDLHPRWTTHTPSLAGSDSPEPIT.RDP...F...NT.....EGMATTLADIVTTVMGSSQP					231
Mouse NGFR	HVDPCLPCTVCEDT.ERQLRECTPWADAECEEIPGRWITRSTPPEGSDVTTTPST.QEP...EAPPER.....DLIASTVADTVTTVMGSSQP					247
Human NGFR	HVDPCLPCTVCEDT.ERQLRECTRWADAECEEIPGRWITRSTPPEGSDSTAPST.QEP...EAPPEQ.....DLIASTVAGVVTVMGSSQP					244
Zebrafish NGFR	SFDPCLPCTVCDQP.EMEVKSCTPVSDAVCQDFDAP..NSSPSPS.APPPTPYFTSP	PSIHKFSSPGSVVSYTEKLLPDNP	TESVT..TTDPGQKR..L			240
Zebrafish NGFR like 12	SFDPCLPCTVCDQP.EMEVKSCTPVSDAVCQDFDAP..NSSPSPS.APPPTPYFTSP	PSIHTFSSPGSVVTYTEKLSPDNP	TESVT..TADPLKR..I			240
Zebrafish NGFR like 3	TMDPCMPCITICEEDTEILLRNCTPTEDALCHDLWS.....PSPG.DDA...TTPKPSS					221
Mouse NRADD	.....MLYNVSKGVVYSDTALQGQDGDRE.....GMWVGAGG.....ALAPNTSSSLFP					46
Zebrafish NRADD	DRKPCVPCS.RCQDEEVEIRPCLPDSDTVCMVKDLNIL.SRPSGSDGPRETPRL.QTPNEETESGISP.....APGSGAPRLTP..Q					232
Chicken NRADD	.....PPKEGSTGPT.....ASATSASTFVP					107
Xenopus tropicalis NRADD	SESPCLPCTRTECKETEVKIGDCVPLHDILCMDKDVPLL.KRTEGDSRGEN.....GTSPGSHHFI..Q					212
Xenopus laevis NRADD	RESPCLPCTRTECKETEVQIGDCMPQHDILCMDKDIPIL.KPIDGDARGEN.....GTTAGSPHFIP..P					210

Lancelet NGFR/NRADD	DASGQNIIPVYCSIMGAVVVGLIVYVAVKRWKTQKPKQGTSGP.....QGT DVEAQKNQNNDSGVCVDPCTTPSGGKT.....RVSELSS	1824
Xenopus L NGFR	TGVAENLIPVYCSILAAVIAGLVAFIVFKRWNSCKQNKQGGNSH...PVNQTPSPEGEKLHSDSGISVNSDSTAEQPT....GHPQGNNDMHLHNKLSS	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	PGASSNIIPVYCALLATVILGLLAYVAFKCRWSHKQRQLAKAR...TVELGDPDR.DQRRGDSNVFVDSPPSLEPCIPSQG...PHPDLCQQLYLHIPQ	139
Zebrafish NRADD	DQGGNNNIIVYVSVLAAVVLGLLLYVAYKCKWKSQQKQALVKAR...VGELNNAGEGEKLHSDSGVFLDSHSLQESQPSKGS..KRDSKQDTRLINLPP	327
Chicken NRADD	EDVGQNIIPVYCSLLAAVVVGLLAYVAFKCHHTCRQKQLAKAR...AAELGTTAEGEKLHSDSGVFLDTHSLQEPHQMGM....KATRLEARPYSSVPQ	199
Xenopus tropicalis NRADD	EDNSKNIIPVYCSILAAVVVGLIGYVAFKCYTTCKQKKQLAKAR...AGELATSGEKLHSDSGVFLDTHSLQEQQNQLS....KA.KTEPKLYINLPP	303
Xenopus laevis NRADD	ADNSKNIIPVYCSILAAVVVGLICYVAFKCYTTCKQKKQLAKAR...AGELATSAEKLHSDSGVFLDTHSLQEPPNHL....KA.KIEPKLYINLPP	301

Lancelet NGFR/NRADD	SRLRDLVFTSL.....QHPVNRHLASELGYDIAATDEFEQNNNGPGAAKAFLVHWSRMENA..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	QQQEEVQRLLMMGE.....PAKGWQELAGHLGYQAEAVETMACDQ...MPAYTLLRNWAAQEGNRA.TLRVLEDALAAIGREDVVQVLSSPAESSSV	227
Zebrafish NRADD	HRQEEVEGLLAEGG.....NRSWKQLAATLGYEQERVDFGRGQ...DPIHTLMTDWSQEGS..TLGLLCSALTRIERPDIITALTAPTQGVSV	412
Chicken NRADD	QRRREEVQLLES GG.....PNGDWRGLAARLGYGDEAVGTFARGQ...APARTLLATWAATEGA..TVEALCRAALAMGRQDVAECLAGPGDASSV	285
Xenopus tropicalis NRADD	HKQSEVERLLADTS.....LGKDWQRLASLGYEETIDTFGRGV...DPVHTLLTDWSSKESS..TLEVLCALVNMERADVVENLNSNDGSSV	389
Xenopus laevis NRADD	HKQSEVERLLADTS.....LGKDWQRLASLGYEETIDTLGRGE...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