

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	ESIACVMHSSGGSIYVCSDRLTSLNIEQSSIRDFYSTLVENHLDRSFVNARLDFLACSAVQSVESGTILQEMESLLGVSVGMAKDLSAAEISMQRIGE	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	RAHTPTQDTNRLSVSSVGSVQRQVSSSSSLNADNTGGDGVDSRETRGRSAKRHSSHSSSIGSINIGEKETELITTPTPILRCDSIIGTGGTPGAEPIPLTLT	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	HVVAHGQNLFLVQVETAAPPPRKTRTRKKRSFKKKMGPNLVPPRNLHHSASSNDAGDEYTSSEASEYDTQGTIPTWIKNELSTSALVSQDEQDADESEDGG	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	VALRNASEVTKSSEGNHQARKKLSLPTVTTKEGKLAPPSSYRAQEGMKRVGPMPGVQRPLNRLRAGRCRGRAGALVPTVSEPPGGLGKSVAKPIYKTKDT	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	LITEVERLKEEKQRAEEQLEKVQETYKAQQQKLEQEQQQVVEERERKLQEEIEILRQELTIQSNALKENQNNIMMSLQDQLVRVQSEQLRANAREKRAASA	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.VLF	FLYIF.....TVCVSAACP	PSQHYDSSGACCSQCP	PGEVVTTPCSDGNGTGC	1593		
Xenopus L NGFR	.....MET.....	PLFIILGCMAMLNAQKEP	CWSGQYTAKGECCIS	QVGEVVIKRCGV.NQTVC	54	
Chicken NGFR	.....MAGFV..	PLLLLLLPAGPTWG...SK	CLTKMYTTSGECCKACNL	GEGVVQPCGV.NQTVC	54	
Mouse NGFR	.....MRRA.....	GA.ACSAMDLR..	LLLLLLLLLVSGGAKET	CSTGMYTHSGECCKACNL	GEGVAQPCGA.NQTVC	67
Human NGFR	.....MGA.....	GA.TGRAMDGPR..	L.LLLLLLVSLGGAKEAC	PTGLYTHSGECCKACNL	GEGVAQPCGA.NQTVC	64
Zebrafish NGFR	.....MF..	TVTTVFLLVGE..ALSSRD	TPSGAFTTRGECCKQ	CPGEGMVKPCGA.TQTVC	53	
Zebrafish NGFR like 12	.....FV..	TYAFLSLQGE..ALSSRD	TPSGAFTTRGECCKQ	CPGEGMVKPCGA.TQTVC	53	
Zebrafish NGFR like 3	.....MDRDERM.....	DEED.WRHEIGCYW..GK	LGLVSSSKL.ELAVEEE	CESGSFTHSGECCVQCP	PGEVVIKECGA.TQTEC	71
Mouse NRADD	.....	.....	.....	.....	0	
Zebrafish NRADDMKGATEAL..QL	CFYVL...AVKMAFGKT	CTSEQFTTKTGECCSM	CAAGTGLVTS	CGQ.EDTKC	57
Chicken NRADD	.....	.....MQ.WGCAALRLSQA	LCLLLSAPLCPQVSARSPP	CPSGAYTQSGECCSSCP	PGSGTAVPHGL.TSTQC	65
Xenopus tropicalis NRADD	.....	.....MD.MRGP....	ILTISLLLIS.....KIAAEDV	CESGLFTNSGKCCSLCP	PGFGVTVPCGV.SDTKC	56
Xenopus laevis NRADD	.....	.....ME.MRGP....	RLTLCLLLIS.....KIVAEDV	CESGLFS.SGKCCSVCL	PGFGVAVPCGV.SDTKC	55

Lancelet NGFR/NRADD	TACVPGQTFSNSRSHTEQCLDCTGCGANM.KVVS	PCNRTHDTVCECSADFYWDE...	ETSRCE	RCQICPPGFGAVEAC	SPRQDSGCVACPNMTYSDVDS	1688		
Xenopus L NGFR	EPCLDSVTYSDTIISHTEACKPCTECFCHK.RMEAP	CVESDDAVCACAYGYFTDK...	KSGQCKLCKSC	PEGFGMMMSCTNIQDT	ICEKCEPGTYSDEDN	149		
Chicken NGFR	EPCLDSVTYSDTVSATEPCKPCTQC	VGLH.SMSAPCVESDDAVCRCA	YGYFQDE...LSGSCKECS	ICEVGFGLMFP	CRDSQDTVCEECEPGTFSDEAN	149		
Mouse NGFR	EPCLDSVTFS	DVVSATEPCKPCTECLGLQ.SMSAP	CVESDDAVCRCSYGYQDE...	ETGRCEACSV	CGVSGLVFSCQDKQNTVCEECEPGTYSDEAN	162		
Human NGFR	EPCLDSVTFS	DVVSATEPCKPCTECLGLQ.SMSAP	CVESDDAVCRCA	YGYQDE...TTGRCEAC	RVCEAGSLVFSCQDKQNTVCEECPDGTYSDEAN	159		
Zebrafish NGFR	EPCLDSETFSENFSHKDKCLPCTQC	SELM.RMLTPCTDANDALCVCDY	GFFLNQ...LSGRCEACT	VCPVGQGVQVPCNFER	DTVCEKCEDDTYSDQDT	148		
Zebrafish NGFR like 12	EPCLDSETFSENFSHKDKCLPCTQC	SELM.RMLTPCTDANDALCVCDY	GFFLNQ...LSGRCEACT	VCPVGQGVQVPCNFER	DTVCEKCEDDTYSDQDT	148		
Zebrafish NGFR like 3	TQCLDSETF	SATFSHTDKCKQVCTECTGLM.RMQ	TPCTDSND	AEVCNNGYFMNV...LSSRCEP	CTVCPLGQGVDMRCELNHD	TVCEECDRETYSDQEN	166	
Mouse NRADD	.....	.....	.....	.....	.....	0
Zebrafish NRADD	QPCQDGV	SFSDSESL.LSCTLCAHCP	IGI.PQLARCTKTQD	TRCDGCEHFFLWRDGNSTG	GLCAPCRKCGPGWGV	SQACGLLGDTKCELCKP	GTYSKDTS	155
Chicken NRADD	EPCAQKKEPQIPEQAE	.....GN	.....	.....	.....	83
Xenopus tropicalis NRADD	EPCTENSTFSDVRSATAK	CQPCSTCHGPSATIESTCTREQD	TVCRCEGHYLD....SYGIC	FPCCVCSRGHGV	VALCTQTKN	TVCQLCPSGFYSEVKS	151	
Xenopus laevis NRADD	APCKENSTFSDVRSATAK	CQLCSPCLLPSV.KESSCTREQD	ITICRCPDGGYLD....NYGIC	RPCQLCPKGQGV	VSFCSRDKNTECQLCPSGFYSEVKS	149		

Lancelet NGFR/NRADD	PSAQCVACTLCTDS.QVMLQCTCTSI	SDTICLDKNMPQLIGANVG...RTTP	.....	.....	ADGLL..TLK	1743
Xenopus L NGFR	DRDPCLPCTICEDG.EIEAKECT	FTSDTVCDPNPRVSSVTPA..SS	DFPYTGT.SVP.....	PFDLSSSSATTSGDSKVL	P..P	223
Chicken NGFR	FVDPCLPCTICEEN.EVMVKECT	ATSDAECRDLHPRWTTHTPS	LAGSDSPEPIT.RDP....F..NT.....	EGMATTLADIVTTVMGSS	QPVV..S	231	
Mouse NGFR	HVDPCLPCTVCEDT.ERQLRECT	PWADAEECEIPGRWITRSTP	PEGSDVTTTPST.QEP....EAPPER.....	DLIASTVADTVTTVMGSS	QPVV..T	247	
Human NGFR	HVDPCLPCTVCEDT.ERQLRECT	RWADAEECEIPGRWITRSTP	PEGSDSTAPST.QEP....EAPPEQ.....	DLIASTVAGVTTVMGSS	QPVV..T	244	
Zebrafish NGFR	SFDPCLPCTVCDQP.EMEVKS	CTPVSDAVCQDFDAP..NSS	SPS.APPPTPYFTSP	SIHKFSSPGSVVSYTEKLLPDNP	TESVT..TTDPGQKR..L	240	
Zebrafish NGFR like 12	SFDPCLPCTVCDQP.EMEVKS	CTPVSDAVCQDFDAP..NSS	SPS.APPPTPYFTSP	SIHTFSSPGSVVTYTEKLS	PDNP	TESVT..TADPLKR..I	240
Zebrafish NGFR like 3	TMDPCM	PCTICEEDTEILLRNCTPTEDALCH	RLWS....PSPG.DDA...TTPK	PSS.....	PHFI..G	221	
Mouse NRADDMLYNVSKGVV	SDTALQGQDGDRE.....	GMWVGAGG.....	ALAPNTSSLFP	PPEP	46
Zebrafish NRADD	DRKPCVPCS	RCQDEEVEIRPCLPDSDTV	CMVKDLNIL.SRPSGSDGPRET	PRL.QTPNEETESGISP.....	APGSGAPRLTP..Q	232	
Chicken NRADDPPKEGSTGPT.....	ASATSASTFV	PPLP	107
Xenopus tropicalis NRADD	SES	PCLPCRTECKETEVKIGDCVPLH	DILCMDKDVPLL.KRTEGDS	RGEN.....GTSPGSHHFI	P..Q	212	
Xenopus laevis NRADD	RES	PCLPCRTECKETEVQIGDCMPQH	DILCMDKDIPIL.KPIDGD	RGEN.....GTTAGSPHFI	P..P	210	

Lancelet NGFR/NRADD	DASGQNIIPVYCSIMGAVVVGLIVYVAVKRWKTQKPKQGTSGP.....QGTDVEAQKNQNNDSGVCVDPCTTPSGGKT.....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	PGASSNIIPVYCALLATVILGLLAYVAFKCRWSHKQRQQLAKAR...TVELGDPDR.DQRRGDSNVFVDSPPSLEPCIPSQG...PHPDLCQQLYLIHPQ	139
Zebrafish NRADD	DQGGNNNIIVYVSVLAAVVLGLLLYVAYKCKWKSQQKQALVKAR...VGELNNAGEGEKLHSDSGVFLDSHSLQESQPSKGS..KRDSKQDTRLYINLPP	327
Chicken NRADD	EDVGQNIIPVYCSLLAAVVVGLLAYVAFKCHHTCRQKQQLAKAR...AAELGTTAEGEKLHSDSGVFLDTHSLQEPMQMG....KATRLEARPYSSVPQ	199
Xenopus tropicalis NRADD	EDNSKNIIPVYCSILAAVVVGLIGYVAFKCYTTCKQKQQLAKAR...AGELATSGEKLHSDSGVFLDTHSLQEQQNQLS....KA.KTEPKLYINLPP	303
Xenopus laevis NRADD	ADNSKNIIPVYCSILAAVVVGLICYVAFKCYTTCKQKQQLAKAR...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..TLDALLAALRRIQRADIVESLCESTATSP	426
Human NGFR	AKREEVEKLINGS.....AGDTWRHLAGELGYQPEHIDSFTHEA....CPVRALLASWATQDSA..TLDALLAALRRIQRADLVESLCESTATSP	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.TLRLVEDALAAIGREDVVQVLSSPAESSSV	227
Zebrafish NRADD	HRQEEVEGLLAEGG.....NRSWKQLAATLGYEQERVDFGRGQ....DPIHTLMTDWSQEGS..TLGLLCSALTRIERPDIITALTAPTQGVSV	412
Chicken NRADD	QRREEVEQLLES GG.....PNGDWRLAARLGYGDEAVGTFARGQ....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