

KAL-----
-----CRALTL PNSALHSL SLEACQLTGACCKDLASTFTRYKCLRRINLAKN
SLGFSGLFVLCAMKDQCTCTLYELKLRMADFSDSQEFLSEMERNKILSIENGV-----

#NLRP4c_mouse "Q3TKR3|NAL4C_MOUSE NACHT, LRR and PYD domains-containing protein
4C - Mus musculus"

-----MASFFSDFGLMWYLEELNKKEFMKFKEFLKQEILQL
RLKQIS-----WTEVKKASREDLANLLLKHYEKKAWDMTFKIFQKMNKDLMERAGR
EIAG-----
-----HSKLYQAHLKK
KLTHDYARKFNKIVQDFSKQKFTQDDYDRFENFLISKVTAKKPHM--VFLQGAAGIGKSL
MLTKLMLAWSEGVMFQNKFSYIFYFCCQDVK-KMKRASLAELISKEWPKTSAPIEDILSQ
PEKLLFVIDNLEVMCEDMS----ERESELCDTCTEKQPVRI LLSLLRRKMLPKSSFLIS
ATPETFEKMEGRVECTNVKIVTGFNESNIKMYFRSLFQDKT-----KTQEIFSLVK
ENQQLFTVCQVPVLCWMVATCLKKEIEKGRDLVSVCRRTTSLYTTHIFNLFIPQSAQ--Y
PSKESQAQLQSLCSLAAEGMWT-DTFVFGEEALRRNGIMSDIPTLLDVRILEKSKK-SE
KSYIFLHPSIQEVCAAIFYLLKSHMDHPSQDVKS-----IEALIFT-FLKKVKVQW
IFFGSI FGLLHESEQKLEAFFGHQLSQEIKRQLYQCLETISGN-----
-----EELQEQVDGMKLFYCLFEMDDEAF LAQAMNCME-----
-QINFAVDYSDVIVAA-HCLQHCSTLKKLSLSTQN-----VLSEGQEH-----
-----YTEKLLMCWHMCSVLISSKDIYILQVKNTNLNETASLVLYSHLMYP-----SC
TLKALVNNVTFLCDNRLFFELIQNQ-CLQHLDLNLTFLSH-GDVKLLCDVLSQEECNIE
KLM-----VAACNLSPDDCKVFASVLISSKMLKHLNLSNNL-D
KGISSLSKALCHPDCVLKNLVLVNC SLSEQWDYLSEVLRNKTNLHLDISSNDLKDEGL
KVL-----
-----CGALSLPDSVLKSLSVRYCLITTSQCQDLAEVLRKNQNLRLNLOVSNN
KIEDAGVKLLCDAIKHPNCHLENIGLEACALTGACCEDLASAFTHCKTLWGINLQENALD
HSLGIVLFEALKQQCTLHVGLGRITDFDKETQELLMAEEEKNPHLSILSSV-----

#NLRP4d_mouse "Q66X24|Q66X24_MOUSE NALP-beta (Fragment) - Mus musculus"

-----MASFFSDVGLMWYLEELNRKEFIKFKEFLKQEILQL
GLKQIS-----WTEVKKASRKDLNQLKH YGEKQTWDMTFNIFQKLNKELIEGAER
EIAG-----
-----HPKLYRAHLKT
KVTHYGFRAFNISIQDFFRKEFTKDDFDYFEDLFLSKRTEMKPHVREVFLYGVAGIGKTL
LLKFMFAWLEGLVIQDKFSYIFYFCCQDLK-QLKTASLADLISSECPNPSAPIEEILSQ
PEKLLFIIDSLEWIECDLS----EQESELCDNCMEKKPVNIQISSLLRGKILPQSSLLIS
ATPR-FEKMQDMIECTDVKI IKGFKESNINMYFHIMIRDNN-----KVHEAFLVR-
ENEQLFTICQAPVLCWMVITCLKNEIEKGRDPVSICQSTTSLYTTHIFNLFIPQSAQ--Y
PSKESQAQLQSLCSLATEGMWT-GTFMFSEEALRRNGTMSDIPTLLDIGMLHDG-----
-----HPSQHVKC-----IETLMFM-FLKKVKVQW
VFWG-FIFGLLHRALEEKLEIFFGYSLSKKIKDKLCQCLKTISRN-----
-----KSLQEEIDGMK-FFCLFELDDEAFVQAMNCME-----
-QIRFVTKDYSDIIIAA-YCLKHCSKLLKLSFSTEN-----VLIEELDQS-----
-----YMEKVLDCWNHMC SGFTRSKDIKVLQIKDTHFKEQVFQVLFESLRYP-----SF
TLKELMVNNVTFYDGEHMFELIQNC-SLECLNLLSLLSP-SDVELLCKILIQSECKME

K-----VAHCKLSPDDCKSFVFLMRSKSLKDLNLACNNL-G
QGISSLCKALCHQDCILKYLVLNCSLSEQWDYLSDVLSQNKTLRHLEISVNDLKDEGL
KIL-----
-----CKALTVLES-----LSMVHCFITSSGCQDLAEVLRKKQKLCCLDVSNN
KLED SGVKLLCEAMEHPNCHLEDLGLDDCDITGASSENLSAFIQCKALKNINLNGNVFE
VSEMFVSDMLKQKHSRLIFG-LRITDFDNESPAFLVFEEKKN-----

#NLRP4e_mouse "gi|51921379|ref|NP_001004194.1| NLR family, pyrin domain
containing 4E [Mus musculus]"

-----MASFFSDFGLMWYLEELNKKEFMKFKELLQQEILQL
GLKHIS-----WTEVKKASREDLANLLLKHYYEKKAWDMTFKIFQKMNRRQDLMERAGR
EIAG-----
-----HSKLYQVHLKK
KLTHDYARKFNIKDQDSLKQKFTQDDCDHFGNLLISKATGKKPHM--VFLQGVAGIGKSL
MLTKLMLAWSEGVMFQNKFSYIFYFCCQDVK-KMKRASLAELISKEWPNASAPIEEILSQ
PEKLLFVIDNLEVMCEDMS----EWESELCDDCEKQPVNLMSSLLRRKMLPESSFLVS
ATPETFEKIEDRIECTNVKMMAGFNESSIKVYFYSLFQDRN-----RTQEIFSLVR
ENEQLFSVCQVPVLCWMVATCLKKEIEKGRDPVSI CRRITSLYTTYIFNLFIPHSAQ--Y
PSKKSQDQLQGLCSLAAEGMWT-DTFVFAEEALRRNGIMSDISTLLDVRILEKSKE-SE
KSYIFLHPSIQEVCAAIFHLLKSHVDHPSQDVKS-----IEALIFT-FLKKVKIQW
IFFGSFIFGLLHESEQKLEAFFGHQLSQEIKRQLYQCLETISGN-----
-----KELQEIDGMKLFYCLFEMDDEAFLPQVMNCME-----
-QIKFVAKDYSDVIVAA-HSLQHCSTLKKLSLSTQN-----ILSEGQEH-----
-----YTEKLLICWHHVCVSVLTSSKDIHVLVQVKTDFNERAFLVLYSHLKYP-----SC
ILKVLEVNNTLLCDNRLLFELIQNQ-RLQLLNLSTFLSH-NDVKLLCDVNLQAEENIE
KLM-----VADCNLSRDDCKVFSVLISSKMLKHLNLSNNL-D
KGISSLSKALCHPDCVLKLVAKCSLSEECWHYLSEVLRNRKTLTHLDISFNDLKDEGL
KVL-----
-----CGALTLPDSVLI SLSVRYCLITTSGCQDLAEVLRNNQNLRLNLQISNN
KIEDAGVKLLCDAIKHPNCHLENIGLEACALTGACCEDLASSFTHCKTLLGINLQENALD
HSGLVALFEAMKQQQCTVNLRLRITDFDKETQEFLEMAEKEKNPYLSI-----

#NLRP4f_mouse "gi|140972011|ref|NP_780499.3| NALP, kappa [Mus musculus]"

-----MASFISDFGLIWLRELNKKEFMKFKDFLIQEILEL
KLKQVS-----STKVKKASREDLANLLKCGE-NQAWDMTFRILQKINRKDLTERATG
AIVG-----
-----NPNLYRDHLKK
KLTHDCPKKFNRIQDFIKETFIQNDYDAFENLLISKGTERKPHM--VFLKGMAGVGKTL
MLKNLMLAWSKGLVFQNKFSYAFYFCCQDVK-QLKTASLAELISREWPSAPSAPIEEILSQ
PEKLLFIDSLEGMWDLT----KQSELCDDCEKQPVSTLLSSLLRRKMLPESSLLLS
TTPETFEKMEDRIQCTDVKTATAFDEFSMKIYFHRLFQDRK-----RAQEAFLSLVR
ENKQLFTICQVPLLCWMVATCLKEEIEKGGDPVSLCRRTTSLYTTTHIFSLFIPQSAQ--Y
PSKKSQDQLQGLCSLAAEGMWT-DTFVFGKEALRRNGIFDSDIPTLLDIGMLGKIRE-FE
NSYIFLHPSVQEVCAAIFYMLKRHVEHPSQDVKN-----IETVLFM-FLKKVKQW
IFLGCIFGLLQKSEKLGVFFGHRLSKNIHKKLYQCLETLN-----
-----AELQEIDGMRLFSCLFEMEDEAFLVKAMNCMQ-----
-QINFAKNYSDFIVAA-YCLKHCSTLKKLSFSTEN-----VLNE-GDQS-----

-----YMEELLICWNNMCSVFVRSKDIQELRIKDTNFNPAIRVLYESLKYP-----SF
TLNKLVANNSVFG-DNHVLFELIQNS-SLQYLDLSCSFLSH-NEVKLLCDILNQAECNIE
KLM-----IAHCKLSPDDCKIFGSILMSSKSLKVLNLANNNL-N
QGISSLCKALCHPHCTLEYLVLNSCSLSEQCWDYLSEVLRQNKTLSHLDISSNDLKDEGL
KIL-----
-----CRSLILPYCVLESCLSCCGITERGCQDLAEVLKNNQNLKYLHVSYN
KLKDTGVMLLCDAIKHPNCHLKDQLQLEACEITDASNEELCYAFMQCETLQTLNLMGNAFE
VSRMVFFPRF-----

#NLRP4g_mouse "Q3UWL9|Q3UWL9_MOUSE In vitro fertilized eggs cDNA, RIKEN full-length enriched library, clone:7420493B02 product:similar to PAN2 protein - Mus musculus"

-----MASFISDFGLMWYLKELNKKEFIKFKEFLIQEILKL
KLKQIS-----WTEVKKASREDLANLLKCYEENQAWDMTFNILQKINRKDLTERATE
EIADS-----
-----SPLGLTDSGNPKLYRDHLKK
KLTHDCSKKFNRIQDFIKEIFIQNDCTFENLLISKGTEKKPHM--VFLQGMAGIGKTM
MLKNLMLAWSKGLVFQNKFSYTFYFCCRDKV-QLKTASLAELISREWSPSPAPIEEILSQ
PEKLLFIIDSLEGMECDLT----KQESLDCNCEKQPVSISSLLTRKMLPESSFLLS
TTPETFEMEDRILCTDVKTATAFDERSIKIYFHRLFQDKI-----RAQEAFSLVR
ENEQLFTICQVPLLCWMVATCLKEEIEKGGDPVSVCRHITSLYTTHILNLFIPQSAQ--Y
PSKKSQDQLQGLCSLAAEGMWT-DTFVFGEALRRNGILDSDIPTLLDIGMLGKIRE-FE
NYYIFLHPSVQEVCAAFYLLKSHVDHPSQDVKS-----IETVLFM-FLKKVKTQW
IFLGCIFIGLLQKSEQEKLVVFFGRRLSQIKHQKLYQCLETISGN-----
-----AELQEIDGMKLFCCLEIEDEAFLVKVMNCMQ-----
-QINFAKNYSDILILAA-YCLKHCSTLKKLSFSTQN-----VLNEKGNQR-----
-----CMKKLIICWNDMCSVFVRSKDIQVLQIKDTNFNPAIRILYEYLKYP-----SF
TLNKLVANNSVHFGDNHAFELIQNC-SLQYLDLGCFLTH-SEVKLLCDVNLQAECNIE
KLV-----VSHCKLSPDDCKIFGSVLMSSKTLKVLNWAYNNL-N
QGISLLCKAWCHPDCILEYLVLANCSLSEQCWDYLSEVLRQNKTLSHLDISSNDLKDKGL
KIL-----
-----CRALTLPYCALKSLYLNCCQITARGCQDLAKVLRNNQNLKCLHISNN
KLKDALMLLCKAIKHPNCHLEDLRLEACEITGASNEDLRYAFMQCETLQMINLMGNALE
IVDY-----

#NLRP4_human "gi|19745162|ref|NP_604393.1| NLR family, pyrin domain containing 4 [Homo sapiens]"

-----MAASFFSDFGLMWYLEELKKEEFRKFKEHLKQMTLQL
ELKQIP-----WTEVKKASREELANLLIKHYEEQQAWNITLRIFQKMDRDKDLCMKVMR
ERTG-----
-----YTKTYQAHAKQ
KFSRLWSSKSVTEIHLYFEEVQEECDHLDRLFAPKETGKQPRT--VIIQGPQGIGKTT
LLMKLMAWSDNKIFRDRFLYTFYFCCRELR-ELPPTSLADLISREWDPDPAAPITEIVSQ
PERLLFVIDSFEELQGGN----EPDSDLCGDLMEKRPVQVLLSSLLRKKMLPEASLLIA
IKPVCPELRDQVTISEIYQPRGFNESDRLVYFCCFFKDPK-----RAMEAFNLVR
ESEQLFSICQIPLLCWILCTSLKQEMQKGDALALTCQSTTSVYSSFFVFNLFTEGAE--G
PTPQTQHQLKALCSLAAEGMWT-DTFEFCEDDLRRNGVVDADIPALLGTKILLKYGE-RE

SSYVFLHVCIQEFCAALFYLLKSHLDHPPAVRC-----VQELLVANFEKARRAHW
IFLGCFLTGLLNKKEQEKLDAFFGFQLSQEIKQOIHQCLKSLGER-----
-----GNPQGQVDSLAIIFYCLFEMQDPAFVKQAVNLLQ-----
-EANFHIIDNVDLVVS-A-YCLKYCSSLRKLCSVQN-----VFKKEDEHSS-----
-----TSDYSLICWHHICSVLTTSGHLRELQVQDSTLSESTFVTWCNQLRHP-----SC
RLQKLGINNVSFSGQSVLLFEVLFYQPDLYLSFTLTKLSR-DDIRSLCDALNYPAGNVK
ELA-----LVNCHLSPIDCEVLAGLLTNNKCLTYLNVSCNQL-D
TGVPLLCEALCSPDTVLYLMLAFCHLSEQCEYISEMLLRNKSVRYLDLSANVLKDEGL
KTL-----
-----CEALKHPDCCLDSLCLVKCFITAAGCEDLASALISNQNLIKILQIGCN
EIGDVGVLQLLCRALHTDCRLEILGLEECGLTSTCCKDLASVLTCSKTLQQLNLTNTLD
HTGVVVLCEALRHPECALQVGLRKTDFDEETQALLTAEERNPNLITIDDCDTITRVEI

#NLRP4_chimpanzee "gi|114679221|ref|XP_524404.2| PREDICTED: NACHT, leucine rich repeat and PYD containing 4 isoform 4 [Pan troglodytes]"

-----MTLHL
ELKQIP-----WTEVKKASREELANLLIKHYEEQQAWNITLRIFQKMDRDKLCKMVMR
ERTG-----
-----YTKTYQAHAKQ
KFSRLWSSKSVTEIHLYFEEEVKQEECDHLDRLFAPKETGKQPRT--VIIQGPQGIGKTT
LLMKLMAWSDNKIFRDRFLYTFYFCCRELR-ELPPTSLADLISREWPDPAAPITEIVSQ
PERLLFVIDSFEELQGSN----EPDSDLCGDLMEKQPQVLLSLLRKKMLPEASLLIA
VKPVCPKELQDQVTISEIYQPRGFNESDRLVYFCCFFKDPK-----RAMEAFNLVR
ESEQLFSICQIPLLCWILCTSLKQEMQKGDALALTCQSTTSVYSSFVFNLFTEGAE--G
PTPQSQHQLKALCSLAAEGMWT-DTFEFCEDDLRRNGVVDADIPALLGTKILLKYGE-RE
SSYVFLHVCIQEFCAALFYLLKSHLDHPPAVRC-----VQELLVANFEKARRAHW
IFLGCFLTGLLNKKEQEKLDAFFGFQLSQEIKQOFHQCLKSLGEH-----
-----GNPQGQVDSLAIIFYCLFEMQDPAFVKQAVNLLQ-----
-EANFHIIDNVDLVVS-A-YCLKYCSSLRKLCSVQN-----VFKKEDEHSS-----
-----TSDYSLVCWHHICSVLTTSGHLRELQVQDSTLSESTFVTWCNQLRHP-----SC
RLQKLGINNVSFSGQSVLLFEVLFYQPDLYLSFTLTKLSR-DDIRSLCDALNYPAGNVK
ELG-----LVNCHLSPIDCEVLAGLLTNNKCLTYLNVSCNQL-D
TGVPLLCEALCSPDTVLYLMLAFCHLSEQCCQYISEMLLHNKSVRYLDLSANVLKDEGL
RTL-----
-----CEALKHPDCCLDSLCLVKCFITAAGCEDLASALISNQNLIKILQVGCN
EIGDVGVLQLLCRALHTPDCRLEILGLEECGLTSTCCKDLASVLTCSKTLQQLNLTNTLD
RTGVVVLCEALRHPECALQVGLRKTDFDEETQALLTAEERNPNLITIDDCDTITRGRD
LIARNLGSDSNTCKGQGLGPLLT-----

#NLRP4a_rat "gi|109458051|ref|XP_218188.4| PREDICTED: similar to NACHT, leucine rich repeat and PYD containing 4A [Rattus norvegicus]"

-----MASFFSDFGLMWYLEELNKKEFMKFKEFLKQEILQL
GLKQVS-----WTEVKKASREDLASLLLKHYEEKQAWDMTFNFFQKINRKDLIKRAKR
EIDG-----
-----YPKLYRAHLKT
KLTHDSSRIFNINIQDFLKEKFTKDDHDFETLLQSKGTESKPOV--VVLSGVAGIGKTL
MLKRLMLAWIEGLVFPYKFSYIFYFCCQEVK-QLKTASLAE LISREWDPDPAPIEEILSE
PEKLLFIIDSLEGIECDLF----KCDSELCDNCMEKQPVNILLSLLRKKMLLEASLLIS

TPPETFEKMEDRIEYTHVKIITGLNESDIKMCFHRLFQDRN-----RAQEAFSLVR
ENEQMLTICQVPVLCWMVATCLKTEIEKGRNLVSTCRRTTSLYTTYIFNLFIPQSAH--S
PSKKSQDQLQGLCSLAAEGIWT-DTFVFTEEALRRNGILDSDIPTLLDIGMLGKMGK-FE
NCYIFLHPSLQEACAAIFYLLKSHGDHP IEDVKS-----VEALLFT-FLKKAKVQW
ILGGRFIFGLLHESEQKKLEAFFGHQLSQEIKHQLYQCLETISVN-----
-----EELQEIDGMKLFYCLFEMEDEDFLMEAMNYME-----
-QINFVAKDYSVDVIVAA-YCLKHCYTLKLSFSSTQN-----ILNEEHEHS-----
-----CMENLLTCWRHICSVLINSKDIQELQIKDTNLNEPAFVSVLYNSLKYC-----ND
TLKVLVENVVFFLCEKYLFFELIQNC-NLQHLNLTFLSH-SDVKLLCDVNLQAECNIE
KLE-----VAACNLSPDDCKMFASILMSSKTLKQLNLSSNIL-G
KGISSLCKSLCHPDCILEHLVLAKCSLSDQCWDYLSDGIRQNKTLNHLDISSNDLKDEGL
KVL-----
-----CRALALPNSVLKSLCLRHLITTSQCQDLAEVLRNNQNLTSLQISYN
KIEDAGVKLLCDAIKQPNCHLEDLGLEACELTGACCEDLASTFTQCRTLWGINLLNNTLD
YTGLVVLCEALRQKCTPHVGLRITDFDNETQAFVLAEQEKNPDL SILSGV-----

#NLRP4b_rat "gi|109458152|ref|XP_344857.3| PREDICTED: similar to NACHT, leucine rich repeat and PYD containing 4B [Rattus norvegicus]"

-----MASLFSDFGFMWYKELNKVEFMKFKEILLILEILQM
GLKQIS-----WTEVKNASREDLAILLVKYCEGKQAWDTTFKVLQKISRHD LTERATG
EIAA-----
-----HANIYRAHLKK
KLTRDCSRKFSISIQN-----FFQDEYDHLNLLIPKVTEEKPQL--VFLKGIAGIGKTI
LLKNLMIVWSEGLVFQNKFSYIFYFCCQDVK-QLKTTSLTELISREW PSSAPIEEI LSQ
PEKLLFIIDSLEGMEWDFT----KQESELDCNCKEKQPVNVLSSLLK KILPESSLLIS
ATFETFEELKDWIEYTNVRTITGFKESNIKMYFHSLSLFQDRN-----RALEAFSFVR
ENEQLFTLCQAPVICCMVATCLKNEIEKGKDPVSI CRRTTSLYTTTHIFNLFIPPNVQ--Y
PSKKSQDQLQGLCFLAVEGMWT-DISVFSEETLRRNGILDSDIPTLLDIGILEQSRE-SQ
NSYIFFHPSVQEFCAAMFYLLQTHMNHSPDVLH-----VEKLLFS-FLKEVNTQW
IFLGRFIFGLLNELEHEKLEAFFGYQLSQQLKQELFEWLELLLD-----
-----PEVKVNTMKFFYCLFEMEEVFVQSAMNCRE-----
-EIDVVAKDYDFIVAA-YCLNHGSALRDL S ISTQN-----VLNEKLNQR-----
-----YMENLLMLWHNICSVFARNKDIHILQMKDTIFNEPVFQILYNYLKNS-----SC
ILEVLVANDVSFLCDKYLFFDLIQSY-NLELLDLSGTFLSH-SDVVILCNILNKA EYK--
-----IQELELANCSLSEQSWKYISDVLCQNKTLRHLDISSNDLKDEGL
KVL-----
-----CKALTLPDSVLLTSLAEACELTGACCEDLASTFTQCKTLGWINLVKN
ALDFNGLVVLCKALKQKTSNLKELRLRITDFDNKSQTFL LSEEKGNKFLNIENDE-----

#NLRP4c_rat "gi|109480334|ref|XP_234957.4| PREDICTED: similar to NACHT, leucine rich repeat and PYD containing 4A [Rattus norvegicus]"

-----MASFFSDFGIMWYLKELNKREFVKFKEFLKQEILQF
GLTIS-----CTEVKRATREGLANLLLKH YEEKQAWNITFNIFQKLNRTDLIERAKR
EIAG-----
-----HPKLYQAHLKT

RLKQIS-----WTKVKKASREDLANLLLLKHYYEKKQAWDMTFKIFQKMNKDLIERAGR
EIAG-----
-----HSKLYQAHLKK
KLTHDYARKFNKAQDLFKQKFTQDDCDFENLLVSKATGKKPHM--VFLQGVAGIGKSL
MLTKMLLAWSEGIVFQNKFSYIFYFCCQDVK-QLKRASLAELISREWPNASAPTAEILSQ
PEKLLFIIDSLEVMCENMS----ERESELCNCTEKQPVSLLLSSLLRRKMLPESSFLIS
ATPETFEKMEDRIECTNVKIITGFNENNIKMYFRSLFQDN-----RTLEAFSLVR
ENEQLFNVCQVPVLCWVATCIKKEIEKGRDPVICRRTTSLYTTTHIFNLFTPQNAQ--Y
PSKKSQDQLQGLCSLAAEGMWT-DTFVFSEEALRRNGILDSDIPTLLDRRILERSKE-SE
SCYIFLHPSLQEVCAAVFYLLKSHLDHPSQDVKS-----VEALLFT-FLKKAKVQW
IFLGCFLFGLLHESEKLEMFQGHQLSQEIKHQLYQCLETISVN-----
-----EELQEQIDGMKLFYCLFEMEDEAFMQAMNCME-----
-QINFAVDYSDVIVAA-YCLKHCSTLKKLSFSTQN-----ILSEEQEH-----
-----YTEKLLICWHMCSVLISSKDIHVLQVKDTNLNETAFWVLYNHLKYP-----SC
TLKVLVNNVTFLCDNHLFFELIQNQ-RLQHLNLSLTFLSH-SDVKLLCDVNLQAECNIE
KLM-----IAACNLSPDDCKVFASVLISSKMLKHLNLSNNL-D
KGISSLCKALCHPDCILKHLVLANCSLSEQCWDYLSEVVRNKTLSHLDISSNDLKDEGL
KVL-----
-----CGALTLPDGLISLSVRHCLITTSQCQDLAEVLRHNQNLRSQVSNN
KIEDAGVKLLCDAIKQPNCHLENIGLEACEITGACCKDLASAFVHCKTLWGINLLENALD
HSGLVVLFELKQKCTLHVLGLRITDFDKETQEFLIAEEKKNPYLSILSNV-----

#NLRP4f_rat "gi|109458053|ref|XP_001076792.1| PREDICTED: similar to NACHT, leucine rich repeat and PYD containing 4A [Rattus norvegicus]"

-----MASFSSDFSLVWYLKELNQEKFMKFKDFLIQEILEL
KLKQIS-----WTEVKKASREGLSNLLKCYGENQALDMTFKILQKINRKDLTKKATR
EIADS-----
-----STLGLTDSSENSKLYREHLKK
KLSHNCSKMFNINIQDFILETVIQDDYDTFENLLVSKGDEKPHM--VFLKGMAGIGKTL
MLKNVMLAWAKGLVFNKFSYTFYFCCQDVK-QLKTASLAELISREWPISAPIEEILSQ
PEKLLFIIDSLEGMWDLT----KQSEELCGNCTEKQPVSLLLSSLLRRKMLPESSFLIS
ATPETFEKMEDRIRCTDVKTATAFNERSIEICFHRLFQDRN-----TAQKAFSLVR
ENEQLFTLCQAPLLCWMVATCLKKEIEKGDVPSICRHITSLYTTYIFNSFIPQSAK--Y
PSKKSQDQLQGLCSLAAEGMWT-DTFVFSEEALRRNGIMSDIPTLLDIGMLGKIRE-FE
NSYFLHPSVQEICAAIFYLLKSHGVHPSQDVKS-----VETVLFM-FLKKVKTQW
ILWGSFIFGLLHKSEKELAVFFGYQLSQKIRHKLYQCLETINGN-----
-----VELQEQIDGMKLFYCLFEMEDDAFLVKAVNCMQ-----
-QINFAVANYSDFFVAA-YCLKRCSTLKKLSFSTQN-----ALNEELEQQ-----
-----YRERLLICWNDICSVFVRSKNIQTLQIKDTNFSEPTFRVLYESLKYP-----SF
PLSKLVANNVHFFGDNMFFELIQNH-NLQYLDLSCSSLSP-NGVKLLFDVNLQAECNIE
KLM-----VAHCKLSPDDCKIFGSILMSSKTLKILNLSNNL-N
QGISSLCEGLCHPNCVLEYLVLANCSLSEQCWDYLSVLRKNKTLNHLDISCNDLKDKGI
KIL-----
-----CKALTLPDCFMKSLCLKHCQITTRGCQDLAEVLRNNQNLKHLHVSNN
KLKDAGVKLLCDAIKHPNCHLVLDGLEACEITGASSENLSFAFIQCKTLKRLTLKGNAFE
ISGMVFPKPF-----

#NLRP9_dog "gi|73947407|ref|XP_533578.2| PREDICTED: similar to NACHT, leucine rich repeat and PYD containing 9 protein [Canis familiaris]"

-----MTEFFSDFGLLWYLEELKKEEFWKFKELLKQEPLQL
GLKPIP-----WTELKKASREDLAKMLDKHYPGKQAWDVTLNLFQINRHDLWTKAQE
EIRN-----
-----KSPYRNHMKE
KFRLIWEKETCLPVPNDFYKETIKHEYENLHAAYRASQAEE--SSPTVVLOGPEGIGKTT
LLRKVMLEWAEGNLWKDRFTFFIFFLNGCEMN-MITETSLVELISRDLPLSSEPVEDILSQ
PERILFIMDGFEEKFDLE----LS-TPLCNDQRQRQPMQIILSSLLQRKMLPESLLIA
LGTEGMRKNYCLLQHPKYITLPGFSEHERKLYFYHFFRERN-----KALKAFSFVR
GNIPLFVFNPLVCWLVCTCMKWQLEKGEDLEIVSESTTSLYTSFFISVFQSRNET--C
PPKHSRTRLKGLCTLAAMGVWT-RMFVFCHEDLRRNGISESDTLMWMMGRILQRSG----
EYFTFTHMCLQEFCAAMFYVLKQPKDSPNPAIGS-----VTQLVTA-GVSQVQSPL
SRMITFLFAFSTEKITNLETSGFLLSKELKQEITQCLKSLSQCD-----
-----P-NQVAVNFQELFSGLFETHEKGFVAQVMDFFE-----
-EVNIYIGNTEDLVISA-FCLKHCQNLRTLHLCIEN-----VFSDDS--GS-----
-----INEKLSFWQDFCSVFTTNENFQMLDLNCKFSEASLAILCKALAQP-----VCK
LQKYNFAS-DFG-SSPALHKAILHNP-HLKHLNLHGSSLSH-VDVRQLCEMLKHPTCSIE
ELM-----LGMCDITAEACEEIASVLCNKKLKLKLSLAENPLRN
EGMLMLCDALKHPDCVLETLLMCCCLTSVACDYISQALLCNKSLSFLDLLESNFLKDDGV
ASL-----
-----CEALKHPNCHIEQLWLADCSLTSLCKNLSDVLCNEKLIKILKLSN
DIQDAGVKQLCEALKHPDCKVEHLGLDMCQLTTACCEALASALTVCCKSLKSLNLHWISLD
RDGAVVLCEALNHLDCALQQLGLDKSVFDKEIQMLLTAVEEKNPHLTISHLLWINKEYRI
RGVLT-----

#NLRP9_bovine "gi|66954669|ref|NP_001019835.1| NLR family, pyrin domain
containing 9 [Bos taurus]"

-----MAESFFSDFGLLWYLEELKKEEFWKFKELLKQEPLKL
KLKPIP-----WTELKKASRENVSKLLSKHYPGKLAWDVTLNLFQISRDDLWRKARN
EIRQ-----
-----KINPYRSHMKQ
KFQVLWEKEPCLLPEDFYEETTKIEYELLSTVYLDFAKPG-ESSPTVVHLGPEGIGKTT
FLRKVMLEWAKGNLWRDRFSVFFLTGREMN-GVTDMSLVELLSRDWPESEPIEDIFSQ
PERILFILDGMEELKFDLD----CN-TDLCEDWEQPQSMQVVLQSLQKQMLPECSLLLA
LSKMGMRKNYSLLKHMKCIFLLGFSEHQKLYFSHYFQEKD-----ASSRAFSFVR
EKSSLFVLCQSPFLCWLVCVTSKLCQLEKGEDLELDSETITGLYVSFFTKVFRSGSET--C
PLKQRRARLKSCLTAAEGMWT-CTFLFCPEDLRRNGVSESDTSMWLDKMLLHRSRSG----
DCLAFIHTCIQEFCAMFYMFTRPKDPPHSVIGN-----VTQLITR-AVSEHYSRL
SWTAVFLFVFS TERMTHRLETSGFPLSKEIKQEITQSLDLSQCD-----
-----P-NNVMSFQALFNCLFETQDPEFVAQVVNFFK-----
-DIDIYIGTKEELIICA-ACLRHCHSLQKFHLCMEH-----VFPDESGCIS-----
-----NTIEKLTLRDVCSAFTASEDFEILNLDNCRFDEPSLAVLCRTLSQP-----VCK
LRKFVCNFASNLANSLELFKVLHNP-HLKHLNLFYGSLSH-MDARQLCEALKHPCNIE
ELM-----LGKCDITGEACEDIASVLVHNKKLNLKSLCDNALKD
DGVVLVCEALKNPDCALEALLSHCCFSSAACDHLSQVLLYNRSLTFLDLGSNVLKDEGV
TTL-----
-----CESLKHPSCNLQELWLMNCYFTSVCCVDIATVLIHSEKLTCLKLGN
KIYDAGAKQLCKALKHPKCKLENLGLAECELSPASCEDLASALTTCKSLTCVNLEWITLD
YDGA AVLCEALVSLECSLQLLGLNKSSYDEEIKMMLTQVEEMPNLII SHLLWTDDEGRR
RGILV-----

#NLRP11_human "gi|21450725|ref|NP_659444.1| NLR family, pyrin domain containing 11 [Homo sapiens]"

-----MAESDSTDFDLLWYLENLSKDFQSFKKYLARKILDF
KLPQFP-----LIQMT---KEELANVLPISYEGQYIWNMLFSIFSMMRKEDLCRKIIIG
RRNR-----
-----NQEACKAVMRR
KFMLQWESHFTGKFHYKFFRDVSSDVFYILQLAYDSTSYYSANNLN-VFLMGERASGKTI
VINLAVLRWIKGEMWQNMISYVVHLTSHEIN-QMTNSSLAELIAKDWPDGQAPIADILSD
PKKLLFILEDLNIRFELN----VNESALCSNSTQKVP IPVLLVSLKRRKMAPGCWFLIS
SRPTRGNNVKTFLKEVDCCTTLQLSNGKREIYFNSFFKDRQ-----RASAALQLVH
EDEILVGLCRVAILCWITCTVLKRQMDKGRDFQLCCQTPDLHAHFLADALTSEAGL--T
ANQYHLGLLKRLCLLAAGGLFL-STLNFSGEDLRCVGFTEADVSVLQAANILLPSNT-HK
DRYKFIHLNVQEFCTAIAFLMAVPNYLIPSGSRE-----YKEKREQ-----YSDF
NQVFTFIFGLLNANRRKILETSFGYQLP-MVDSFKWYSVGYMKHLD-----
-----RDPEKLTHHMPFLFYCLYENREEEFVKTIVDALM-----
-EVTVYLQSDKMMVSL-YCLDYCCHLRTLKLSVQRIFQ-----NKEPLIRPTA-----
-----SQMKS LVYWREICSLFYTMESLRELHIFDNDLNGISERILSKALEHS-----SC
KLRTLKLSYVSTASGFEDLLKALARNRSLTYLSINCTSISL-NMFSLLHDILHEPTCQIS
HLS-----LMKCDLRASECEEIASLLISGGSLRKLTLSSNPLRS
DGMNILCDALLHPNCTLISLVLVFCCLTENCCSALGRVLLFSPTLRQLDLCVNRLKNYGV
LHV-----
-----TFPLLFP TCQLEELHLSGCFSSDICQYIAIVIATNEKLRSL EIGSN
KIEDAGMQLLCGGLRHPNCMLVNI GLEECMLTSACCRSLASVLT TNKTLERLNL LQNH LG
NDGVAKLLES LI SPDCVLKVVGLPLTGLNTQTQQLLMTVKERKPSLIFLSETWLSKEGRE
IGVTPASQPGSIIPNSNLDMFFKFP RMSAAMRTSNTASRQPL-----

#NLRP11_chimpanzee "gi|114679217|ref|XP_524402.2| PREDICTED: NACHT, leucine rich repeat and PYD containing 11 [Pan troglodytes]"

-----MAESDSTDFDLLWYLENLSKDFQSFKKYLARKILDF
KLPQFP-----LIQMT---KEELANVLPISYEGQYIWNMLFSIFSMMRKEDLCRKIIIG
RRNR-----
-----NQEACKAVMRR
KFMLQWESHFTGKFHYKFFRDVSSDVFYILQLAYDSTSYYSANNLN-VFLMGERASGKTM
VINLAVLRWIKGEMWQNMISYVVHLTSHEIN-QMTNSSLAELIAKDWPDGQAPIADILSD
PKKLLFILEDLNIRFELN----VNESALCSNSTQKVP IPVLLVSLKRRKMAPGCWFLIS
SRPTRGNNVKSFLKEVDCCTTLQLSKEKREIYFNSFFKDRQ-----RASAALQLVH
EDEILVGLCRVAILCWITCTVLKRQMDKGRDFQLCCQTPDLHAHFLADALTSEAGL--T
ANQYHLGLLKRLCLLAAGGLFL-STLNFSGEDLRCVGFTEADVSVLQAANILLPSST-HK
DRYKFIHLNVQEFCTAIAFLMAVPNYLIPSGSRE-----YKEKREQ-----YSDF
NQVFTFIFGLLNANRRKILETSFGYQLP-MVDSFKWYSVGYMKYLD-----
-----RDPEKLTHHMPFLFYCLYENREEEFVKTIVDALM-----
-EVTVYLRSKDKMMVSL-YCLDYCCHLRTLKLSVQHIFQ-----NKEPLIRPTA-----
-----SQMKS LVYWREICSLFYTMESLWELHIFDNDLNGISERILSKALEHS-----SC
KLRTLKLSYVSTASGFEDLLKALARNRSLTYLSINCTSISL-NMFSLLHDILHEPTCQIS
HLS-----LMKCDLRASECEEIASLLISGGSLRKLTLSSNPLRS
DGMNILCDALLHPNCTLISLVLVFCCLTENCCSALGRVLLFSPTLRQLDLCVNRLKNYGV
LHV-----
-----TFPLLFP TCQLEELHLSGCFSSDICQYIAIVIATNEKLRSL EIGSN
KIEDAGMQLLCGGLRHPNCMLVNI GLEECMLTSACCRSLASVLT TNKTLERLNL LQNH LG
NDGVAKLLES LI SPDCVLKVVGLPLTGLNTQTQQLLMTVKERKPSLTF LSETWLSKEGRE
IGVTPASQPGSIIPNSNLDMFFKFP RMSAAMRMSNTASRQPL-----

#NLRP13_human "gi|110624785|ref|NP_789780.2| NACHT, leucine rich repeat and PYD containing 13 [Homo sapiens]"

-----MNF SVITCPNGGTTNQG L L P Y L M A L D Q Y Q L E E F K L C L E P Q Q L M D
FWSAPQGHFPRIPWANLRAADPLNLSFLLDEHF PKGQAWKVVLGIFQTMNLTSLCEKVRA
EMK-----ENVQTQELQDPTQEDLEM
LEAAAGNMQTQGCQDPNQEELEEEETGNVQAQGCQDPNQEEPEMLEEA-DHRRKYREN
MKAELLETDWNI SWPKDHVYIRNTSKDEHEELQRLLDPNRTRAQAQTIVLVGRAGVGKTT
LAMQAMLHWANGVLFQQRFSYVFYLSCHKIR-YMKETTFAELISLDWPDFDAPIEEFMSQ
PEKLLFIIDGFEEIIISESRSESLDDGSPCTDWYQELPVTKILHSLKELVPLATLLIT
IKTWFVRDLKASLVNPCFVQITGFTGDDL RVYFMRHFDDSS-----EVEKILQQLR
KNETLFHSCSAPMVCWTVCSCLKQPKVRYDLQSITQTTTSLYAYFFSNLSTAEVD--L
ADDSWPGQWRALCSLAIEGLWS-MNFTFNKEDTEIEGLEVPFIDSLYEFNILQKIND-CG
GCTTFTHLSFQEFFAAMSFVLEEPREFPPHSTKP-----QEMKMLLQHVLLDKEAYW
TPVVLFFFGLLNKNIARELEDTLHCKISPRVMEELLKWGEELGKA-----
-----ESASLQFHILRLFHCLHESQEEDFTTKMLGRIF-----
-EVDLNILEDEELQASS-FCLKHCKRLNKLRLSVSSHILERDLEILETS-----
-----KFDSRMHAWNSICSTLVTNENLHELDLSNSKHLHASSVKGLCLALKNP-----RC
KVQKLTCKSVTPPEWVLQDLIIALQGN SKLTHLNFSSN-KLGMTVP-LILKALRHSACNLK
YLC-----LEKCNLSAASCQDLALFLTSIQHVTRLCLGFNRLQD
DGIKLLCAALTHPKCALERLELWFCQLAAPACKHLSDALLQNRSLTHLNL SKNSLRDEGV
KFL-----
-----CEALGRPDGNLQSLNLSGCSFTREGCGELANALSHNHVKILD LGEN
DLQDDGVKLLCEALKP-HRALHTLGLAKCNLTACCQHLFSVLSSSKSLVNLNLLGNELD
TDGVKMLCKALKKSTCRLQKLG-----

#NLRP13_chimpanzee "gi|114679233|ref|XP_524405.2| PREDICTED: NACHT, leucine rich repeat and PYD containing 13 isoform 2 [Pan troglodytes]"

-----MNF SVITCPNGGTTNQG L L P Y L M A L D Q Y Q L E E F K L C L E P Q Q L M D
FWSAPQGHFPRIPWANLRAADPLNLSFLLDEHF PKGQAWKVVLGIFQTMNLTSLCEKVRA
EMK-----ENVQTQELQDPTQEDLEM
LEAAAGNMQTQGCQDPNQEELEEELEEEETGNVQAQGCQDPNQEEPEMLEEA-DHRRKYREN
MKAELLETDWNI SWPKDHVYIRNTSKDEHEELQRLLDPNRTRAQAQTIVLVGRAGVGKTT
LAMQAMLHWANGVLFQQRFSYVFYLSCHKIR-YMKETTFAELISLDWPDFDAPIEEFMSQ
PEKLLFIIDGFEEIIISESRSESLDDGSPCTDWYQELPVTKILHSLKELVPLATLLIT
IKTWFVRDLKASLVNPCFVQITGFTGDDL RVYFMRHFDDSS-----EVEKILQQLR
KNETLFHSCSAPMVCWTVCSCLKQPKVRYDLQSITQTTTSLYAYFFSNLSTAEVD--L
ADDSWPGQWRALCSLAIEGLWS-MNFTFNKEDTEIEGLEVPFIDCLYEFNILQKIND-CG
GCTTFTHLSFQEFFAAMSFVLEEPREFPPHSTKP-----QEMKMLLQHVLLDKEAYW
TPVVLFFFGLLNKNIARELEDTLHCKISPRVMEELLKWGEELGKA-----
-----ESASLQFHVLRRLFHCLHESQEEDFTTKMLGRIF-----
-EVDLNILEDEELQASS-FCLKHCERLNKLRLSVSSHILERDLEILETS-----
-----KFDSRMHAWNSICSTLVTNENLHELDLSNSKHLHASSVKGLCLALKNP-----RC
KVQKLTYSVTPPEWVLQDLIIALQGN SKLTHLNLSSN-KLGMTVP-LILKALRHSACNLK
YLC-----LEKCNLSAASCQDLALFLTSIQHVTRLCLGFNRLQD
DGIKLLCAALTHPKCALERLELWFSQLAAPACKHLSDALLQNRSLTHLNL SKNSLRDEGV
KFL-----
-----CEALGRPDGNLQSLNLSGCSFTREGCRELANALSHNHVKILD LGEN
DLQDDGVKLLCEALKP-HRALHTLGLAKCNLTACCQHLFSVLSSSKSLVNLNLLGNELD

TDGVKMLCKALKKSTCRLQKLG-----

#NLRP13_dog "gi|73947403|ref|XP_541402.2| PREDICTED: similar to NACHT, leucine rich repeat and PYD containing 13 [Canis familiaris]"

-----MSSSANIYVDNGSYDKLLSYLMGLDQSQLEEFKLCLQSPQLLL
EN-----FRKIPWANLKAIDPINLLCLLSEYFSEKQMWVETLSIFENMNLTSLCMEIGA
TMN-----GEWQKQETKRYTQVIVGS
VESIIGHFQPRYLNIPS-----LFVSEMEQALGPQDPNQEAEMPEEEKVHRRRYRER
MKAKILMMWDNMPWPEDHIYLRNVTEKEHDELKSLLYPNRTGAQPQTIIILEGIAGVGKTT
LAMKAMLHWAEGFLFQQRF SYVFFISCHKVK-DMKDITTFAGLLSWDWPDSQVPIEELMSH
PERLLFVIDGFEEMDMP SN---LDNSPPCTDWYQQLPVNRILFYLLKKELVPMATLLIT
TKEYRTKDLKLLLNPFVQILGFTEGDREEYFIRYFGDQK-----KAKKVLYWVR
KNETLFYFCSAPLVCWTVCSCLKRQMVNRPHFQISTQTTTSLYVHFFSSLFATAEVS--L
SEQNWPGQWSALCSLAAEGMWF-RNFTFTKEDLKHKCLEAHLIGSLLRLNLRKVNDC
ECVTFTHQSFQVFLGAMFYVLWGTKSIGGPAKH-----EEMRVLLNNALVDRNFYW
NQMALFFFGLLKRSLIRELEDTLCCCKVQQRIMDELLEWAEELKSY-----
-----DIVLNRFEFLHFFSCLYETQEENFVRQILSHLL-----
-EADINIFGNQQLQVSS-FCLKHCRSLSKLRLSVTSSILQTELTFSVET-----
-----LEPHSKIYQWQDICSVFCNGHVSELDLSNSKLNNTSSMKKLCYELRNP-----RC
KLRKLTCKSITPVKILKELVVLVHGNRLTHLNLSSN-NLGVVPVSTMIFKTLRHSACNLQ
YLC-----LEKCNLSAAIYQDLALHVSSTQRTTRLCGLFNPLQD
DGVRLCAALHPECALERLVLWFQCLGAPSCRYLSEALLKNKSLTHLNLRRNKLRLRDEGV
KFL-----
-----CKALSHPDQSLQNLDSLDCSFTADGCQELANALRHNNMKILDIRNN
DVQDNGVKHLCEVLQDPYCELNLTGLGKCNLTPACCQHLSSVLTSSKSLINLNLENDLE
PSGVSILWKALKKSMCKLQKLG-----

#NLRP13_bovine "gi|119925439|ref|XP_608304.3| PREDICTED: similar to NACHT, leucine rich repeat and PYD containing 13 [Bos taurus]"

-----MASPAGISWHDGARDQLLSHLRGLDPWQLEDKFLALQCEPLL
EG-----ARRIPWADLRAAGPADLLCLLEERFPGRRTWEAALRVFEDLRLSSLCEMRA
ELHGWF CILTVGPGAAGMATRRQHFFLPNSGYLGNQSLRTHPSSCHTALQRELSSGFCI
LAVGPGAIVVLRRELMDVNLQYIIVEPEMSQVCRLQDPNQEEPETLEET-AHRRRYRER
LRTRILALWDRTPWPEDHIYLRHVTRQREHAELRGLLRPRGAGAPPLTMLLEGAAGVGKTT
LATKLVLHWAEGVLFGRF SYVFI SGHWLA-KLGDISFAGLLALDWPDSQVPVEEFRAH
PERLLFVIDGAEVTLGSK---GSASRPGADWYQELPAASILVRLKKELVPEATLLVT
AGPPGGRALRGLLRPCRVDIPGFTEGDRREYLRRFLGDPD-----VAEEAWRRMQ
GSETLVRLCAAPLACWAVCAGLKRQLAGSPAPAPGAPTPTGLYAQLFCSSLLAGAEPG--L
RTGSSAGQWRAFCSLAAEGLWL-AAFTFAGDALERWRLEAPFIDGLLRLQILRRVSD-CE
HCVTFAHRSFQEFFGALFYVLWGAQGS LGG VPRH-----QEMRRWLNHAFADANPYW
RQMVRRFFFGLLGTDLARQLEEAVGCRMSPGVADEVLDWAEELERC-----
-----GAVSGRDFDLWLFQCLHETQDENLARRVLNRLP-----
-VADLDIQGCEHLRVSS-FCLKHCQKLRKLRSLVSHRVLEKKRTSGLGTPE-----
---MRVADFRMHQWEDICSVFCSGNLSQLDLSNSKLNSTASMMRLCLKLGNP-----QC
RLQKLAWSMAPVEGLRKLGLLLRGRHLTHLNLSSN-SLDAVSRGVFRMLGHSACGLK
YLW-----LEKGNLSAAACEDLASLLTSTPRLTRLCGLNPLGD
EGVQLLCSLTRPECVLQRLELWCCRLSTPSCRHLSDALRRSRLTHLNLRRNSLGDGGV

KLL-----
-----SSALGRADCALQSLNLSHCSLTVAGCRELAHALKHNGHLKILDVGN
DIQDEGVKELCSVLKSPSCVLQTLGLEKCSLTAACCRPLSSVLGSSKSLENLNLGNNLG
PDGVSRLWMLPRKPTCKLRKLG-----

#NLRP8_human "gi|33667040|ref|NP_789781.2| NLR family, pyrin domain containing 8
[Homo sapiens]"

-----MSDVNPPS
DTPIPFSSSTHSSHIP--WTFSCYPGSPCENGVMYMRNVSHEELQRFKQLLLTELS-T
GTMPIT-----WDQVETASWAEVVHLLIERFPGRRAWDVTSNIFAIMNCDKMCVVVRR
EINAILPTLEPEDLNVGETQVNLEEGE-----
-----SGKIRRYKSNVME
KFFPIWDITTPGNQRDFFYQGVHRHEEYLPCLLLPKRPQGRQPK-TVAIQGAPGIGKTI
LAKKVMFEWARNKFYAHKRWCIFYFHCQEVN-QTTDQSFSELIEQKWPQSQDLVSKIMSK
PDQLLLLLLDGFEELTSTLID----RLEDLSEDWRQKLPGSVLLSSLLSKTMLPEATLLIM
IRFTSWQTCKPLLKCPSLVTLPGFNTMEKIKYFQMYFGHTE-----EGDQVLSFAM
ENTILFSMCRVPVVCWVMVCSGLKQQMERGNLTSQCPNATSVFVRYISSLPTRAEN--F
SRKIHQAQLEGLCHLAADSMWH-RKWVLGKEDLEEAKLDQTGVTAFMGMSILRRIAG-EE
DHYVFTLVTFQEFFAALFYVLCFPQRLKNFHVLS-----HVNIQRLIASPRGSKSYL
SHMGLFLFGFLNEACASAVEQSFQCKVSVFGNKRKLLKVIPLLHKC-----
-----DPPSPGSGVPLFYCLHEIREEFVSQALNDYH-----
-KVVLRIGNNKEVQVSA-FCLKRCQYLHEVELTDTLNFNMNVWKLSSSSHPGSEAP-----
-----ESNGLHRWWQDLCVDFATNDKLEVLMTNSVLGPPFLKALAAALRHP-----QC
KLQKLLLRVNSTMLNQDLIGVLTGNQHLRYLEIQHVEVES-KAVKLLCRVLRSPRCRLQ
CLR-----LEDCLATPRIWTDLGNLQNGHLKTLILRKNLEN
CG-----AYYLSVAQLERLSIENCNLTQLTCESLASCLRQSKMLTHLSLAENALKDEGA
KHI-----
-----WNALPHLRCPQLRVLVRKCDLTFNCCQDMISALCKNKTLSLDLSFN
SLKDDGVILLCEALKNPDCTLQILELENCLFTSICCQAMASMLRKNQHLRHLDSLKNAIG
VYGILTLCFAFSSQKKREEVIFCIPAWTRITSFSPTPHPPDFTGKSDCLSQINP-----

#NLRP8_chimpanzee "gi|114679237|ref|XP_512922.2| PREDICTED: NACHT, leucine rich
repeat and PYD containing 8 [Pan troglodytes]"

-----MSDVNPPS
DTPIPFSSSTHSSHIP--WTFSCYPGSPCENGVMYMRNVSHEELQRFKQLLLTELS-T
GTMPIT-----WDQVETASWAEVVHLLIERFPGRRAWDVTSNIFAIMNCDKMCVLVRR
EINAILPTLEPEDLNVGETQVNLEEGE-----
-----SGKIRRYKSNVME
KFFPIWDFTTWPNQRDFFYQDVRHEEYLPCLLLPKRPQGRQPK-TVVIQGAPGIGKTI
LAKKVMFEWARNKFYAHKRWCIFYFHCQEVN-QMTDQSFSELIEQKWPQSQDLVSKIMSK
PDQLLLLLLDGFEELTSTLID----RLEDLSEDWRQKLPGSVLLSSLLSKTMLPEATLLIM
IRFSSWQTCKPLLKCPSLITLPGFNTMEKIKYFQMYFGHTE-----EGDRVLSFAM
ENTILFSMCRVPVVCWVMVCSGLKQQMERGNLTHACPNATSVFVRYISSLPTRAEN--F
SRKIHQAQLEGLCHLAADSMWH-RKWVLGKEDLEEAKLDQTGVTAFMGMSILRRIAG-EE
DHYVFTLVTFQEFFAALFYVLCFPQRLKNFHVLS-----HVNIQRLIASPRGSKSYL
SHMGLFLFGFLNEACASAVEQSFQCKVSVFGNKRKLLKVIPLLHKC-----
-----DPPSPGSGVPLFYCLHEIREEFVSQALNDYH-----
-KVVLRIGNNKEVQVSA-FCLKRCQYLHEVELTDTLNFNMNVWKLSSSSPPGSEAP-----
-----ESNGLHRWWQDLCVDFATNDKLEVLMTNSVLGPPFLTALAAALRHP-----QC

KLQKLLLRVNSTMLNQDLIGVLMGNQHRLYLEIQHVEVES-KAVKLLCRALRSPRCRLQ
CLR-----LEDCLATPRIWTDLGNLQGNHGLKTLILRKNLEN
CG-----AYYLSMAQLERLSIENCNLTQLTCESLASCLRQSKMLTHLSLAENALKDEGA
KHI-----
-----WNALPHLRCPQLRVLVRKCDLTFNCCQDMISALCKNKTLSLDLSFN
SLKDDGVILLCEALKNPDCTLQILELENCLFTSICCCQAMASMLRKNQHRLHLDLSKNAIG
VYGILTLCFAFSSQKKREEVIFCIPAWTRITSFSPTPHPPDFTGKSDCLSQINPYAVQSS
FSGA-----

#NLRP5_human "gi|114842393|ref|NP_703148.3| NACHT, LRR and PYD containing protein 5 [Homo sapiens]"

-----MKVAGGLELGAAALLSASPRALVTLSTGPTC
SILPKNPLFPQNLSSQPCIKMEGDKSLTFSSYGLQWCLYELDKEEFQTFKELLKKKSSSES
TTCSIP-----QFEIENANVECLALLLHEYYGASLAWATSISIFENMNLRTLSEKARD
DMKRHSPEDPEA----TMTDQGPSKEKVPGISQAVQQDSATAAETKEQEISQAMEQEGAT
AAETEEQ-----GHGGDTWDYKSHVMT
KFAEEED-----VRRSFENTAADWPEMQTLAGAFDSD-RWGFRPR-TVVHLHGKSGIGKSA
LARRIVLCWAQGGLYQGMFSYVFFLPVREM-QRKKESSVTEFISREWPDSPAPVTEIMSR
PERLLFIIDGFDDLGSVLN-----NDTKLCKDWAEEKQPPFTLIRSLLRKVLPEFLIIVT
VRDVGTEKLEKSEVSPRYLLVRGISGEQRIHLLLERGIGEH-----QKTQGLRAIM
NNRELLDQCQVPAVGS LICVALQLQDVVGESVAPFNQTLTGLHAAFVHFQLTPRGVVRR
LNLEERVVLKRFCRMAVEGVWN-RKSVFDGDDLMVQGLGESELRALFHMNILLPDSH-CE
EYTFHLSLQDFCAALYVLEGLEIEPALCPLY-----VEKTKRSMELKQAGFHIHS
LWMKRFLFGLVSEDVRRPLEVLLGCPVPLGVKQKLLHWVS-LLGQQ-----
-----PNATTPGDTLDAFHCLFETQDKEFVRLALNSFQ-----
-EVWLPINQNLDLIASS-FCLQHCPYLKIRVDVKGIFPRDESAEACP-VVPLWM-----
----RDKTLIEEQWEDFCMSLGTPLRQLDLGSSILTERAMKTLCAKLRHP-----TC
KIQTLMFRNAQITPGVQHLWRIVMANRNLRSNLGGTHLKE-EDVRMACEALKHPKCLLE
SLR-----LDCCGLTHACYLKISQILTTSPSLKSLSLAGNKVTD
QGVMPLSDALRVSQCALQKLILED CGITATGCQSLASALVSNRSLTHLCLSNNSLGNEGV
NLL-----
-----CRSMRLPHCSLQRLMLNQCHLDTAGCGFLALALMGNSWLTHLSLSMN
PVEDNGVKLLCEVMREPSCHLQDLELVKCHLTAACCESLSCVISRSRHLKSLDLTDNALG
DGGVAALCEGLKQKNSVLARLGLKACGLTSDCCEALSLALSCNRHLTSLNLVQNNFSPKG
MMKLCSAFACPTSNLQIIGLWKWQYPVQIRKLLLEEVQLLKPRVVIDGSWHSFDEDDRYWW
KN-----

#NLRP5_chimpanzee "gi|114679239|ref|XP_001139299.1| PREDICTED: NACHT, LRR and PYD containing protein 5 [Pan troglodytes]"

-----MTHGSNPLPSLLSAAMLLAIRCSRTLPGVERNLVTLSTGPTC
SILPKNPLFPQNLSSQPCIKMEGDKSLTFSSYGLQWCLYELDKEEFQTFKELLKKKSSSES
TTCSIP-----QFEIENANVECLALLLHEYYGASLAWATSISIFENMNLRTLSEKARD
DMKRHSSSEDPEA----TTTDQGPSKEKVPGISQAVQQDSATAAETKEQEISQAMEQEGAT
AAETEEQEISEAEEAGTIEAKRQ-----GHGGDTWDYKSHVMT
KFAEEQD-----VRRSFEKSAADWPEMQTLAGAFNSD-QWGFRPR-TVVHLHGKSGIGKSA
LARRIVLCWAQGGLYQGMFSYVFFLPVREM-QRKKESSVTEFISREWPDSPAPVTEIMSR
PERLLFIIDGFDDLGSVLN-----SDTKLCKDWAEEKQPPSILIRSLLRKVLPEFLIIT
VRDVGIEKLEKSEVSPRYLLVRGISGEQRIHLLLERGIGEH-----QKTQGLRAIM
NNRKLFDQCQVPAVGS LICVALQLQDVVGESVAPFNQTLTGLYAAFVHFQLTPRGVARRC
LNLEERVVLKRFCRMAVEGVWN-RKSVFDGDDLMVQGLGESELRALFHMNILLPDSH-CE
EHYTFHLSLQDFCAALYVLEGLEIEPALCPLY-----VEKTKRSMELKQAGFHIHS
LWMKRFLFGLVSEDVRRPLEVLLGCPVPLGVKQKLLHWVS-LLGQQ-----

-----QKAPGDTLDAFHCLFETQDKEFVRLALNGFQ-----
-EVWLPIQNLDLIASS-FCLQHCPYLKIRVDVKGIFPRDESAEACP-VVPLWM-----
----RGKTLIEEQWEDFCVSLGTHPHLRQLDLGSSILTERAMKTLCAKLRHS-----TC
KIQTLMFRNAQITAGVQHLWRILMANRNLRSNLGGTHLKE-EDVRMACEALKHPKCLLE
SLR-----LDCCGLTHACYLKISQILTTSPSLKSLSLAGNKVTD
QGVTPLSDALRVSQCALQKLILED CGITATGCQSLASALVSNRSLTHLCLSNNSLGNEGV
NLL-----
-----CRSMRPHCSLQRLMLNQCHLDTAGCGFLALALMGNSWLTHLSLSMN
PVEDNGVKLLCEVMREP SCHLQDLELVKCHLTAACCELSCVISRSRHLKSMDLTDNALG
DVGVAALCEGLKQKNSVLRGLKACGLTSDCCEALSLALSCNRHLTCLNLVQNNFSPKG
MMKLCSAFACPTSNLQI IGLWKWQYPVQIRKLLLEEVQLLKPQIVIDGSWHSFDEDDRYWW
KN-----

#NLRP5_mouse "gi|7106379|ref|NP_035990.1| NACHT, leucine rich repeat and PYD
containing 5 isoform a [Mus musculus]"

-----MGPPEKESKAILKARGLEEEQKSERKMTSPENDSKSIQKDQGPQE
QTSEST-----MGPPEKDSKAILKARGLEEEQKSESTMSPSENVSRAILKDSGSEVE
QASERKMTSPENDSKSIQKDQGPQEQTSETLQSKEEDEVTEADK-----
-----NGDDLQDYKAHVIA
KFDTSVD-----LHYDS-----PEMKLLSDAFKPY-QKTFQPH-TIILHGRPGVGKSA
LARSIVLGWAQGKLFQKMS-FVIFFSVREIK-WTEKSSLAQLIAKECPDSWDLVTKIMSQ
PERLLFVIDGLDDMDSVLQH---DDMTLSRDWKDEQPIYILMYSLLRKALLPQSFLIIT
TRNTGLEKLSMVVSPLYILVEGLSASRRS QLVLENISNES-----DRIQVFHSLI
ENHQLFQDQCQAPSVCSLVCEALQLQKKGKRCRCLTLPQTLTGLYATLVFHQLTLKRPSQSA
LSQEEQITLVGLCMMAAEGVWT-MRSVFYDDDLKNYSKKESEILALFHMNILLQVGHNSE
QCYVFSHLSLQDFFAALYVLEGLE-EWNQHFCF-----IENQRSIMEVKRT-DDTRL
LGMKRFLFGLMNKDILKTLEVLFEYPIPTVEQKLQHWVS-LIAQQ-----
-----VNGTSPMDTLDAFYCLFESQDEEFVGGALKRFQ-----
-EVWLLINQKMDLVSS-YCLKHCQNLKAI RVDIRDLLSVDNTLELCPVTVQET-----
----QCKPLLEWGWGFCVSLGSLRNLKELDLGDSILSQRAMKILCLELRNQ-----SC
RIQKLTFKSAEVVSGLKHLWKLFSNQNLYLNLGNTPMKD-DDMKLACEALKHPKCSVE
TLR-----LDSCELTIIGYEMISTLLISTTRLKCLSLAKNRVGV
KSMISLGNALSSSMCLLQKLI LDNCGLTPASCHLLVSALFSNQN LTHLCLSNNSLGTEGV
QQL-----
-----CQFLRNPECALQRLILNHCNIVDDAYGFLAMRLANNTKLTHLSLTMN
PVG DGAMKLLCEALKEPTCYLQELELVDCQLTQNCCEDLACMITTTKHLKSLDLGNALG
DKGVITLCEGLKQSSSLRRLGLGACKLTSNCCALSLAISCNPHLNSLNLVKNDFSTSG
MLKLCSAFQCPVSNLGI IGLWKQEYARVRRQLEEVFVKPHVVIDGDWYASDEDDRNWW
KN-----

#NLRP5_rat "gi|109458087|ref|XP_218237.4| PREDICTED: similar to NACHT-, LRR- and
PYD-containing protein 5 (Maternal antigen that embryos require) (Mater protein)
(Ooplasm-specific protein 1) (OP1) [Rattus norvegicus]"

-----MSVSLKIRFCSHFIFLLSSYLTSY-----
-----RGGDLQDYKAHVIA
KFDTSVD-----LHCDG-----PEMKVLSDAFKPH-QKTFRPH-TIILHGRPGVGKSA
LARSII LGWAQGKLYQDMS-YVFLFSVREMK-WTEKSSLAQLMANEWPHSQAPVTKIMSQ
PERLLFVIDGLDDMDSALQH---DDMTLSRDWKDKQPIYILVYSLLRKALLSQSFLIIT
TRNTGLENLRSMVVSPLYILVEGLSASRRS QLVLENIPDDH-----QKIQVFHHSVI

ENHQLFDQSQAPSFCSLVCEALQLQEKLGRCTLPCQTLTDLYATLVFHQLTSRGPSSQRA
LSKEEQITLVGLCRMALEGVVT-MRSVYDDDLKSYSLKQSEISALFHVNIILLQVGHSSSE
QCYVFFDLSLQDFFAALYVLEGLG-EWNQYFSY-----ITNQRNIMEVKRS-SDSHL
LEMKRFLFGLMNKDTLKTVEVLFRCPTVPPKQKQLQHCLS-LIGQQ-----
-----VNGSSPMDTLDIFYLLFESQDEEFVHMALKSFO-----
-EVWLLINQKMDLMVSS-YCLOQCQNLKAIKRVDISDLFVSDNTPKLCV-VALQKT-----
----QCKPLIEWWENFCTVLSTHPNLKTLDLGHSILNEWSMKILCLKLRNS-----SC
SIQNLTFKNSEVVSGLQYLWMLLVSNRNLKYLNLGNTPMKD-DDIKLACEALKHPSCSLE
TLR-----LDSCELTLTGYELISKLLLSASSLKCLSLARNKVG
KSMTSLGEALSSSTCTLQKLILNECFVSPFPTNAVLPALKILS--KHNLSHLCQVLSLSI
SVL-----
-----CSILGNPVCLSRSLLLNHCNIIKDAYGFLALILANNRKLTHLSLTMN
PVGNSAMKLLCEALKEPTCYLQDLELVDCQLTENCCEDLACMITTTKHLQSLDLGNALG
DKGVITLCKGLKQSSSSLRRLGLAACGLTSKCCEVLSSALSCLNPYLSLNLVNRNDFNTSG
MLKLCSAFQNPASNLWIIIGLWKQFYAQVRRQLEEVQFIKPHVVIDGDWYSIDEDDRNWW
KN-----

#NLRP5_bovine "gi|56118314|ref|NP_001007815.1| NACHT, LRR and PYD containing protein 5 [Bos taurus]"

-----MREAKIAPLSNYGLQWCFEQLGKEEFQTFKALLKEHASES
AACSFPE-----LVQVDRADAESLASLLHEHCRASLAWKTSTDFEKMSLSALSEMARD
EMKKYLLAEISEDSAPTKTDQGPSMKEVPGPRED-----
-----PQDSRDYRIHVMT
TFSTRLD-----TPQRFEEFASECPDAHLSGAFNPDPSSGGFRPL-TVVVHGGPPGVGKSS
LARRLLLFWAQGDLYKGLFSYVFLLRARDLQ-GSRETSFAELISKEWPDAPVPEKVLVLSQ
PERLLIVVDGLELELTFRD----QDSSLLADWAERQPAPVLAHSLKLVLLPECALLLT
VQDAGLQRLQALLRSPRYLWVGGLSVENRMQLLLGGGKHCR-----RKTCAWHAGA
DHQEVLDKQCQVPVVCALVREALELQGEPEGKGLPVPGHTLTGLYATFVFQRLAPKDAGWRA
LSGEERGALKGLCRLAADGVWN-AKFVFDGDDLGVHGLQGPESLALQOASILLPDGH-CG
RGHAFSHLSLQEFFAALFYVLRGVEGDGEGYPLF-----PQSTKSLTELRRHIDLNVQL
VQMKRFLFGLVSKVEMRALETLLGCPVPRVPAKQQLLHWIC-LVGQH-----
-----PAAAASPDLEAFYCLFEAQDDEFVRLALNGFQ-----
-EVWLQLNRPMDLTVSS-FCLRRQCQLRKRRLDVRGTP-KDEFEAES-
GAPQGL-----
----KIK-TLDEHWEDLCSVLSTHPNLRQLDLGSGSVLSKEAMKTLKVKLRQP-----AC
KIQNLIFKGARVTPGLRHLWMTLIIINRNITRLDLTGCRLE-EDVQTACEALRHPQCALE
SLR-----LDRCGLTPASCREISQVLATSGSLKSLSLTGNKVAD
QGVKSLCDALKVTPCTLQKLILGSCGLTAATCQDLASALIENQGLTHLSLSGDELGSKGM
SLL-----
-----CRAVKLSSCGLQKLALNACSLDVAGCGFLAFALMGNRHLTHLSLSMN
PLEDPGMNLLCEVMPEPSCPLRDLVNCRLTASCKSLSNVITRSPRLRSLDLAANALG
DEGIAALCEGLKQKN-TLTRLGLEACGLTSEGCKALSALTCSRHLASLNLNRNDLGPGRG
MTTLCSAFMHPTSNLQTIIGLWKEQYPARVRRLLQVQRLKPHVVISDAWYTEEEEDGPCW
RI-----

#NLRP5_dog "gi|73947399|ref|XP_533576.2| PREDICTED: similar to NACHT, LRR and PYD containing protein 5 [Canis familiaris]"

-----MREAKLPCFSNYGLQWYFKQLSKEEFQTFKELLMEKASEL
AVCSFPE-----WVEVSNANVEHLASLLHEHYKESLAWKISIHIFEEMNLSTLSEKARK
EMKKYSLTEIPE----NSTPKKNDQEPNMKEGPGQRKD-----
-----VGNTWNYKDYVMT
KFATKLD-----EYHGSENFASDYPEMQTLLGAFNPD-QRQGFQPR-TVVVHGGKSGIGKSD

LARRVLLSWAQGKLYQGMFSYVFFLGAREMH-CMKEGSFAELISREWPDYQVPMMDIMSQ
PERLLFVVDGFDLDFAFKD----NDPNLCEDWTDKQPTSVLMHSLKLVLLPESLMIT
VRDTGIEKLSMLTSPRYLLVRGISVEKRIQLLCQHTKNEH-----LKTQVLHSVV
DNHLLFEECQAPILGSLICEALNLQEASGKSLPPTCQTLTGLYATFVFHQLTPRDASRRC
LNQEERAILKNLCLMAMRGVWN-RKFVYRDDL SVHRLRKSELSALFQTNILLQDGS-HE
RCYTF LHVSLQDFCAALYYILEGLETEWDPYPVF-----MENMRSLVELKQISSNAHL
FQMKRFLFGLMSKEVMGALEVLGCPVPLVMKQGLLCWIS-LLGQQ-----
-----ASTATPPDSLDAFHCLFETQDDEFVLLALNSFQ-----
-EVWLPINRRMDLMVSS-FCLQRCQYLQKIRMDVCEFLKDEFTEAHP-LAPQGM-----
----PIKTLADEWVESLCLVLSLTHPSLQQLDLGSLTNEWAMKTLCKIKLRQP-----TC
KIQNLIFKGAQVTLGLRHLWMTLITNRNIKCLNLESTHLKD-EDLMMVCEALRHPNCLLE
SLR-----LDHCGLTPACCLVISQILVTSISLKSLSLVGNKVTN
QGKPLCDALTASQCTLQKMILGKCGLKAPDCQDLASALISNQLSLTHLCLSSNSLGSEGM
NLL-----
-----GRAIKFPNCGLQRLILNECNLDVAGCGFLAFALMGNRHLTHLSLSMN
PLEDDGMNLLCEVIMEPSCHLQDLELVKCHLTAGCCKKLSHVIVRNKHLKSLDLAVNALG
DDGVTALCEGLKHKRSLKRLGLEACGLTSGCCEVLASALLCSQRLTSLNLMRNDSPMG
MTKLCPAFAQPTSNLQIIGLWKWEYPTQIRKLLKEVQLVKPQIVIGDDWYSFDEDDRYWW
KS-----

#NLRP8_dog "gi|73947401|ref|XP_853947.1| PREDICTED: similar to NACHT, leucine
rich repeat and PYD containing 8 [Canis familiaris]"

-----MSSASSTSPFENGVMVLYMYYLSKEELQTFKQLLVDERPRP
GSVQIT-----WDQVKTARWGEVHLLMEYFPGRLAWDVTHDIFAKMNQMECLRVQM
ELNDILPSLELEDSNPREMPVSLEEGE-----
-----SDKIQEYKLYMID
EYSMIRSKTTWPGNHMDFFYQDIERHERFLPCIFLPKRPQGRQPK-TVVLQGVSGVGKSS
LAGKVMLEWAKNFYSHKFWYAFYFHCREVA-QVDEQSLSELI AHKW PRAQALMSKIMSK
PDQLLLFDGFEVTLTLD----RPTDLSWDWSQKLPGSVLLTSLLSKIMLPEATLLIT
LRFTSWRKLKPFKHPFITLTGFSMVEKVKYFRTYFRNKR-----EADALS FVM
GNTILFSMCQVPVICWMVC SCLRQOMEKGVDLVQAYPNATAVVFVQYLSLFP TKAGS--L
PSNTHQEQLRGLCYLAAEGMWN-MRWVFDKDFEQAKLDETAVATFLHVNIFRRVAG-DK
DYAFADLSFQEFFAALLYVLCFPQRLRNFWVLD-----RVQIICLIAYPGRKKNHL
AQMGFLFLGLLNEKCSLAAEKSFRCKLSLGNKKKLLKVAALPYEC-----
-----GPPTLHHGIPQLFYCLHEIQEEAFVVSQILSDCQ-----
-KAALIISRNKDMQASA-FCLKHCRHLRNLELTITLTITQLYALNPDPLOSTEPG-----
-----SSNQCFLLWQDFCSVVRTHENLEVLAVTNTVMEADSVKVL SAALRHP-----GC
KLQKLI FRRVNTSMLNEDLLQVLMENWYLRCLIEIQGTEVRC-EAMEFLCTALKYPQCYLQ
CLR-----LEDCAVTPKSWVELARDLGSNRHLKTLMLRSCLET
FG-----AYYLSLAQLERLLENCGLTVLSCKSLMSLMSNKMLTHLSLAENALKDEGA
KQL-----
-----CSALQHPMCPLQRLVLRNCALTS DCCQDMASALGKNKNLRS LLDLGFN
SLKDDGVTLLFEALKKSEGLQILELERCLFTSLCCQAMASMLLHNQSLRYLDVSKNDIG
LRGILLREAFQQHKWKKKVVLETKQNYAPDMVMRLEGPVAVKNE SLRIIQDWSADCWDEA
RWME-----

#NLRP1a_mouse "gi|51921281|ref|NP_001004142.1| NLR family, pyrin domain
containing 1A [Mus musculus]"

-----MEE-----SQSKQESSTKVAQHEGQEDVDPTFKTKKLMLEVELMKHRVQLERN

LKLR-----
-----TFPGARTKQVKEALYPLLTWSSKSKNLFQNF TKLLLLFKKLCQ
RG---SENLVRESWYPCVPEE---EAHMIDIQDLFGPNLGTQKKPQLV IIEGAAGIGKST
LARLVKRAWKEGKLYRNDFFHVFFFSCRELA-QYEQLSLAELIVQGQEVPTAPIRQILSH
PEKLLFILDGIDEPAWVLAD----QNPCLCHWSQTPVHTLLGSLGKSILPGASFLT
TRTTALQKFIP SLEQPCQVEVLGFTLFRKKNFYKYFGKKK-----GGVTFTLVK
SNSALLTLCEVPWVCWLVCTCLKKQMEQGGELSLTS-QTTTALCLKYLSLTIPG-----
QHMRT--QLRDLCSLAAEGVCQ--RRTLFS ESDLCKQGLDEHAIASFLKIGVLQKQASSLS
--YSAHLCLQEFAAMSYILDDSEERH-ADMKND-----RIVETLVERYGRQNLFE
APTVRFLFGLLSKEELKIEKLFCSLHGK--TKLKLWHILGKSQPHQP-----
-----PCLGLLHCLYENQDMELLTHVMHDLQGTIVPGPDDLAHTVLQ
TNVKHLVIQTDMDLMVVTFCIKFCCHVRS LQLNRKVQQGHKFTAPGMVLYRWTPITDA--
-----SWKIFFSNLKLARNLEELDLSGNPLSYAVHSLCTTLRKR-----GC
QLKTLCTLPEDMNKAEVKNTEAKGSLGKAPGPRNDIFPFPPA----HCPYNQTSTSEHL
PCR-----LVECGLTSTYCSLLASVLSARSSLTELDLQNLNDLGD
GGVKMLCEGLRNPACNLSILWLDQASLSDQVIAELRTLEAKNPKLLISSTWKPHVMVPTM
NMDKEEVGDSQALLKQQRQSGMVGWLLKEDNVKKIKQ NATN----TYAHTHTHTHAELV
PLKTFHPCSPVSPGDKHMEPLGTEDEFWGP TGPVTTEVVDRENRNLYRVQLPMAGSYHCPS
TGLHFVVTRAVTIEIEFCAWSQYLDKTP LQQSHMVVGPLFDIKAEQGAVTAVYLPHFVAL
QEGIVDSSLFHVAFQEHGMVLETPARVEQHYAVLENP SFSPMGILLRMIPAVGHFIPIT
STTLIYYHLYLEDVTFHLYLVPNDCSIRKAIDDEEMKFQFVRINKPPPVDALYLGSRIV
SSSKL--VEIIPKELELCYRSPGESQLFSEIDIGHMDSEIKLQIKDKRHMNLKWEALLKP
G----KISLRPETLRVEERDTKGAF LCSFPVSSLSL DAPSLLFHMDQHREQLVARVTSVD
PLLDKHLGVLSEDSYEVVRSETTNQDKMRKLFSLRSWSWDCKDQFYQALKETHPHLVM
DILEKLGGSVKS----

#NLRP1b_mouse "gi|110665740|ref|NP_001035786.1| NLR family, pyrin domain
containing 1B [Mus musculus]"

-----MEQ-----SQPKKKSRTKVAQHEGQLNLNPTFKTRKRKEVELMKRRPKPEGH
LKLG-----
-----TIPKVHIKQKGETLDP--TWSRKRKNLVQKLTNLLLFEKLC
RG---SENLIRKSWYSCEEEE---RGHMIEIQDLFGPNRGTHKKPQLV IIEGAAGIGKST
LARQVKRAWKEGQLYRNHFQHVFFLSCRELA-QYEQLSLAELIAQGGQEVPTVPIRQILSH
PKELLFILDGIDEPAWVLAD----QNPCLCHWSQRQPVHTLLGSLGKSILPGASFLT
ARTTALQKIIPYVQPRRVEVLGFSKFEREVYFRKYFVKES-----DAIAAFRLVV
SNPVLLTLCEVPWVCWLVCTCLKKQMEQGGELSLTS-QTTTALCLKYLSLTIPG-----
QHMRT--QLRALCSLAAEGICQ--RRTLFS ESDLCKQGLAEDAIA TFLKIGILQKQASSLS
--YSAHLCLQEFAVMSYILEDSDERC-DGMEFK-----RTVETLIEVYGRHTLCE
EPTVHFVFLGVLNEQGMREMKKIFDCKLPLG--TELKMLKSTLG--NPTYQ-----
-----HHLGLLHCLYESQEEVLLTYVLCNLH-LTGPDKNYMEATVSQ
TNVKHLVIQTDMEMLMVVTFCIQFCCHVRS LRVNMKGQQGHKLTVA SMVLYRWTPITNA--
-----SWKILFYNLKFNSNLEGLDLSGNPLSYSAVQYLCDAMIYP-----GC
QLKTLW-----
-----LVECGLTPTYCSLLASVLSACSSLRELDLQNLNDLCD
DGV RMLCEGLRNRACNLRILRLDLYSLSAQVITELRTLEENNLK LHISSIWMPQMMVPTE
NMDEEDILTSFKQQRQSS-----
-----GANPMEILGTEEDFWGPIGPVATEVVYRERNLYRVQLPMAGSYHCPS
TRLHFVVTRAVTIEIEFCAWSQFLDKTP LQQSHMVVGPLFDIKAEQGAVTAVYLPHFVSL
KDTKASTDFDKVAHFQEHGMVLETPDRVKPGYTVLKNP SFSPMGVLRIPAAARHFIPIT
SITLIYYRVNQE EVTLHLYLVPNDCTIQKAIDDEEMKFQFVRINKPPPVDNLFIGSRIV
SGSEN--LEITPKELELCYRSSKEFQLFSEIYVGNMGSEIKLQIKNKKHMKLIWEALLKP
G----DLRP-----ALPRIA QALKDAPSLLFHMDQHREQLVARVTSVD
PLLDKHLGVLNEESYEAVRAENTNQDKMRKLFNLSRSWSRACKDLFYQALKETHPHLVM
DLLEKSGGSVLSG----

#NLRP1c_mouse "gi|85986637|ref|NP_001034323.1| NLR family, pyrin domain
containing 1C [Mus musculus]"

-----MYMKQKKNENLYSTQPSKGENLSQNFTNLLLSQKLCPC
QG---SKTFARKSWHQCVPEE---RGHMIEIQDLFGQNLNKQEKAQLVVIVGAAGIGKST
LARQVRNAWKEGQLYRDHFQHVFFFSCTELS-KSKQLSLAEFIAQGQEVPTAPIRQILSH
PEELLFILDGIDEPAWVLKD---QDPELCLHWSQMOPVHTLLGSLLGKSILPGASFLIT
ARTTALKKFI SNFKQPWQVEVLGFTMLERKNYFYKYFEKEI-----EAI AAFRLIK
SNSVLLTLCEVPWVCCLVNCLKKQMDQGRVISLTS-QTTTALCLKYLSTIPG-----
KHRRT--QLRALCSLAAEGIWK--RRTLFSSEDLCKQGLEEDAIATFLKIGVLKQASSLS
--YSFAHLCLQEFAAMSYLEDESEGRH-GDMKIN-----RTVRILVKRYGRQNLFE
APTVRFLFGLLSKEGFKEMQKVF SCKLSGK--SKLMIR-HILQKLQPHQP-----
-----SCLGLLHCLYEKQEMELLTMMHDLRGTIMHGLINIAHTVLQ
RNLKLNVIQTDMDLMVVTFFIRLCSHVRSLQLNRKGGQYKLMAPGMVLYRWTPITDS--
-----SWKIFFFNLFKFTTNLEELDLSGNPLSYSAACSLCKALRHP-----GC
QLKTLW-----
-----LVECGLTSTYCSLLASVLSACSSLTELNRLNLYLGN
RGVKLLCEGLRNPACNLSTLWLDVASLREEVITELRTLEAKNLKLLISRACKSHVIVPTK
NMDKEEVGDSL DLLKQQRQSS-----
-----GDKHMEPLGTDYDFWGSTGVPVATEVVDREERNLYRVQLPMAGSYHSPS
TGLHFVVTRAVTIEIEFCAWSQYLDKTP LKHSHMVAGPLFDIKAEQGT VSAVYLSRFVSL
QEGIVDSSLFHV AHFQEHGIIPRNTSKGGTALCSTGKPKLLPNGNSTENDSGCRTLHPHH
FHHTDLLSPLSRGCHLSPLLGPQ-----

#NLRP1_rat "gi|109488421|ref|XP_340836.3| PREDICTED: similar to NACHT, leucine rich repeat and PYD containing 1 [Rattus norvegicus]"

-----MEE-----SQSKQESNTRVAQHGSQQDVPDPTFQTKRALEKERSKPRPRPLPR
GTIP-----
-----EIEYKRKETIS-----HTQSMEQKYLQNF TKLLLLQKCCP
GG---SEKLVRESWHP CVPEE---GGHMIEIQDLFDPNLDTEKQPQLVIEGAAGIGKST
LARQVKRAWDEGQLYRDRFQHVFFFSCRELA-QCKQLSLAELIAQGQEVPTAPTRQILSR
PEKLLFILDGIDEPAWVLED---QNPELCVHWSQAQPVHTLLGSLLGKSILPEASLMLT
ARTTALQKLVPSLGQPHRVEVLGFSSEFERKDYFYKYFAKER-----NTIIDFNLI
SIPVLLTLCEVPWVCWLLCTCLEKMQQGEVLSLTS-QTTTALCLKYLSTIPG-----
QHLST--QLRTLCSLAAEGICQ--RRTLFSKSDLCKQGLAEDAIATFLKIGVLQRQPSLS
--YSFAHLCLQEFAAMSYLEDESEAH-GDMGND-----RTVETLVERYGRQNLFE
APTVRFLGLLNTREMREMENIFACKFPWE--TKLKLQSIIG-EPFCQP-----
-----CHLGLFHCLYENQEEELLTETMLCFP-LTASGPNHMEATVFQ
TNVKRLVIQTDMEMLMVVTF CITFS-HVRSRLKKGKQGEYKLTAPAMVLYRWTPISEA--
-----SWKVLF SNLKCTRNL EELDLSGNPLSYSAVRS LCTALRQP-----GC
RLKTLW-----
-----LVDCGLTSRCCSFLASMLS AHSRLAELDRLNDLGD
NGVRQLCEGLRNPACNLSILRLDQASLSEQVITELRALETKNPKLFI SSTWMSHMTMPTE
NTDGEESLTSSKQQQQSS-----
-----GDKHMEPLGTD DDFWGPSGPVSTEVVDREERNLYRVRLPMAGSYHSPS
TGLHFVVTRAVTIEIGFCAWSQFLHETPLQHSHMVAGPLFDIKAEHGAVTAVCLPHFVSL
QEGKVDSSLFHV AHFQDHGMVLET PARVEPHFAVLENP SFSMPGVLLRMIPAVGHFIPIT
SITLIYYRLYLEDITFHLYLVPNDCTIRKAIDEEELKFQFVRINKPPPVDALYVGSRYIV
SSSKE--VEILPKELELCYRSPRESQLFSEIYVGNIGSGINLQLTDK KYMNIWEALLKP
GDLRP-----ALPRMASAPKDAPALLHFVDQHREQLVARVTSVD
PLLDKLGHLVLS EEDYETVRAEATNQDKMRKLFGRSRSWSWDCCKDHFYQALKETHPHLIM
DLLEKSGGVS VRL-----

#NLRP1_bovine "ENSBTAT00000027232 peptide:ENSBTAP00000027232
pep:NOVEL_protein_coding"
--MAGEARSLEDLEKKKQKLELRLWLPDEEPRQLQSPEVVHAQPEKPRSRKMTIILSV
KEVQHECMAIHTKGFVNEQGACTKTLEETDLNSALYSSFSHSPAPNLESPSWPTSTKV
LTFCKPKQPV--LNPLKWSSSPLIFASGYRKEDLSPSIYQG--FPSSPYHESPSQELPND
PTSTAVLRA-----CEIPRHSCPEPREKEGPGTVWPLVETSGNSCTEILLLENINSQN
GRDGIQPPLSLMPLL-----
-----PPSTHLMFCFPCHRSRQRYQDQRRETPCSTWSWKNEDLHPKFMQLLLLHTPYH
KD---YESLNRESWDHGVVEG---QGHLIEVRDLFGSDLGSQEGPHTVILHGVAGIGKST
LARHIRRAWEEGQLYRNHFQHVYFNCRELA-TSKLTSLEELITKDQSTTVAPAGQIQSQ
PEQLLFILDGLDELECVSEE----KRAELCLHRSQQQSVQTLGSLVEKTIPEASLLIT
ARTAAQKQFIPSLKQPCWVEVLGFSSESRKDYFYEYFTEES-----QATRAFSVVE
SNQALLTMCLTPLVSWLACTCLKQOMEAGEELSLKS-QTMTALYLRILAQAQA-----
QPLGT--QLRGFCTLAAEGICQ-GKTLFSPGDLKKHGLDGVISATPLKMDVLQKHTPSLN
--YSFIHLCFQEFFAAVVSFALGDIRDKS-DHPNST-----GSMEKLVEVYGINNLF
APT VHF LSGLLSEQGAREMENIFQCKLSWE--RKRESLLRWAELELRR-----
-----EHYSLQLFHCLYEIQDEEFLTQAMAHFQ-----
--GMRVCIRTSMELLVFTFCIRFCSHVWRLQLNEGRQHPGACRPTD TVLLSWVPATEA--
-----CWQVLCVSVLQVTGNLKELDL SRNILSRSAVQSLDEALRCP-----GC
QLETLRLASCSLTAESCKDIASGLSTSQTLMQLELSFN TLLDAGAHLCCQGLRQPTCKLQ
RLL-----LAGCGLTSGCCQDLASMLRVSPSLMELNLLQNDLDD
LGVRLLCGELRHPSCQLICLWLDQTQLSEEVTKMLRALERQKPLLVSIGIWKPSLRILHE
GPGGAEMS-DTSSLKRQRQASARQKNLKLAAALS-----APEGSSPQAA
QVRLFCPSSPAPPEDEHME SLGTEDDLWGPTGPVATEAVDEERSLYRVHLP MAGFYHWP
N TGLRFEVRGPVTVEIEFCAWDQFLNRNFPQRSWLAAGPLFDIKAEPGAVAAVFLPHFVAF
RGNDVDISQFQVAHFKEEGMLLEKPARVTPCYAVLENP SFSPMGVLLRMVQTALRFIPIT
STVLLYHYLQPEVTFHLYLIPSDCSIQKAIDNEEKMFQFVRIHKPPPLTPLYMGSRYIV
SGSEK--LEIIPKELELCYRSPRESQLFSEFYVRHLRSGIRLQIRSKKDGTVVWEALVKP
GDLRRAVTPVS-----PGLRA-----

#NLRP1_dog "ENSCAFT00000024581 peptide:ENSCAFP00000022816
pep:NOVEL_protein_coding"
MACRVQWQLAWYLEMMGKEELKEFQLRLLLEQQFWGDPPHALRAQLGKARGLEVASRLVAQ
YGEQQAWVLALRTWEEMGLSRLCAQSRAEAGLIPLSPG----SPMAPSMQSPNSPISTEV
LRFIQDPRTR--NSGQPLPPLLNTSGHMMNEDPSSCKYQEGLPDSPEFQGSPhQESPSA
PMP TAVLGG-----WEAPPQSPVPKGQEA PKAGWPVAGTSGNHNPGERNRSQTESPQ
GRS-----
-----VPYLYVPSFPPLAGITERYQHQRKKPYPTWSWEDKDLHQIFIQLLLLHQYP
RG---HESLTKGRWHHGAEK---QGHLIEVEDLFGPGLGAQEEPQTVILHGVAGIGKST
LARQIRTAWKEGQLYKDRFRHVYFNCRELA-RSETMSLTELITKAQAGPVLPAEQILSQ
PGRLLFILDLDPEPRWVLGE---QESLHSSWSKQRPVHALLGSLGKTVLPEVSLLV
T VRTALRRLVP SVGQLCWVEVLGFSSEGRREYFYKYFKNKS-----QATQAFSLVE
LNPTLLTMCLVPLVSWLLCTCLKKQMQRGEELSLGSSQTTTALWLYYLSQALPA-----
QLLGA--QLRGFCSLAAEGFWQ-GTNLLSRRDLRKHGFDEATISTFLKTGILRKHP SPLN
--YHLAHRCLQEFFAAVSCV LGGEDGGS-PHPDSI-----RGAEKLLLEVYEGHDLFG
APTTHFLFGLLSEQGEREMEA VQCKLPRE--RKRD-LLRWAEAGLWPRLS-----
-----APQPCSLHLLHCLYEIQDEDL LTRAMAHFH-----
--GRSMCVQTGVEFLVCTFCFKFC SHVKRLQLNESRWDGQAWRPS SVALFSWVPVTD A--
-----CWQALFSTLRASGLKELDL SGNHLSHPAVQSLCKVLKFP-----CC
HLETVRLAGCGLTAEGCS DLASALSASPALAELELSFNLLLDAGA QHL SRGLRQPACRLR
RLL-----LAGCSLTSRCCGALASALST SPLLEL DLQONELGD
VGVRLLCGGLGHP TCQLTLLWLDQTQLSEEMTQMLRALQEEKPLFVC SKWKPRATVPT E
GLSRGETS-GTSSLKQQRQSGRKSNAVAQARQPSLDRESGA--DSCSAPFPERSCPQVG
QVQLGRPPSPAAPWDLNTEPLRIGDGFWGPLGPVAPEWLAEDGSLYRVHLPVAGSYHWP
D TGLRFEVRGPATIDIEFCVWDQHLPRAGLWHSWVAGPLFDIKAEPGAVATVCLPHFV
DL QGSSVDTSLFYAAHLKDEGM LVETPARVEADHV VLENP SFSPIGVLLRTIHAALRFLP
VTV CVLLYHHLRPGEVAFHLYLIPSDYSIRKAIDNEEKKFQFVQIHKPPPLASLYMGSRY
TV SGSEK--LEIIPKELELCYRSPREPQLFSEFYVSHLGS GIRLQVRDKKDDTVVWEALVKP
GDLRPVASLAP-----PAPAARFPPTDAPAWLHFVDRHREQLVARVTSVD

PVLDMLHGQVLSSEEQYERVRAEATTPSQMRKLF SFSRSWDRACKDQVYQALKEAHPHLM
ELWEKWGGNSGKQAPP

#NLRP1_human "gi|14719829|ref|NP_127497.1| NLR family, pyrin domain containing 1 isoform 1 [Homo sapiens]"

MAGGAWGRLACYLEFLKKEELKEFQLLLANKAHSRSSSGETPAQPEKTS GMEVASYLVAQ
YGEQRAWDLALHTWEQMGLRSLCAQAQEGAGHSPSFPYS----PSEPHLGSPSQPTSTAV
LMPWIHELPA GCTQGSERRVLRQLPDTSGRRWREI SASLLYQALPSSPDHESPSQESPNA
PTSTAVLGS-----WGSPPQPSLAPREQEAPGTQWPLDETS GIIYYTEIREREREKSEK
GRPP-----WAA-----
-----VVGTPPQAHTSLQPHHPWEP SVRESLCSTWPWKNE DFNQKFTQLLLLQRPH
RS---QDPLVKRSWPDYVEEN---RGHLIEIRDLFGPGLDTQE-PRIVILQGAAGIGKST
LARQVKEAWGRGQLYGDRFQHVYFSCRELA-QSKVVSLAELIGKDG TATPAPIRQILSR
PERLLFILDGVDEPGWVLQE----P SSELCLHWSQPQPADALLG SLLGKTILPEASFLIT
ARTTALQNLIP SLEQARWVEVLG FSESSRKEYFYRYFTDER-----QAIRAFRLVK
SNKELWALCLVPWVSWLACTCLMQQMKRKEKLT LTS-KTTTTLCLHYLAQALQA-----
QPLGP--QLRDLC SLAAEGIWQ-KKTLFSPDDL RKHGLDGAIISTFLKMGILQEHP IPLS
--YSFIHLCFQE FFAAMS YVLEDEKGRG-KHSNCI-----IDLEKTLEAYGIHGLFG
ASTTRFLLG LLSDEGEREMENIFHCRLSQG--RNLMQWVPSLQ LLLQP-----
-----HSLESLHCLYETRNKTF LTQVMAHFE-----
--EMGMCVETDMELLVCTFCIKFSRHVKKLQLIEGRQHRSTWSP TMVVLFRWVPVTD A--
-----YWQILF SVLKVTRNLKELDLSGNLSHSAVKSLCKTLRRP-----RC
LLETLRLAGCGLTAEDCKDLAFGLRANQTLTELDLSFNVLTDAGAKHLCQRLRQP SCKLQ
RLQ-----LVSCGLTSDCCQDLASVLSASP SLKELDLQ QNNLDD
VGVRLLC EGLRHPACKLIRLGLDQ T T L SDEM RQELRALEQEK PQLLIF SRRKPSVMTPTE
GLDTGEMSNSTSSLKRQLRGLSERAASHVAQANLKL LDVSKIFPIAEIAEE----SSPEVV
VELLCVPSPASQGD LHTKPLGTD DDFWGP TGPVATEVVDKEKNLYRVHFPVAGSYRWP N
TGLCFVMREAVTVEIEFCVWDQFLG E INPQHSW MVAGPLLD IKAEPGAVEAVHLP HFVAL
QGGHVDTS L FQMAHFKEEGMLLEKPARVELHHIVLENP SF SPLGVLLKMIHNALRFIPVT
SVVLLYHRVHPEEVTFHLYLIPSDCSIRKAID DLEMKFQFVRIHKPPPLTPLYMGCRYTV
SGSGSGMLEILPKELELCYRSPGEDQLFSEFYVGH LGS GIRLQVKDKKDETLVWEALVKP
GDLMPATTLIP-----PARIAVP SPLDAPQLLHFVDQYREQLIARVTSVE
VVDKHLHGQVLSQEYERVLAENTRPSQMRKLF SLSQSWDRKCKDGLYQALKETHPHLM
ELWEKGSKKGLLPLSS-

#NLRP1_chimpanzee "gi|114666001|ref|XP_001167230.1| PREDICTED: death effector filament-forming Ced-4-like apoptosis protein isoform 8 [Pan troglodytes]"

MAGGAWGRLACYLEFLKKEELKEFQLLLANKAHSRSSSGETPAQPEKTS GMEVASYLVAQ
YGEQRAWDLALHTWEQMGLRSLCTQAQEGAGHSPSFPYS----PSEPHLGSPSQPTSTAV
LMPWIHELPA GCTQGSERRVLRQLPDTSGRRWREI SASLLYQALPSSPDHESPSQESPNA
PTSTAVLGS-----WGSPPQPSLAPREQEAPGTQWPLDETS GIIYYTEIREREREKSEK
GRPP-----WAA-----
-----VVGTPPQAHASLQPHHPWEP SVRESLCSTWPWKNE DFNQKFTQLLLLQRPH
RS---QDPLVKRSWPDYVEEN---RGHLIEIRDLFGPGLDTQE-PRVILQGAAGIGKST
LARQVKEAWGRGQLYGDRFQHVYFSCRELA-QSKVVSLAELIGKDG TATPAPIRQILSR
PERLLFILDGVDEPGWVLQE----P SSELCLHWSQPQPADALLG SLLGKTILPEASFLIT
ARTTALQNLIP SLEQARWVEVLG FSESSRKEYFYKYFTDER-----QAIRAFRLVK
SNKELWALCLVPWVSWLACTCLMQQMKQKEKLT LTS-KTTTTLCLHYLAQALQA-----
QPLGP--QLRDLC SLAAEGIWQ-KKTLFSPDDL RKHGLDGAIISTLLKMGILQEHP IPLS
--YSFIHLCFQE FFAAMS YVLEDKKGRG-KHSNCI-----IDLEKMLEAYGIHGLFG
ASTTRFLLG LLSDEGEREMENIFHCRLSQG--RNLMQWVPSLQ LLLQP-----
-----HSLESLHCLYETRNKTF LTQVMAHFE-----
--EMGMCVETDMELLVCTFCIKFSHHVKKLQLIEGRQHRSTWSP TMVVLFRWVPVTD A--
-----YWQILF SVLKVTRNLKELDLSGNLLSHSAVKSLCKTLRRP-----RC
LLETLRLAGCGLRAEDCKDLAFGLRANQALTELDLSFNVLTDAGAKHLCQRLRQP SCKLQ
RLQ-----LVSCGLTSDCCQDLASVLSASP SLKELDLQ QNNLDD
VGVRLLC EGLRHPACKLIHLGLDQMTLSDEM RQELRALEQEK PQLLIF SRRQGETQTP TD
GLEVSEPGNITGLQQP SDGSERAASHVAQANLKL LDVSKIFPIAEIAGKSHEESSPEVV
VELLCVPSPASQGD LHMKPLGTD DDFWGP TGPVATEVVDKEKNLYRVHFPVAGSYRWP N
TGLCFVVMREAVTVEIEFCVWDQFLG E INPQHSW MVAGPLLD IKAEPGAVEAVHLP HFVAL
QGGHVDTS L FQVAHFKEEGMLLEKPARVELHHIVLENP SF SPLGVLLKMIHNALRFIPVT

SVVLLYHRLHPEEVTFHLYLIPSDCSIRKAIDDLEMKFQFVRIHKPPPLTPLYMGCRYTV
SGSGSMLEILPKELELCYRSPGEDQLFSEFYVGHLSGIRLQVKDKKDETLVWEALVKP
GRNTSQPNLR-----CNRDARR-----

#NLRP2_human "gi|8923473|ref|NP_060322.1| NLR family, pyrin domain containing 2
[Homo sapiens]"

-----MVSSAQMGFNLQALLEQLSQDELSEKFKYLITTFSLAH
ELQ-----KIPHKEVDKADGKQLVEILTTHCDSYVEMASLQVFEMHRMDLSEAKD
EVRE-----AALKSFNKRKPLS
LGITRKERPPLDVDEMLERFKTEAQAFTETKGNVICLGKEVFKG-----KKPDKDNRCRY
ILKTKFREMWKSWPGDSK-EVQVMAERYKMLIPFSNPRVLPGPFYTVVLYGPAGLGKTT
LAQKMLDWAE-DNLIHKFKYAFYLSCRELS-RLGPCSFAELVFRDWPELQDDIPHILAQ
ARKILFVIDGFDELGAAP----GALIEDICGDWEKKKPVVLLGSLLNRVMLPKAALLVT
TRPRALRDLRILAEPIYIRVEGFLEEDRRAYFLRHFGDED-----QAMRAFELMR
SNAALFQLGSAPAVCWIVCTTLKLQMEKGEDPVPTCLTRTGLFLRFLCSRFP-----
QGAQLRGALRTLSLLAAQGLWA-QTSVLHREDLERLGVQESDLRFLDGDILRQDRV-SK
GCYSFIHLSFQQFLTALFYTLEKEEEEEDRDGHT-----WDIGDVQKLLSGVERLRNPDL
IQAGYYSFGLANEKRAKELEATFGCRMSPDIKQELLRCDISCKG-----
-----GHSTVTDLQELLGCLYESQEEELVKEVMAQFK-----
-EISLHLN-AVDVVPSS-FCVKHCRNLQKMSLQVIKENLPENVTASESDAEVERS-----
----QDDQHMLPFWTDLCSIFGSNKDLMGLAINDSFLSASLVRILCEQIASD-----TC
HLQRVVFKNISPADAHRNLCALRGHKTVTYLTLOGNDQDD--MFPALCEVLRHPECNLR
YLG-----LVSCSATTQQWADLSLAEVNQSLTCVNLSDNELLD
EGAKLLYTTLRHPKCFLQRLSLENCHLTEANCKDLAAVLVVSRELTHLCLAKNP IGNTGV
KFL-----
-----CEGLRYPECKLQTLVLWNCIDITSDGCCDLTKLLQEKSSLLCLDLGLN
HIGVKGMKFLCEALRKPLCNLRCLWLWGCSIPPFSCEDLCSALSCNQSLVTLDLGQNPLG
SSGVKMLFETLTCSGTLRLRLKIDDFNDELNKLLEEIEEKNPQLIIDTEKHHPWAERP
SSHDFMI-----

#NLRP2_chimpanzee "gi|114679066|ref|XP_001175071.1| PREDICTED: NACHT, leucine
rich repeat and PYD containing 2 isoform 2 [Pan troglodytes]"

-----MVSSAQMGFNLQALLEQLSQDELSEKFKYLITTFSLAH
ELQ-----KIPHKEVDKADGKQLVEILTSHCDSYVEMASLQVFEMHRMDLSEAKD
EVRE-----AALKSFNKRKPLS
LGITRKERPPLDVDEMLERLKTALDK-----DNRCRY
ILKTKFREMWKSWPGDSK-EVQVMAERYKMLIPFSNPRVLPGPFYTVVLYGPAGLGKTT
LAQKMLDWAE-DNLIHKFKYAFYLSCRELS-RLGPCSFAELVFRDWPELQDDIPHILAQ
ARKILFVIDGFDELGAAP----GALIEDICGDWEKKKPVVLLGSLLNRVMLPKAALLVT
TRPRALRDLRILAEPIYVRVEGFLEEDRRAYFLRHFGDED-----RAMRAFELMR
SNADLFQGSAPAVCWIVCTTLKLQMEKGEDPVPTCLTRTGLFLRFLCSRFP-----
QGAQLRGALRTLSLLAAQGLWA-QTSVLHREDLERLGVQESDLRFLDGDILRQDRV-SK
GCYSFIHLSFQQFLTALFYALEKEEEEEDRDGHT-----SDIGDVQKLLSGVERLRNPDL
IQAGYYSFGLANEKRAKELEATFGCRMSPDIKQELLRCDISCKG-----
-----GHSTVTDLQELLGCLYESQEEELVKEVMAQFK-----
-EISLHLN-AVDVVPSS-FCVKHCRNLQKMSLQVIKENLPENVTASESDAEVERS-----
----QDDQHMLPFWTDLCSIFGSNKDLMGLAINDSFLSASLVRILCEQIASD-----TC
HLQRVVFKNISPADAHRNLCALRGHKTVTYLTLOGNDQDD--MFPALCEVLRHPECNLR
YLG-----LVSCSATTQQWADLSLAEVNQSLTCVNLSDNELLD
EGAKLLYTTLRHPKCFLQRLSLENCHLTEANCKDLAAVLVVSRELTHLCLAKNP IGNTGV
KFL-----

-----CEGLRYPECKLQTLVLWNC DITS DGCCDLAKLLQEKSSLSCLDLGLN
HIGVKGMKFLCEALRKPLCNLRCLWLWGCSIPPFSCEDLCSALSCNQSLVTLDLGQNPLG
SSGVKMLFETLTCS SGTLR LRLKIDDFNDELNKLLEEIEEKNPQLIIDTEKHHPWEERP
SSHDFMI-----

#NLRP2_mouse "gi|112821677|ref|NP_808358.2| NACHT, leucine rich repeat and PYD
containing 2 [Mus musculus]"

-----MEHFDPLGFNLKDVLRLKLDKTELNNFKRTLRSCLPD
TMK-----QINKLTMDLANGAQLAEILTDHCP SAWIKRVTVQILEEINRVDLAE LVVK
QIEE-----AVLKVPEEKVSSK
PREPSGTLTFPWNFVQAKRPEDKQKE-----E
WKTRYTAKWKQNFWPCKNKEIYVVTESYKTL LALCNP-KIETPFAHAIVLHGPPGSGKTT
MAKQLMLEWSE-SKQAQIFSCAFYI SCREVN-NTKPCTFAHLLSMDNP SWRDCVIRDLIL
GKEFLFVVDGFDLTFPAG----ALIRDLCGDWNTVKPVEVLLGSL LKRKMAPHATLLVT
TRTQSLHQIFVMMDQPLL VETLGFLEQEKQEYFQKYFEDEEGEEEDKGEKALRALKEVR
CNADLYQMASLPTACGIFCLCLELRMKGEDLSLTCQTYTSMFLNFLCEVFSSETCED-H
LNEEFQILFKKICILAANSLE-QVPI LCEEDFLTKLNLN LHPMVCRHILFKDSS-ST
HCLSFICLGIQQLLAAI IFVQELGQESKGVSKYS-----IQNMLSREARLKNPDL
SGLLPFVFGLLNETRIQELKTTFGCQISTEVKRKFLECESGENKP-----
-----LLLLMNMQEILSCLYESQEEGFVKEAMVLF-----
-DISLHLKTSTDLIHAS-FCLKNSQNLQTM SLKVEKAVFPENVAALSTAKHQRS-----
----PDEQRMLTFWTD FCDTFNSNKKLVFLDIHESFLNSSALEILCEKLP SA-----SC
CLQKVVLKNI SPDDAYEKLC LIFNGYKTI SHLILQGGNLD S--MHSLCEVLKNPACNLK
FLS-----LGSCSTAAQKWDDFFPVLKVNQSLIFLDLTDNSLLD
KSALLCNIWKEPKCILQRV SLENCQLTEACKDLSSVLMVSRTLTHLSLANNKLGDNV
KNL-----
-----CESISCTECNLQTLVLWSCNITNAGCHYLSKMLKQTL SLKHLDLGLN
RIGTKGAKFLCEALKNPKSKL KSLWLCGCSITPLNCQDFSETLRSNKSLNTLDLSQNVLG
TDAIKTFCEALKLQICPLQMLRLKFDEAKPSIQNLIQEMKVSHPQLRISSDQVDLKNP--
PLPHFIF-----

#NLRP2_rat "gi|109461167|ref|XP_001070923.1| PREDICTED: similar to NACHT,
leucine rich repeat and PYD containing 2 [Rattus norvegicus]"

-----MEHSDQLGFNLKDVLKLDKTELNNFKSTLKSCLPQ
TMK-----QISKLTMDLANGAQLAEILTDYCPNDWVKRVTFKILEEINRADLAE LVMK
QVEE-----AASKASEEKVSSK
PREPLKTSLFPQDFVQGD ERPEHKHKK-----E
WRNMYTEKWKKNFWPKCNKEIYVDTESYRTLLTLCNP-KIEMPFAYTIVLHGPPGSGKTT
MARRLMEWSE-SKQAQSFSCAFYI SCRKLN-NSKPCTFAHLLSMNPN SWRYYMIRRLVL
SEQFLFVVDGFDLTFPAG----ALLRDI CGDWNTVKPVEVLLSLLMRKMEPHSTLLVT
TQTQSLHQIYLMVDQPV LVETQGFLEPEKQEYFQQYFEDEEGEEEGEGEGKALRALKEVK
CNEALFQMASLPAACGIFCLCLELGMKKGEDLALTCQTYTSMFLNFLCRVFLQEACDG-H
LNKQLQILFKKICILAAD SLE-QVPI LCEEDFLK LKLNKLHPVVYRCIFLEDSS-CT
NCLSFICLSIQQLLAAI IFVQELGQESKDVSKYS-----IQKMLSREARLKNPNL
SGVLPFVFSLLNKTHIQELETIFGCQISMGV KRKFLECELGENKP-----
-----FLLMLDQEIFSCLYESQEEEFVKEAMALFG-----
-EVSLHLKTNMDLVHAS-FCLKNSQNLQTM FLKVEKAVFPENFATLESTAEDQRF-----
----QDKKMLTLWTD FCDTFHSNEKLAFLEI HESFLNSSSLEILCEKLSSA-----PC
HLQKVVLKNI SPDDAYEKLC LIFCGYETI SHLTLQGGKLD S--MLHSLCKVVKNPACNLK

FLS-----LGSCSTTAQKWDDFFPALKANQSLISLDLTDNNLLD
KGVRLCNTWKQSKCILQRVSLENCHLTEVCKDLSSVLMVSQTLTHLSLAKNELGDNGV
KKL-----
-----CESLSFPKCKLQTLVLWSCNITSNGCHYLSKMLGQAPSLKHLDLGLN
RIGTTGAKFLCEALKSPRSNLKSLWLCGCSI IPTNCKDFSEILRSNKSLNTLDLSQNVMG
TDAVKIFCESLKLQICPLQTLRLKFDEANPSIQKLIQEMKESHQLSITSDQVDPKKKSH
SFPHFIF-----

#NLRP2_dog "ENSCAFT00000004144 peptide:ENSCAFP00000003831
pep:NOVEL_protein_coding"

-----MEPSAQLGFNLQPLLEQFAQDELSSQFKSLLRPLSLQD
ELQ-----HIPATEVEEADGKQLAEILINHCP SHWVEMVTIQIFDKMNRDLSERAKD
ELRV-----KIMKRSNHRKPEE
TWITRTELKCANLEEPPEHVEEKDSAFTQVQEEDVTNPEEAKEGLKGEKPGKQDKYISI
LKEKVQMWKKNFWPGASENIHTVTQKYETLIPFCNPKMLAGPFPHTVVLHGPAGVGKTT
LAKKMLDWTEDSLAQTCPTAFYLSCKALS-RKGMCSFIELLAQSAPDLQDALAQVLTQ
AQKLLFVIDAFEELRVPSGV--EALVHDLCDVWKTQRPASTLLGSLLKRKLLPTAALLVT
TRPEALRELRLMVEQPLFVEIEGLSECDRKAYFLRHFGEAA-----QALRAFHLMK
SNATLFQMGAAAPAVCWVCTCKLQMDGEDPGPTCQTTTSLLLRFLCSQFAPAQGS--C
LGLHLRSTLHALCLLATEGVWT-QTSVFDGHDLLRLGVHESDLHPFLNRNIILOKSRD-CE
GCYCFHLHSVQQFLAAALYILGSQDHQDLPAGSPS----WDAGNVQRLLSKEEGLKNPYL
APVGHFLFGLTNEKRARELGMTFGCLVSTKVKQELLECRVGSPE-----
-----RPFSSVTDTKETLHCLYESQEEQLVKEAMVQVT-----
-EVSLVFKDTSDIMHAS-FCLKHCESLQKMWLQIEKGMFLENDAVSESEDQADRS-----
----QNDQHVLFPWIDFCSMFDSNKNLIFLDISQSFLSASSVRILCEKITS-----TH
NLQKVVLNIFPADAYRNFCIAFGGHETLTHLTQNDQND--MLPILCEILRHPKCNLQ
YLR-----LVSCSATTQWAHLSSSLKINQSLTCLNLTANELPD
ESAKLLCTTLRHPKCFLQRLSLENCQLTEACCKELSSALIVNQLRTHLSLAKNTLGDDGV
KLL-----
-----CEGLSYPDCQLQMLVLWYCSITSGGCNHLSTLLQQNSNLTHLDLGLN
HIGITGLKFLCEALKNPMCNLKLWLGCAITPFSSEILSSALGRNQSLVTLDLGQNSLG
YSGIKMLCDTLKLHCSRLTLRLKIDESDPRIQKLLKEIQEYDPQLTIESDDQDPTNNRP
SSHDFIF-----

#NLRP7_human "gi|75709196|ref|NP_996611.2| NACHT, leucine rich repeat and PYD
containing 7 isoform 2 [Homo sapiens]"

-----MTSPQLEWTLQTLLEQLNEDELKSFKSLLWAFPLED
VLQ-----KTPWSEVEEADGKKLAEILVNTSSENWIRNATVNIILEMNLTCLCKMAKA
EMME-----DGQVQEIDNPELG
DAEEDSELAKPGEKEGWR-----NS
MEKQSLVWKNFTWQGDIDNFHDDVTLRNQRFIPFLNPRTPRKLTPTVTVVLHGPAGVGKTT
LAKKMLDWTDCNLSPTLRYAFYLSCKELS-RMGPCSF AELISKDWPELQDDIPSI LAQ
AQRILFVVDGLDELKVPP----GALIQDICGDWEKKKPVVLLGSLLKRKMLPRAALLVT
TRPRALRDQLLAQQPIYVRVEGFLEEDRRAYFLRHFGEED-----QAMRAFELMR
SNAALFQLGSAPAVCWIVCTTLKQMEKGEDPVPTCLTRTGLFLRFLCSRFP-----
QGAQLRGALRTLSLLAAQGLWA-QMSVFHREDLERLGVQESDLRFLDGDILRQDRV-SK
GCYSFIHLSFQFLTALFYALEKEEGEDRDGHA-----WDIGDVQKLLSGEERLKNPDL
IQVGHFLFGLANEKRAKELEATFGCRMSPDIKQELLQCKAHLHAN-----
-----KPLSVTDLKEVLGCLYESQEEELAKVVVAPFK-----

-EISIHILTNTSEVMHCS-FSLKHCQDLQKLSLQVAKGVFLENYMDFELDIEFERCTYLTIPNWARQDLRSLRLWTFDCSLFSSNSNLKFLEVKQSFLSDSSVRILCDHVTRS-----TC
HLQKVEIKNVTPDTAYRDFCLAFIGKKTLLHLLTLAGHIEWERTMMLMLCDLLRNHKCNLQ
YLR-----LGGHCATPEQWAEFFYVLKANQSLKHLRLSANVLLD
EGAMLLYKTMTRPKHFLQMLSLENCRLTEASCKDLAAVLVVSCKLTHLCLAKNPIGDTGV
KFL-----CEGLSYPDCKLQTLVLQOCSITKLGCRYLSEALQEACSLTNLDLSIN
QIARG-----LWILCQALENPNCNLKHLRLKTYETNLEIKKLEEVKEKNPKLTIDCNASGATAPPC
CDFFC-----

#NLRP7_chimpanzee "gi|114678963|ref|XP_512902.2| PREDICTED: NACHT, leucine rich repeat and PYD containing 7 [Pan troglodytes]"

-----MTSPQLEWTLQTLLEQLNEDELKSFKSLWAFPLED
VLQ-----KTPWSEVEEADGKKLAEILVNTSSENWIRNATVNILEEMNLTELCKMAKA
EMME-----DGQVQEIDNPELG
DAEEDSELAKPGEKEGWR-----NS
MEKQSSVWKNTFWQGDIDNFHDAVTLRNQRFIPFLNPRTPGKLTPTVTVLHGPAGVGKTT
LAKKMLDWDTCNLSPVRYAFYLSCKELS-RMGPCSFANELISKDWPELQDDIPSILAQ
AQRILFVVDGLDELKVPP----GALIQDICGDWEKKKPVVLLGSLKLRKMLPKAALLVT
TRPRALRDLQLLAQQPIYVRVEGFLEEDRRAYFLRHFGDED-----QAMRAFELMR
SNAALFQLGSAPAVCWIVCTTLKLQMEKGEDPVPTCLTRTGLFLRFLCSRFP-----
QGAQLRGALRTLSLLAAQGLWA-QMSVFHREDLERLGVQESDLRFLDGDILRQDRV-SK
GCYSFIP-----DL
IQVGHFLFGLANENRAKELEATFGCRMSPDIKQELLRCKAHLHAN-----
-----KLSVTDLREVLGCLYESQEEELAKVVVAPLK-----
-EISIHILTNTSEVRHCS-FSLKHCQDLQKLSLQVAKGVFLENYMDFELDIEFERCTYLTIP
PTWARQDLRSLRLWTFDCSLFSSNSNLKFLEVKQSFLSDSSVRILCDHVTRS-----TC
HLQKVEIK-----NTLHLLTLAGHIEWERTMMLMLCDLLRNKCNLQ
YLR-----L-----
-----ENCRLTEASCKDLAAVLVVSCKLTHLCLAKNPIGDTGV
KFL-----CEGSSYPDCKLQTLV-----

#NLRP3_human "gi|34878693|ref|NP_004886.3| NLR family, pyrin domain containing 3 isoform a [Homo sapiens]"

-----MKMASTRCKLARYLEDLEDVDLKKFKMHLEDYPPQK
GCIPLPRG-----QTEKADHVLDLATLMIDFNNGEEKAWAMAVWIFAAINRRDLYEKAKR
DE-----PKWGS-----NARVSNPTVICQEDSIEEE
WMGLLEYLSRISICKMKKDYRKKYRKYVRSRFQCIEDRNARLGESVSLNKRYTRLRLIKE
HRSQQEREQELLAIG--KTKTCESPVSPKMELLFDPDEHSEPVHTVVFQGAAGIGKTI
LARKMMLD WASGTLYQDRFDYLFYIHCREVS-LVTQRSLGDLIMSCCPDPNPIHKIVRK
PSRILFLMDGFDELQGFDE----HIGPLCTDWQKAERGDILLSSLRKLLPEASLLIT
TRPVALEKLQHLLDHPRHVEILGFSEAKRKEYFFKYFSDEA-----QARAAFSLIQ
ENEVLFMTCFIPLVCWIVCTGLKQOMESGKSLAQTSKTTTAVYVFFLSLLQPRGGS---
QEHGLCAHLWGLCSLAADGIWN-QKILFEESDLRNHGLQKADVSAFLRMNLFQKEVD-CE

KFYSFIHMTFQEFFAAMYLLLEEEKEGRTN--VPGSRLKLP SRDVTVLL ENY GKF EKGYL
IFVVRFLFGLVNQERTSYLEKKLSCKISQQIRLELLKWI EVKAKA-----
-----KKLQIQPSQLELFYCLYEMQEEDFVQRAMDYFP-----
-KIEIN-LSTRMDHMVSSFCIENCHRVESLSLGF LHNMPKEEEEEEEKE-----GRHLD--
---MVQCVLPSSSHAACSHGLVNSHLTSSFCRG-----
-----LFSVLSTSQSLTELDLSDNSLGD-PGMRVLCETLQHPGCNIR
RLW-----LGRGCSHECCFDISLVLSSNQKLV ELDLSDNALGD
FGIRLLCVGLKHLLCNLKKLWLVSCCLTSACCQDLASVLSTSHSLTRLYVGENALGDSGV
AIL-----
-----CEKAKNPQCNLQKGLVNSGLTSVCCSALSSVLSTNQNLTHLYLRGN
TLGDKGIKLLCEGLLHPDCKLQVLELDNCNLTSHCCWDLSTLLTSSQSLRKLSLGNNDLG
DLGVM MFCEVLKQQSCLLQNLGLSEMYFNYETKSALETLQEEKPELTVVFEP SW-----

#NLRP3_chimpanzee "ENSPTRT0000004039 peptide:ENSPTRP0000003727
pep:NOVEL_protein_coding"

-----MKMASTRCKLARYLEDLEDVDLKKFKMHLEDYPPQK
GCIPLPRG-----QTEKADHVDLATLMIDFN GEEKAWAMAVWIFAAINRRDLYEKAKR
DE-----PKWGS D-----NACVSNPTVICQEDSIEEE
WMGLEYLRSRISICKMKKDYRKRYRKYVRSRFQCIEDRNARLGESVSLNKRYTRLRLIKE
HRSQQEREQELLAIG--KTKACESPVSP IKMEMLFDPDDEHSEPVHTVVFQGAAGIGKTI
LARKIMLDWALGTLYQDRFDYLFYIHCREV S-LVTQRSLGDLIMSCCPDPNPP IHKIVRK
PSRILFLMDGFDELQGFDE----HIGPLCTDWQKAERGDILLSSLIRKLLPEASLLIT
TRPVALEKLQHLLDHPRHVEILGFSEAKRKEYFFKYFSDEA-----QARAAFSLIQ
QNEVLF TMCFIPLVCWIVCTGLKQ QMESGKSLAQT SKTTTAVYVFFLSLLQPRGGS---
QEHRLCAHLWGLCSLAADGIWN-QKILFEESDLRNHGLQKADVSAFLRMNLFQKEVD-CE
KFYSFIHMTFQEFFAAMYLLLEEEKEGRTN--VPGSRLKLP SRDVTVLL ENY GKF EKGYL
IFVVRFLFGLVNQERTSYLEKKLSCKISQQIRLELLKWI EVKAKA-----
-----KKLQIQPSQLELFYCLYEMQEEDFVQRAMDYFP-----
-KIEIN-LSTRMDHMVSSFCIENCHRVESLSLGF LHNMPKEEEEEEEKE-----GRHPD--
---MVQCVLPSSSHAACSHGLG-----
-----RCGLSHECCFDISLVLSSNQKLV ELDLSDNALSD
FGIRLLCVGLKHLLCNLKKLWLVN-----
-----SGLTSVCCSALSSVLSTNPNLTHLYLRGN
TLGDKGIKLLCEGLLHPDCKLQVLELDNCNLTSHCCGDLSTLLTSSQSLRKLSLGNNDLG
DLGVM MFCEVLKQQSCLLQNLGLSEMYFNYETKSALETLQEEKPELTVVFEP SW-----

#NLRP3_rat "gi|109488152|ref|XP_220513.4| PREDICTED: similar to cold
autoinflammatory syndrome 1 homolog [Rattus norvegicus]"

-----MMSVRCKLAQYLEDLEDVDLKKFKMHLEDYPPPEK
GCVP IPRG-----QMEKADHLDLATLMIDFN GEEKAWGMAVWIFAAINRRDLWEKAKK
DQ-----PEW NDA-----CTS NLSMVCQEDSLEEE
WIGLLGYLSRISICKKKKDYCKIYRRHVRSRFYSIKDRNARLGESVDLNRRYTQLQLVKE
HPSKQEREHELLTIG--RTKMWDRPMSSLKLELLFEP EDEHLEPVHTVVFQGAAGIGKTI
LARKIMLDWALGKLFKDFDYLFYIHCREV S-LRAPKSLADLI I SCWPDNPPVCKILCK
PSRILFLMDGFDELQGFDE----HIEEVCTDWQKAVRGDILLSSLIRKLLPKASLLIT

TRPVALEKQLHLLDHPRHVEILGFSEAKRKEYFFKYFSNEL-----QAREAFRLIQ
ENEILFTMCFIPLVCWIVCTGLKQQMETGKSLAQTSKTTTAVYVFFLSLLQSRGGI---
EEHLFSAYLPGLCSLAADGIWN-QKILFEECDLRKHGLQKTDVSAFLRMNVFQKEVD-CE
RFYSFSHMTFQEFFAAMYLLLEEEEGVTVRKGPPEGCSDDLNRDVKVLLLENYGFKEGYL
IFVVRFLFGLVNQERTSYLEKKLSCKISQQVRLELLKWIEVKAKA-----
-----KKLQRPQSQLELFYCLYEMQEEDFVQSAMGHFP-----
-KIEIN-LSTRMDHVVSFCIKNCHRVKTLGFLHNSPKEEEEKRG-----SQPLD--
---QVQCVFPDPHVACSSRLVNCCLTSSFCRG-----
-----LFSSLSTNQSLTELDLSDNTLGD-PGMRVLCEALQHPGCNIQ
RLW-----LGRGCLTHQCCFNISVLSLSSQKLVELDLSDNALGD
FGVRLLCVGLKHLNLCNLQKLWLVSCCLTSACCQDLALVLSNHSLTRLYIGENALGDSGV
QVL-----
-----CEKMKDPQCNLQKGLVNSGLTSLCCSALTSVLKTNQNLTHLYLRSN
ALGDMGLKLLCEGLLHPDCKLQMLELDNCSLTSHSCWDLSTILTHNQSLRKLNLSNNDLG
DLCVVTLCVGLKQGGCLLQSLQLGEMYLNCETKRTLEALQEEKPELTVVFEISW-----

#NLRP3_mouse "gi|22003870|ref|NP_665826.1| NLR family, pyrin domain containing 3
[Mus musculus]"

-----MTSVRCKLAQYLEDLEDVDLKKFKMHLEDYPPEK
GCIPVPRG-----QMEKADHLDLATLMIDFNNGEEKAWAMAVWIFAAINRRDLWEKAKK
DQ-----PEWNDT-----CTSHSSMVCQEDSLEEE
WMGLLGYSRISICKKKKDYCKMYRRHVRSRFYSIKDRNARLGESVDLNSRYTQLQLVKE
HPSKQEREHELLTIG--RTKMRDSPMSSLKLELLFEPEDGHSEPVTVVFGAAGIGKTI
LARKIMLDWALGKLFKDFDYLFYIHCREVSLRTPRSLADLIVSCWPDNPVCKILRK
PSRILFLMDGFDELQGFDE----HIGEVCTDWQKAVRGDILLSSLIRKLLPKASLLIT
TRPVALEKQLHLLDHPRHVEILGFSEAKRKEYFFKYFSNEL-----QAREAFRLIQ
ENEVLFTMCFIPLVCWIVCTGLKQQMETGKSLAQTSKTTTAVYVFFLSLLQSRGGI---
EEHLFSDYLQGLCSLAADGIWN-QKILFEECDLRKHGLQKTDVSAFLRMNVFQKEVD-CE
RFYSFSHMTFQEFFAAMYLLLEEEAEGETVRKGPGGCSDDLNRDVKVLLLENYGFKEGYL
IFVVRFLFGLVNQERTSYLEKKLSCKISQQVRLELLKWIEVKAKA-----
-----KKLQWQPSQLELFYCLYEMQEEDFVQSAMDHFP-----
-KIEIN-LSTRMDHVVSFCIKNCHRVKTLGFLHNSPKEEEEERG-----GRPLD--
---QVQCVFPDTHVACSSRLVNCCLTSSFCRG-----
-----LFSSLSTNRSLELDLSDNTLGD-PGMRVLCEALQHPGCNIQ
RLW-----LGRGCLSHQCCFDISSVLSLSSQKLVELDLSDNALGD
FGIRLLCVGLKHLNLCNLQKLWLVSCCLTSACCQDLALVLSNHSLTRLYIGENALGDSGV
QVL-----
-----CEKMKDPQCNLQKGLVNSGLTSLCCSALTSVLKTNQNFTHLYLRSN
ALGDTGLRLLCEGLLHPDCKLQMLELDNCSLTSHSCWNLSTILTHNHSRKLNLGNNDLG
DLCVVTLCVGLKQGGCLLQSLQLGEMYLNRKTRALEALQEEKPELTIVFEISW-----

#NLRP3_dog "gi|73962271|ref|XP_848377.1| PREDICTED: similar to Cold
autoinflammatory syndrome 1 protein (Cryopyrin) (NACHT-, LRR- and PYD-containing
protein 3) (PYRIN-containing APAF1-like protein 1) (Angiotensin/vasopressin
receptor AII/AVP-like) isoform 3 [Canis familiaris]"

-----MASVRCKLARYLEDLEDADFKKFKMHLQDYPQK
GFSPLPRS-----QTEKADHMDLATLMIDFNNGEEKAWAMAVWIFAAINRRDLYEKAKR

DE-----LEWGS-----CPRLYNHLECREESLEEE
WMGLLGYLSRISICKKKKDYCKKYKHHVRSRFQCIKDRNARLGETVNLNKRYPTRLRLVKE
HQSQQEREHELLAIGRTSAKTLDSPMSSVNVLELLFEPDDQHLEPVHTVVFQGSAGIGKTI
LARKIMLDWASDKIYQDRFDYLFYIHCREVS-LGTRRSLGDLIVSCCPDPNPPICKIVSK
PSRILFLMDGFDELQGFDE----HTEALCTNWQKVERGDILLSSLIRKRLPEASLLIT
TRPVALEKLQHLLDRPRHVEILGFSEAKRKEYFFKYFSDEQ-----QATEAFRLIQ
ENEILFTMCFIPLVCWIVCTGLKQQMDSGKNLAQTSKTTTSVYIFFLSSLLQSHRET---
QKHQVSASLRGLCSLAADGIWN-QKILFDECDLRNHGLQKADVSAFLRMNLFQKEVD-CE
KFYSFIHMTFQEFFAAMYLLLEEEEQGRMRN-LPWSSSKLPNRDVKVLENYGKFEKGYL
IFVVRFLFGLVQERTSYLEKKLSCKISQKIRLELLKWIIEKAKG-----
-----KNLQIQPSQLELFYCLYEMQEEDFVRKAMGHFP-----
-KIEIS-LSTRMDHVSSFCIENCCRVESLSLRLHNSPKEEEEEEEEEENEKEMQHYD--
---VDHCVLLDPHTTYAYRLVNCQVTVSLWQGL-----
-----FVLSRNSLSLTELNLSDNALGD-QGVNVLCEMLQHPGCNIR
KLW-----LGQCCLSYRCCFNISSVLSNNQKLEELDLSHNALGD
FGIRLLCVGLKHLFCNLNKLWLVSCCLTPACCEDLASVLSTNQSLTRLYLGENSLEDAGV
GVL-----CEKAKHPQCKLQRLGLVNSGLTPGCCPALASMLSTNQKLTHLYLRGN
ALGDTGVKLLCEGLLHPNCKLQILELDGCSLTSHCCWDLSTLLTSSKSLRELSLGSNDLG
DLGVMLLCEVLKQQGCILQSLKCEMYFNFDTKCALETLQEEKPELTIVFEPFGSDRSRL
PDASVWAPCHLGVHKWERALLHPG-----

#NLRP3_bovine "gi|76625172|ref|XP_581687.2| PREDICTED: similar to cryopyrin [Bos taurus]"

-----MRMVSVRCKLARYLEDLEDIDFKKFKMHLEDYPSQK
GCTSIPRG-----QTEKADHVLDLATLMIDFNNGEEKAWAMAKWIFAAINRRDLYEKAKR
EE-----PEWGEWN-----EDKNANISVLSQEEESLEEE
WMGLLGYLSRISICKKKKDYCKKYRKYVRSKRFQCIKDRNARLGEVNLNKRFRTRLRIKE
HRSQQEREHELLAIGRTWAKIQDSPVSSVNLLELLFDPEDQHSEPVHTVVFQGAAGIGKTI
LARKIMLDWASEKLYQDRFDYLFYIHCREVS-LGTQRSLGDLIASCCPGPNPPIGKIVSK
PSRILFLMDGFDELQGFDE----HTEALCTNWRKVERGDILLSSLIRKRLPEASLLIT
TRPVALEKLQHLLGQARHVEILGFSEARRKEYFLKYFSDEQ-----QAREAFRLIQ
ENEILFTMCFIPLVCWIVCTGLKQQMDSGKSLARTSKTTTAVYIFFLSSLLQSQGGG---
QENHNSATLWGLCSLAADGIWN-QKILFQECDLRNHGLQKADVSAFLRMNLFQKEVD-CE
KFYSFIHMTFQEFFAAMYLLLEEDNHGEMRN-TPQACSKLPNRDVKVLENYGKFEKGYL
IFVVRFLFGLINQERTSYLEKKLSCKISQKIRLELLKWIIEAKANA-----
-----KTLQIEPSQLELFYCLYEMQEEDFVQRAMSHFP-----
-KIEIK-LSTRMDHVSSFCIENCRHVESLSLRLHNSPKEEEEEEEE-----VRHSH--
---MDRSVLSDFEVAYSQGLVNYLTSSICRG-----
-----IFSVLSNNWNLTELNLSGNTLGD-PGMNVLCEMLQHPGCNIR
RLW-----LGQCCLSHQCCFNISSVLSNNQKLVLELDLSHNALGD
FGIRLLCVGLRHLFCNLKKLWLVSCCLTSASCEDLASVLSTNHSLTRLYLGENALGDSGV
GIL-----CEKVKNPHCNLQKGLVNSGLTSGCCPALSSVLSTNQNLTHLYLQGN
ALGDMGVKLLCEGLLHRNCKLQVLELDNCSLTSHCCWDLSTLLTNSQSLRKLCLGNNDLG
DLGVMLLCEVLKQQGCLLKSRLCEMYFNFDTKRALETLQEEKPELTIVFEPFSR-----

#NLRP6_chimpanzee "gi|114635347|ref|XP_521701.2| PREDICTED: NACHT, leucine rich repeat and PYD containing 6 [Pan troglodytes]"

-----MDQPEAPCSSTGPR LAVARELLLAALEELSQEQLKRFRHKLRDVGPDG
RS--IPWGR-----LERADAVDLAEQLAQFYGPEPALEVARKTLKRADARDVAAQLQE
QRLQREFCAGGP-----
-----SCLGRGWAALLPASRRSPGAVPAAARVKERNARSVKITKRFTKLLIAPESAA
PEEEAL--GPAEEPEPGRARR----SDTHTFNRLFR-RDEEGRPLTVVLQGPAGIGKTM
AAKKILYDWAAGKLYQGQVDFAFFLPCGELLERPGTRSLADLILDQCPDRGAPVPMQLAQ
PQRLLFILDGADEL PALGGP----EAAPCTDPF-EAASGARVLGGLLSKALLPTALLLVT
TRAAAPGR LQGRLCSPQCAEVRGFSDKD KKKYFYKFFRDER-----RAERAYRFVK
ENETLFALCFVPFVCWIVCTVLRQQLELGRDLSRTS-KTTTSVYLLFITSVLSSAPVADG
PRLQG--DLRNLCLAREGV LG-RAAQFAEKELEQLELRGSKVQTLF LSKKELPGVLETE
VTYQFIDQSFQEF LAALS YLLEDGGVPR-TAAGGV-----GTL LRGD---TQPHSHL
VLTRFLFGLLSAERMRDIQRHFGCMVSERVKQEALRWVQGGQ--GCPGVAPEVTEGAK
GLEDTEPEEEEEEGEENYPLELLYCLYETQEDAFVVRQALCGLP-----
ELALQVRVFCRMDVAVLSYCVRCCPAGQALRLISCR LVAAQEKKKSLGKRLQAS-----
-----LGGSSSRGTTK-----QLPASLLHPLFQAMTDP-----LC
HLSLTL SHCKLPDAVCRDLSEALRAAPALTELGLLHNRLSEAGLRMLSEGLAWPQCRVQ
TVR-----VQLPDPQRGLQ-YLVSVLRQSPALTTLDLSGCQLPA
PMVTYLCAVLQHQCGLQTL SVAQQPELPCPCRLVGVSSPSLPVRNETIPEAMAQAQR RP
VSEIFGKGD-----

#NLRP6_rat "gi|109459602|ref|XP_577848.2| PREDICTED: similar to NACHT-, LRR- and
PYD-containing protein 6 (PYRIN-containing APAF1-like protein 5-like)
(Angiotensin II/vasopressin receptor) [Rattus norvegicus]"

-MCDPGGSGTGPIQVASVITLPIPSSEAVARELLLAALQDLSQEQLKRFRHKLRDAPLDG
RS--IPWGR-----LEHSDAVDLTDKLI EFYAPEPAVDVTRKILKKADIRDVSLRLKE
QQLQRLGSSSA-----
-----LLTVSEYKKKYREHVLRQHAKVKERNARSVKINKRFTKLLIAPGSGA
GEDELLG--TSGEPEPERARR----SDTHTFNRLFRGNDDEGPRPLTVVLQGPAGIGKTM
AAKKILYDWAGGKLYHSQVDFAFFMPCGELLERPGTRSLADLILEQCPDR TAPVRRILAQ
PHRLLFILDGADELPTLAAP----EATPCRD PF-EATSGLRVLSGLLSQELLPSARLLVT
SRNATLGR LQGRLCSPQCAEVRGFSDKD KKKYFFKFFRDER-----KAERAYRFVK
ENETLYALCFVPFVCWIVCTVLLQQMELGRDLSRTS-KTTTSVYLLFITSM LKSAGTN-G
PRVQG--ELRMLCLAREGILK-HQAQFSEKDLERLKLQGSQVQTMFLSKKELPGVLETV
VTYQFIDQSFQEF LAALS YLLDAEGAPG-NSAGSV-----QMLLNSD---AGLRGHL
ALTRFLFGLLSTERIRDIGNHFGCVVPGRVKQD TLRWVQGSQPKVATVGA EKKDELKD
EEAE EEEEEEEEEEEELNFGLELLYCLYETQEDDFVRQALSSLP-----
EMVLERVRLTRMDLEVLSYCVQCCPDGQALRLVSCGLVAAKEKKKKKSFRR-----
-----QPCSFSPSSSQSTGK-----QPPASLLRPLCEAMITQ-----QC
GLSILTL SHCKLPDAVCRDLSEALKVAPSLRELGLLQNRLTEAGLRLLSQGLAWPKCKVQ
TLR-----IQMPGLQEV IH-YLVIVLQQSPVLT TLDLSGCQLPG
TVVEPLCSALKHPKCGKLTLSLTSVELTENPLRELQAVKTLKPD LAI IHSKLGTHPQLK
G-----

#NLRP6_human "gi|21264320|ref|NP_612202.1| NLR family, pyrin domain containing 6 [Homo sapiens]"

-----MDQPEAPCSSTGPR LAVARELLLA ALEELSQEQLKRFRHKL RDVGP DG
RS--IPWGR-----LERADAVDLAEQLAQFYGPEPALEVARKTLKRADARDVAAQLQE
RRLQRLGLGSG-----
-----TLLSVSEYKKKYREHVLQLHARVKERNARSVKITKRFTKLLIAPESAA
P-EEAL--GPAEEPEPGRARR---SDTHTFNRLFR-RDEEGRRPLTVVLQGPAGIGKTM
AAKKILYDWAAGKLYQGQVDFAFFMPCGELLERPGTRSLADLILDQCPDRGAPVPQMLAQ
PQRLLFILDGADEL PALGGP----EAAPCTDPF-EAASGARVLGGLLSKALLPTALLLVT
TRAAAPGRLQGR LRCSPQCAEVRGFS DKDKKKYFYKFFRDER-----RAERAYRFVK
ENETL FALCFVPFVCWIVCTVLRQQLELGRDLSRTS-KTTTSVYLLFITSVLSSAPVADG
PRLQG--DLRNLCLAREGV LG-RAQFAEKELEQLELRGSKVQTLF LSKKELPGVLETE
VTYQFIDQSFQEF LAALS YLLEDGGVPR-TAAGGV-----GTLLRGD---AQPHSHL
VLTTRFLFGLLSAERMRDIERHFGCMVSERVKQEALRWVQGGQ--GCPGVAPEVTEGAK
GLEDTEEP EEEEEEGEEP NYPLELLYCLYETQEDAFVRQALCRFP-----
ELALQVRVRCRMDVAVLSYCVRCCPAGQALRLISCR LVAAQEKKK KSLGKRLQAS-----
-----LGGSSSQGTTK-----QLPASLLHPLFQAMTDP-----LC
HLSSTL SHCKLPDAVCRDLSEALRAAPALTELGLLHNRLSEAGLRMLSEGLAWPQCRVQ
TVR-----VQLPDPQRGLQ-YLVGMLRQSPALTTLDLSGCQLPA
PMVTYLCAVLQHQCGLQTL SLASVELSEQSLQELQAVKRAKPD LVI THPALDGHPQPPK
ELISTF-----

#NLRP6_mouse "gi|124487067|ref|NP_001074858.1| NLR family, pyrin domain containing 6 [Mus musculus]"

-----MDAAGASCSSVDAVARELLMATLEELSQEQLKRFRHKL RDAPLDG
RS--IPWGR-----LERSDAVDLVDKLIEFYEPVPAVEMTRQVLKRSDIRDVASRLKQ
QQLQKLGPTSV-----
-----LLSVSAFKKKYREHVL RQHAKVKERNARSVKINKRFTKLLIAPGTGA
VEDELLG--PLGEPEPERARR---SDTHTFNRLFRGNDEESSQPLTVVLQGPAGIGKTM
AAKKILYDWAAGKLYHSQVDFAFFMPCGELLERPGKRS LADLVLDQCPDRAWPVKRI LAQ
PNRLLFILDGADELPTLSS---EATPCKDPL-EATSGLRVLSGLLSQELLPGARLLVT
TRHAATGRLQGR LRCSPQCAEIRGFS DKDKKKYFFKFFRDER-----KAERAYRFVK
ENETL FALCFVPFVCWIVCTVLRQQLELGRDLSRTS-KTTTSVYLLFITSM LKSAGTN-G
PRVQG--ELRTLCLAREGILDH HKAQFSEEDLEK LKLRGSQVQTI FLNKKEIPGV LKTE
VTYQFIDQSFQEF LAALS YLLEAERTPG-TPAGGV-----QKLLNSD---AELRGHL
ALTTRFLFGLLNTEGLRDIGNHFGCVVPDHVKKD TLRWVQGGSHPKGPPV GAKKTAELED
IEDAE EEEEE---EDLNFGLELLYCLYETQEEDFVRQALSSLP-----
EIVLERVRLTRMDLEVLNYCVQCCPDGQALRLVSCGLVAAKEKKK KSLVKRLKGSV--
-----TG TNLVLSLYSSQSTKK-----QPPVSLLRPLCETMTTP-----KC
HLSVLILSHCR LPDAVCRDLSEALKVAPALRELGLLQSRLTNTGLRLLCEGLAWPKCQVK
TLR-----MQLPDLQEVIN-YLVIVLQQSPVLT TLDLSGCQLPG
VIVEPLCAALKHPKCSLKTLSLTSVELSEN SLRDLQAVKTSKPDLSIIYSK-----

#NLRP6_bovine "gi|119919524|ref|XP_581339.3| PREDICTED: similar to PYRIN-
containing APAF1-like protein 5 [Bos taurus]"

-----MGLGPAAGRACCLWSVCDP
WSGCYSAGRPQRAEETGSDVCGQREATCVGGTRQELGAGKSEEATCPTLLCHFLLTACLT
ATPAVLDLVIDSAGQLEASCSSMEPRAAAARELLLGALEDLSQEQLKRFHRHKLDRDVRVDG
RS--IPWGR-----LERADTLDLVEQLVHFYGPERALDVAKKTTLKRADVRDVAARLKE
RRLQSLGPSSP-----
-----ALLSVSEYKKKYREHVLRQHAKVKERDARSVKINKRFTKLLIAEE---
-----PEAERARR----SDTHTFNRLFG-RDEEGERRLTVALQGPAGIGKTM
AARKILYDWAAGKLYHSQVDFAFFLSCRELLERPGTCSLADLILDQCPDREAPVQQMLAQ
SERLLFILDGVDEMLAPEPA----EAAPCRDPH-EAASGARVLGSLLSKELLPAARLLVT
RRGATPGRQLARLCSPOCAEVCVCFSDKDRKKYFYKFFQDEW-----KAEHAYRSVK
ENEMFLSLCFVPGVCWIVCTVLRQQQLQRGQDLWRTS-KTTTAVYLLFVASVLRSAADA
AQLQR--ELRKLCLACDGVLG-GRARFSEEDLERLQLCGSKVQTQFLSKKEMPGVLETE
VTYQFIDQSFQEFALAALSILLEDEGAPR-APAGSI-----EALLQGD---PELRGHL
NLTTTRFLFGLNTERMCEIKRHFVCTVSRVQKRVLRWVQDQGG--GRPRAAPEGTEEIL
APQDTEE-SEEEEGEQLNYPLELLYCLHETQEDAFVHQALRGLP-----
ELVLERVHFVSRMDLAVLSYCVRCCPAGQALRLVSCRLATAQEKKKSLMKRLQGS-----
-----LGG-SSSRATTR-----KSPGSPRLRPLCEAMTDR-----QC
GLNSLTLSRCKLPDSVCRDLSEALREAPALAEGLGFHNGLSEAGLRVLEGLASPQCRVQ
TLR-----VQQPGLQEALQ-YMVGKLOQIPALTTLDLSGCQLSG
PTVTCCLCTTLKCPGCHLQTLRLTSVELSEQALQELQAVETANPRLVITHPALDAHPKPPT
VPISAL-----

#NLRP6_dog "ENSCAFT00000010444 peptide:ENSCAFP00000009685
pep:NOVEL_protein_coding"

-----MPPPEACCRKVRPTLAVARDLLQATFEDLNQEQLKRFHRHKLDRDATLDG
RN--IPWGR-----LDGLDAMDALAAQLTHFYGPEPALDVTRKTLKRADMLDVAARLKE
QQLQRLGPSSS-----
-----TLRSVSEYKKKYRDHVLQQHAKVKERNARSVKINKRFTKLLIAREGAA
LPDEALGCTKELEPEPQRARR----SDTHTFNRLFG-RDEEGQRPLTVVLQGPAGIGKTM
AAKKILYDWAAGKLYHGQVDFAFFLPCRELLERPGACSLADLVLDQCPQRKAPLKPMLAR
PERLLFILDGADDLPLAP----HAAPCTDPF-QAADAARVLGGLLGKTLTLLPAARLLVT
ARTTAPGRLLDRLCSPQCAEVCVCFSDKDKKKYFHKFFRDER-----LAERAYRFVK
ENETLFCALCFVPCWIVCTVLRQQLELGQDLRSRTS-KTTTAVYLLFIIISVLSSAPAADA
PRMRA--ELRKLCLAREGTLG-HRAQFAEKDLERLELRGSKVQTLFSLKKEPGLVQTD
VTYQFMDQSFQEFFSALSYLEEE-----RDLRAL---LQGESHL
TLTTTRFLFGLNPNDRVSDMQRHFGVAVPERVKQDVLLWMQEQGQ--GRRRAAPEKTAGTD
AAEDAEEPEEEEE--CEPNYPLELLYCLYETQEDAFVRQALRCLP-----
ELELERVRLSRMDLVILSYCVRCCPPGQALRLVSCGLAPAQ-KKKKSLMKRLHSS-----
-----LGGSSSSQASKR-----KPQPSPLRPLFEAMTDE-----HC
GLNSLTLCRCKLPDSVCHDLSEALREAPALTELGLLHNQLSEAGLRVLEGLAWPQCRVQ
KLR-----VQQPSLQEAPQ-YIISILRQS-VASTLYLGDCQLPG
PVVTSLCAALQHPGCRLQTLTTLTSVELSKESLQAVKTAKPGLVIITHPALDSHPKPSK
GLSDAL-----

KFM-----SEALKHPQCILQSLVLRCHFTSLSSESLSASLLHNKSLMHLDLGSN
CLQDDGVKLLCDAFRHPCSLQDLELMGCVLTSACCLDLASAILNPNLQSLDLGNNDLR
DDGVKFLFEALRHPNCNIQRLGLEHCGLTSLCCQDLSSTLSSNQGLIKISLTLNLTQCEE
IMKLESEVLRSTECKLQVLGLCKEALDEEAQKLEAVASSNRLAVKQDCNDHEEEDGSWW
RCF-----

#NLRP14_dog "gi|73988784|ref|XP_542482.2| PREDICTED: similar to NACHT, LRR and
PYD containing protein 14 [Canis familiaris]"

-----MTDGSSSSFFPDFGLLLYLEELNKEELNKFKSFLKNETVEP
RSCQIP-----WVEVKKAKREDLANLMKKYYPGEQAWDVALKIFGKMNLKDLKERATA
EINWTARTMVTEGARTQEEQDDQEAQV-----SDGTEYRIQIKE
KFRIMWDKKCLFGGPEDFHPGIAQEDRELLEHLFDVDVKTGEQPQ-TVVLQGAAGVGKTS
LVRKAIVDWAEGLYQQKFSYVLYNAREIN-QLRERSFVQMI SKDWP STEGPIERIMTQ
PSSLLFIIDSFDENLFAFEE---PDFVLCEDWTQVHPVSFLMSSLLRKVMLPESFLLVT
TRLTACKKLP LLKNQHSVELLGM SKDARKEYIYQFFEDKK-----RASQVFSSLR
SNEMLF SMCKVPLVCWAICTCLEQQIEMGGDVSLTCKTTTALFTRYISSLFPPVDGN--C
PSLPNQTLKSLCHLAAKGVWT-MTSVFYREDLRKHGLTKSDVSIFLDMNILQKDTE-YE
NCYVFTHLVQEF LAAMFYMLRDNWETRNNLFDS-----FEDLKLLLESKSS-KDPHL
MQMKCFLFGLLNEDLLKQLETTLCRLSLEIKGKILQWLE-ILGNI-----
-----KCFPAELEFLELFLCLYETQDEAFISQAMRSFQ-----
-KVVIDVCGKVHLLVSS-FCLKHCQCLQTIKLSVTVVFEKTLNSSPPAEMCLEF-----
-----SELI IHCWQDLC SVLHTNEHLRELDLCHSNLDELAMKTFYQELRHP-----NC
KLQRLLMRFLSFPGGCQDIASSLTHNQNL MHLDLKGS DIGD-DGVKSLCEALKHPECKLQ
NLS-----LESCGLTTLCCLNISKALIRSQSLRFLNLS TNHLLD
DGVKLLCEALGHPKCHLERLSLESCGLTVAGCEDLSLALISNKRLTHLCLADN ILGDDGV
KLV-----NDALKHPQCKLQSLVLRCHFTSLSSEHLSSALLCNKSLIHLDLGSN
WIQDDGIKLLCDAFRHPCSNLQDLELMGCVLTSACCLDLASAILNNSHLQNL DLGHNDLR
DDGVKILCEALRHPNCNIQRLGLEHCGLTSLCCQDLSYTLRSNQNL IKINLKQNTLGYEG
MMKLCEVLKSPECKLKVLG-----

#NLRP14_chimpanzee "gi|114635946|ref|XP_521822.2| PREDICTED: NACHT, LRR and PYD
containing protein 14 [Pan troglodytes]"

-----MADSSSSFFPDFGLLLYLEELNKEELNTFKLFLK-ETMEP
EHGLTP-----WTEVKKARREDLANLMKKYYPGEKAWSVSLKIFGKMNLKDLKERAKE
EINWSAQTIGPDDAKAGETQEDQEAQV-----GDGTEYRIRIKE
KFCITWDKKS LAGKPEDFHGIAEKDRKLEHLFDVDVKTGEQPQ-IVVLQGAAGVGKTT
LVRKAVLDWAEGLYQQRFKYVLYNGREIN-KLKERSFAQLISKDWP STEGPIEEIISQ
PSSLLFIIDSFDENLFAFEE---PEFALCEDCTQEHVPSFLMSSLLRKVMLPEASLLVT
TRLTTSKRLKQLLKNHYYVELLGMSEDAREEYIYQFFEDKR-----WAMKVFSSLK
SNEMVFSMCQVPLVCWATCTCLKQOMEKGGDVTLTCQTTTALFTCYISSLFTPVDDG--S
PSLPNQALRRLCQVAAGIWT-MTYVFYRENLRRLGLTKSDVSSFMDSNIIQKDAE-YE
NCYVFTHLVQEFFAAMFYMLKGSWEAGNPSQP-----FEDLKSLQSTSY-KDPHL
TQMKCFLFGLLNEDRVKQLERTFNCKMSLKI KSKLLQCME-VLGKS-----
-----DYSPSQLGFLELFLHCLYETQDKAFISQAMRCFP-----
-KVAINICEKIHLLVSS-FCLKHCRCRLRTIRLSVTVVFEKKILKTSLPANTWD-----
-----GDRITHCWQDLC SVLHTNEHLRELDLCHSNLDKSAMN ILHHEL RHP-----NC

KLQKLLKFITFPDGCQDISTSLIHNKNLMHLDLKGSDIGD-NGVKSLEALKHPECKLQ
TLR-----LESCNLTVFCCLNISNALIRSQSLIFLNLSTNNLLD
DGVQLLCEALRHPKCYLERLSLESCGLTEAGCEYLSLALISNKRLTHLCLADNVLDGGV
KLM-----
-----SDALQHAQCTLKSLVLRCHFTSLSSEYLSTSLHKNKSLTHLDLGSN
WLQDNGVKLLCDVFRHPSCNLQDLELMGCVLTNACCLDLASVILNPNLRSLDLGNNDLQ
DDGVKILCDALRYPNCNIQRLGLECYCGLTSLCCQDLSSALICNKRLIKMNLQNTLGYEG
IVKLYKVLKSPKCKLQVLGLCKEAFDEEAQKLEAVGVSNPHLI IKPDCNYHNEEDVSWW
RCF-----

#NLRP14_human "gi|28827813|ref|NP_789792.1| NLR family, pyrin domain containing
14 [Homo sapiens]"

-----MADSSSSSFFPDFGLLLYLEELNKEELNTFKLFLK-ETMEP
EHGLTP-----WNEVKKARREDLANLMKKYYPGEKAWSVSLKIFGKMNLDLCERAKE
EINWSAQITIGPDDAKAGETQEDQEAVL-----
-----GDGTEYRNRIKE
KFCITWDKSLAGKPEDFHHGIAEKDRKLEHLFDVDVKTGAQPQ-IVVLQGAAGVGKTT
LVRKAMLDWAEGSLYQQRFKYVLYNGREIN-QLKERSFAQLISKDWPSTEGPIEEIMYQ
PSSLLFIIDSFDELNFAFEE----PEFALCEDWTQEHVPSFLMSSLLRKVMLPEASLLVT
TRLTTSKRLKQLLNHHYVELLGMSEDAREEYIYQFFEDKR-----WAMKVFSSLK
SNEMLFSMCQVPLVCWAACCTCLKQQMEKGGDVTLCQTTTALFTCYISSLFTPVDGG--S
PSLPNQAQLRRLCQVAAGIWT-MTYVIFYRENLRRLGLTQSDVSSFMDNSNI IQKDAE-YE
NCYVFTHLHVQEFAAFMYMLKGSWEAGNPSCQP-----FEDLKSLLQSTSY-KDPHL
TQMKCFLFGLLNEDRVKQLERTFNCKMSLKIKSKLLQCME-VLGNS-----
-----DYSPSQLGFLELFHCLYETQDKAFISQAMRCFP-----
-KVAINICEKIHLLVSS-FCLKHCRCLRTIRLSVTVVFEEKILKTSLPTNTWD-----
-----GDRITHCWQDLCSVLHTNEHLRELDLYHSNLDKSAMNILLHELHRP-----NC
KLQKLLKFITFPDGCQDISTSLIHNKNLMHLDLKGSDIGD-NGVKSLEALKHPECKLQ
TLR-----LESCNLTVFCCLNISNALIRSQSLIFLNLSTNNLLD
DGVQLLCEALRHPKCYLERLSLESCGLTEAGCEYLSLALISNKRLTHLCLADNVLDGGV
KLM-----
-----SDALQHAQCTLKSLVLRCHFTSLSSEYLSTSLHKNKSLTHLDLGSN
WLQDNGVKLLCDVFRHPSCNLQDLELMGCVLTNACCLDLASVILNPNLRSLDLGNNDLQ
DDGVKILCDALRYPNCNIQRLGLECYCGLTSLCCQDLSSALICNKRLIKMNLQNTLGYEG
IVKLYKVLKSPKCKLQVLGLCKEAFDEEAQKLEAVGVSNPHLI IKPDCNYHNEEDVSWW
WCF-----

#NLRP14_mouse "gi|50872155|ref|NP_001002894.1| NLR family, pyrin domain
containing 14 [Mus musculus]"

-----MKTEDDEMEYEASKEETVSEDKDF-----
-----DDGIDYRTVIKE
NIFTMWYKTSLHGEFATLNCVITPKDQNLQHFDEDIQTSEAPQ-TVVLQGAAGIGKTT
LLKKAVLEWADGNLYQQ-FTHVLYNGKEIS-QVKEKSFAQLISKHWPSSEGPIEQVLSK
PSSLLFIIDSFDELDFSFEE----PQFALCKDWTQISPVSFLLISSLLRKVMLPESYLLVA
TRSTAWKRLVPLLQKPQRVKLSGLSKNARMYIHHLLKDKA-----WATSAIYSLR
MNWRLFHMCHVCHMCQMICAVLKGQVEKGRVEETCKTSTALFTYYICSLFPRIPIVG--C
VTLPLNETLLRSLCKAAVEGIWT-MKHVLYQQNLRKHELTREDILLFLDAKVLOQDTE-YE
NCYMFTHLHVQEFAALFYLLRENLEEQDYPSEP-----FENLYLLESNHI-HDPHL
EQMKCFLFGLLNKDRVRQLEETFNLTISMEVREELLACLE-GLEKD-----

-----DSSLSQLRFQDLLHCIYETQDQEFITQALMYFQ-----
-KIIVRVDEEPQLRIYS-FCLKHCHTLKTMRLTARADLNMLD---TAEMCLEG-----
-----AAVQVIHYWQDLFVSLHTNESLIEMDLYESRLDESLMKILNEELSHP-----KC
KLQKLI FRAVD FLNGCQDFT-FLASNKKVTHLDLKETDLGV-NGLKTLCEALKCKGCKLR
VLR-----LASC DLNVARCQKLSNALQTNRSSVFLNLSLNNLSN
DGVKSLCEVLENPNSSLERLALASCGLTKAGCKVLSSALT KSKRLTHLCLSDNVLEDEGI
KLL-----
-----SHTLKHPQCTLQSLVLRSCSFTP I GSEHLSTALLHNRS LVHLDLGQN
KLADNGVKLLCHSLQPHCNLQELELMSCVLT SKACGDLASVLVNNNSLWSDLGHNILD
DAGLNILCDALRNP NCHVQRLGLENCGLTPGCCQDLLGILSNNKSVIQMNL MKNALDHES
IKNLCKVLRSP TCKMEFLALDKKEILKKKIKKFLVDVRINNP HLVIGPECPNTESGCWWN
YF-----

#NLRP14_rat

-----QKEGD
GWSVRILT VKLKKFDHVCLWFSILTDL-----
-----NYGIDYRTI I KE
NFFI IWDKTSLLGESATLNCVTTHKDQKLEHIFDVNIQTSKSPQ-TVVLYGAAGIGKTT
LLKKAVLEWADGNLYQQ-FTHVFYLSGREIS-QEKEKNFAQLISKHWPSSEGP I EQIL--

-----QVEKGGNVEMTCQTSTALFTYYICSLFPRIAGS--S
VTL PNETLLRS LCQA AVEGIWT-MKHVLYQQNLRKHELTREDLSLFL EANVLQQDTE-CE
NCYTFTHLQVQEYFAALFYLLRENPEEKDHPLEP-----FENVHLLLESNHF-HD PHL
EQMKCF LFGLLNKDRVQQLEETFNLTISR AVREELLVCLE-ALEKD-----
-----DSPLSQLRIQDLLHCIYETQDEEFITQALTYFQ-----
-KIMVKVDEESKLLIYS-YCLKHCHSLQTVRLTARADLRNMLDP--TAEICLRS-----
-----VSVVFI SYVEDVWWTVNSKDNLIVCEHWCHWMYESFLLIS-EHLSHI-----VF
SQMSLVFRAVCF LNSCYDFS-FLAFNNTVTHLDLKD TDLGD-NGVKTLCEALKYQGCKLR
VLR-----LESCDLNVTHCQNL SKALQSNRSLVFLNLS TNSLSN
DGVKSLCEVLENPNCP LERLALASCGLTKVGCEVLSSALT KTK-----
-----SLIHLDLGFN
KLADSGVKLLCQTLQQPNCNLQELE-----

#NLRP9a_mouse "gi|115299743|ref|NP_001041684.1| NACHT, LRR and PYD containing protein 9a isoform 1 [Mus musculus]"

-----MMDSSGYGLLQYLQKLSDEEFQRFKEHLRKEPEKF
KLKPI S-----WTKIKNTSKEDLVMQLYTHYP-GKAWDMVLSLFLQVNREDLSTMAQT
ERRD-----
-----KQTKYKEFMKN
TFQHIW TMETNTYIPDRSYHEFIEVQYRALQDIFDCESEP-----VTVVVSGSRGGGKTT
FLRKAMLDWASRNLLQNRFYVYFVSVFLN-NITELSLAELISSTLPESSETVDDILSD
PKRILFILDGFDYLFKFDLE----LR-TNLCNDWRK KLP IQIVLSSLLQKIMLPECSLLE
LGNASLSNI IPLLQYPREI IMSGFSEQTIEIYCVSFFNTQ-----TGVEIFKNLK
SIKPLFNLRCRPHLCWMI CSTIKWQYERREVASRFGRTLGLLYTIFMVSAFKSTYAR--N
PSKQNRARIRT LCTLAVEGMWK-QVYVFDSDDLRRNGI SESDKKVWLRMKFLQNQG----

SNIVFYHSTLQWYFAVLFYFLQY-KDTRHPVIGN-----LAQLLGE-IYAHKQNQW
FHTRILLFGMATEQVNSLLEPCFGCISSEKVRQEIIIRYIKSLSQQE-----
-----CNEKLVVHPQNLFFCILDNQEERFVRQLMDRFE-----
-EMTVDISDVDDMSATP-YCLHRAPKVKNLHLHIQKRVFLEIHDPEYGDLELFLK-----
-----DQKLLAKHWTTLCTFLCN---LHVLDLDSCHFNEKAIEVLCNCLPLTSLVPLTGF
KLHRLLCSTFTNFGDGLLFCFLHLP-HLKYMNLGYNLSN-DAVERLCSALKFSTCGVE
ELL-----LGKCDISSEACGIIAASLIN-SEVKHLSLVENPLKN
KGVMSLCEMLKDPSCVLESMLSYCCLTFIACGHLYEALLSNEHLSLLDLGSNFLEDTG
V
NLL-----
-----CEALKDPNCTLKELWLPGCYLTSECCEEISAVLTCNTNLKTLKLGNN
NIQDTGVRQLCEALCHPNCEMQLGLDMCDFTSDCCEDLALVLTTCNTLKSLLDWNADF
HSGLEMLCKALNHKACNLEVLGLDKSLFSEESQTLQAVEKKNKLNKVLHFPWLKEELEK
RGRVRLVWNSKN-----

#NLRP9b_mouse "gi|52145307|ref|NP_918947.2| NACHT, LRR and PYD containing protein 9b [Mus musculus]"

-----MAGSSGYGLLKLQKLSDEEFQRFKELLREEPEKF
KLKPLS-----WTKIENSSKESLVTLLNTHYP-GQAWNMLSLFLQVNREDLSIMAQK
KKRH-----
-----KQTKYKFMKT
TFERIWTLETNTHIPDRNYHLIVEVQYKALQEIFDSESEP-----VTAIVAGTTGEGKTT
FLRKAMLDWASGVLLQNRQYVFFFVSVSLN-NTTELSLAELISSLPESETVDDILSD
PKRILFILDGFDYLFKFDLE----LR-TNLCNDWRKRLPTQIVLSSLLQKIMLPGCSLLLE
LGQISVPKIRHLLKYPRVITMGGFSERSVEFYCMSFFDNQ-----RGIEVAENLR
NNE-VLHLCSNPYLCWFMFCCLKWQFDREEEGYFKAKTDAAFFTNFMVSAFKSTYAH--S
PSKQNRARLKTCTLAVEGMWK-ELFVFDSEDLRRNGISESDKAVWLKMQFLQTHG----
NHTVYHPTLQSYFAAMFYFLKQDKDICVPVIGS-----IPQLLGN-MYARGQTQW
LQLGTFGLINEQVAALLQPCFGFIQPIYVRQEIICYFKCLGQQE-----
-----CNEKLEERS-QTLFSLRDSQEERFVRQVVDLLE-----
-EITVDISSSDVLSVTA-YALQKSSKLLKHLHIQKTVFSEIYCPDHCKTRTSIG-----
-----KRRNTAEYWKTLGIFCN---LYVLDLDSQFNKRAIQDLCSMSPTPTVPLTAF
KLQSLSCSFMADFGDGLFHTLLQLP-HLKYLNLYGTYLSM-DVTEKLCAALRCSACRVE
ELL-----LGKCGISSKACGIIAISLIN-SKVHLSLVENPLKN
KGVMSLCEMLKDPSCVLQSLMSYCCCLTFIACGHLYEALLSNKHLSSLLDLGSNFLEDTG
V
NLL-----
-----CEALKDPNCTLKELWLPGCFLTSQCCEEISAVLICNRNLKTLKLGNN
NIQDTGVRQLCEALSHPNCLNLECLGLDLCEFTSDCCDLALALTTCKTLNSLNLDDWKTLD
HSGLVVLCEALNHKRCNLKMLGLDKSAFSEESQTLQDVEKNNNNLNILHHPWFEAERNK
RGRVRLVWNSRN-----

#NLRP9c_mouse "gi|110815824|ref|NP_001036077.1| NLR family, pyrin domain containing 9C [Mus musculus]"

-----MVDSSSYGLLQYFQKLSDEEFQRFKELLQKEQEK
KLKPLS-----WTKIKNTSKEDLVTQLYTHYP-RQVWDMVLNLFQVNRKDLSTMAQI
ERRD-----
-----KQNKYKEFMKN
LFQYIWTSETNTYMPDRSYNTIIDRQYKALLDIFDSESDP-----ATAVVLGTRGKGT
V
FLRKAMLDWASGVLLQNRQYVFFFVSVSLN-NTTELSLAELISSKLPESLTDILSN
PKRILFVLDGFDYLFKFDLE----LR-TNLCNDWRKRLPTQNVLSSLLQKIMLPECSSLLLE

LGESSCSKIIPLLQNPREIIMSGLSEQSIYFYCVSFFKIQ-----LGVEVFKDLK
KNEPLFTLCSNPSMLWMICSSLMWGHYSREEVISSSESTSAIHTIFIMSAFKSIFGL--G
SSKYKRFKLTCTLAVEGMWK-QVYVFDSEDLRRNKISESDKTVWLKMKFLQIQG----
NNIMFYHSTLQWYFATLFYFLKQDKDTHYHPVIGS-----LPQLLGE-IYAHKQONQW
THAQTFFFGIATKHVITLLKPCFGNISFKTIRQEIIIRYLKSLSQPE-----
-----CNEKLVHP-KKLLFFCLIENQEERFVSQVMNLF-----
-EITVDISDSDLGAAE-YSLLRASKLKNLHLHIQKKVFSEIHDPEYGSLENFKL-----
-----DQKFSAINWTMLSILFCN---LHVLDLGSCHFNNKVVIEVLCNSLSPTPNMPLTVF
KLQRLLCFMTNFGDGSFLCTFLQIP-QLKYLNLYGTDLSN-DVVEMLCSALKCSTCRVE
ELL-----LGKCDISSEACGIMATFLIN-SKVKHLSLVENPLKN
KGVMLCKMLKDPSCVLESMLSYCCLTFIACGHLYEALLSNKHLSLDLGNSFLEDIGV
NLL-----
-----CEALKYPNCTLKELWLPGCYLTSECCEEISAVLTCNKNLKTLLKLGNN
NIQDTGVKRLCEALCHPKCKVQCLGLDMCELSNDCCEDLALALITCNTLKSLLNDWNALH
HSGVLMCEALNHKKCKLNLMLGLDKSSFSEESQTFLQAVEKNNNLSLVHFPWVEDELKK
RGVRLVWNSKN-----

#NLRP9b_rat "gi|62639014|ref|XP_218248.3| PREDICTED: similar to NACHT, LRR and
PYD containing protein 9b [Rattus norvegicus]"

-----MVDTSYGILLKHLRKLSDGEFWSFKELLRKEPEKF
KLKPIS-----WMKIENASKEELVMLLNTHYP-KQAWDMALSLFLQVNREDLSIMAQK
KRRY-----
-----KQTKYKKFMKT
TFQSIWTLNESNICIPDRSYHLIVEHQYRKLQNIQFDSESEP-----VTAVVTGPTGEGKTV
FLRKAMLDWASGILWQNRQYVFFFSVLSLN-NTTELSLAELISSKLPESSETLNDILSD
PKKILFILDGFDYLFKFDLE----LR-TNLCNDWRKILPTQIILSSLLQKIMLPESLLE
LGHISLPKIFPLLQYPRDITIQGFSECLKTYFISFFNTE-----KGIEVFENLK
SNQ-MLKLCSNPYLCWMFCSCLKWQFDREEEAYFQAKTDSVFFTSFMVSAFKSAYAS--N
PPKQNRQKLSLCTLAVEGMWK-QLFVFDSEDLRRNGISESDKAVWLRMKFLQNHD----
NHIVFYHPTLQLYFASMFYFLKQDKDTHVPIGS-----IPQLLRK-IYARDHTQW
LQIGIFLFGATEQVASLLKPYFGFIQHRDVRQEVRYLKSLSQRE-----
-----CCEKLERP-QNLFACLRDNKEEFVREVVDLFE-----
-EITVDITNSHVLIIA-NHLQKSSKLLKHLHIQKRVFLEIHDPEYSDSETFTQ-----
-----DKNAAEYWKKLCHIFVN---LHVLDLDCSNFNKQVIEELCNVLSPPKIPMAF
KLESLLCSFMTNFGDGSFLHTLLQLP-HLKYLNLYGTNLSN-SRIENLCSALRRSTCKVE
ELL-----LGKCDISSEACGIATSLMN-SKVKHLSLVENPLKN
KGVMSLCEMLKDPSCVLETMLSYCCLTFIACGHLYEALVSNKHLSLDLGNSFLEDIGV
NLL-----
-----CEALKDPNCILKELWLSGCFLTSECCEEISAVLTCNNNLKTLLKLGNN
DIEDTGKHLCEALSHPNCKLECLGLDLCKFTSDCCEDLASALTCTKTLNLSNLDWKTLE
HSGVVALCEALNHKKCNLMLGLDKSAFVSQTFLLQAVEKNNNLSILHYPWVEEERKK
RGVRLVWNSKN-----

#NLRP9a_rat "gi|34854707|ref|XP_218250.2| PREDICTED: similar to NACHT, LRR and
PYD containing protein 9b [Rattus norvegicus]"

-----MVDTSYGILLKHLRKLSDGEFWSFKELLRKEPEKF
KLKPIS-----WMKIENASKEELVMLLNTHYP-KQAWDMALSLFLQVNREDLSIMAQK
KRRY-----
-----KQTKYKKFMKT

ELKPIP-----WAEKKASKEDVAKLLDKHYPGKQAWEVTLNLFLLQINRKDLWTKAQE
EMRN-----
-----KLNPYRKHMKE
TFQLIWEKETCLHVPEHFYKETMKNEYKELNDAYTAAARR-----HTVVLEGPDGIGKTT
LLRKVMLDWAEGNLWKDRFTFVFFLNVEYMN-SIAETSLELLSRDWPESEKIEDIFSQ
PERILFIMDGFEQLKFNLQ----LK-ADLSDDWRQRQPMP IILSSLLQKKMLPESSLLIA
LGKLAMQKHVFLMRHPKLIKLLGFSESEKKSIFSYFFGEEKS-----KALKVFNFVR
DNGPLFILCHNPFTCWLVCVCVKQRLERGEDLEINSQNTSYLYASFLTTFVKAGSQS--F
PPKVNRRARLKSALAAEGIWY-YTFVFSRGDLRRNGLSESEGVMWVGMRLLRG----
DCFAMHLCIQEFCAAMFYLLKRPKDDPNPAIGS-----ITQLVRA-SVVQPQTLL
TQVGIFMFGISTEEIVSMLETSGFPLSKDLKQEITQCLESLSQCE-----
-----A-DREAIAFQELF IGLFETQEKEFVTKVMNFFE-----
-EVFIYIGNIEHLVIAS-FCLKHCQHLLTTRMCVEN-----IFPDDSGCIS-----
-----DYNEKLVYWRELCSMFITNKNFQILDMENTSLLDDPSLAILCKALAH-----VCK
LR-KLFTS-VYFGHDELSEFKAVLHNP-HLKLLSLYGTSLSQ-SDIRHLCETLKHMPCKIE
ELI-----LGKCDISSEACEDIASVLACNSKCLKHLSLVENPLRD
EGMTLLCEALKHPHCALERLMLMG-----

-----CFLTSDSCKDIAAVLICNEKLTCLKLGHN
EIGDTGVRQLCAALQHPHCKLECLGLQTCPI TRACCGDLAAALIACKTLRSLNLDWIALD
VDAVVVLCEALSHPDALQMLGLHKSGFDEETQKILMSVEEKIPHLTISHGPWIDEEYKI
RGVLL-----

#NLRP10_chimpanzee "ENSPTRT0000006299 peptide:ENSPTRP0000005809
pep:KNOWN_protein_coding"

-----MAMAKARNPREALLWALSLEENDFKCLKFYLRDMTLSE
GQPPLARGE-----LEGLIPVDLAELLI SKYGEKEAVKVVLLKGLKVMNLELVQLS-H
ICLH-----
-----DYREVYREHVYR-CLEEWQEA-----GVNGRYNQVLLVAKPSS
ESPESLA-----CPIPEQE----LDSVTVEALFDSGEKPSLAPSLVVLQGSAGTGKTT
LARKMVLWDATGTLYPGRFDYVYVSCKEVVLLLES-KLEQLLFWCCGDNQAPVTEILRQ
PERLLFILDGFDELQRPFEE----KLKKR-----GLSPKESLLHLLIRRHTLPTCSLLIT
TRPLALRNLEPLLKQARHVHILGFSEEERARYFSSYFTDEK-----QADRAFDIVQ
KNDTLYKACQVPGICWVVCVSWLQGMERKGVVLETP-RNSTDIFMAYVSTFLPPDDGGC
SELSRHRVLRSLCSLAAEQIHF-QRFLFEEAELRKHNLDGP-RLAAFLSSNDYQLGLAIK
KFYSFRHISFQDFHFAMSYLVKEDQSRL-GKESRR-----EVQRLLLEVKEQEGNDEM
TLTMQFLLDISKDSF SNLELKF CFRI SPCLAQDLKHFKEQMES-----
-----MKHNRTWDLEFSLYEAKIKNLVKG IQMNNV-----
SFKIKHSNEKKSQSQNLFSVKSSLSHGPKKEEQKCP SVHGQKEGKDNIAGTPKEAS-----
-----TGKGRGTEE-----TPKNYI-----

#NLRP10_human "gi|28827807|ref|NP_789791.1| NLR family, pyrin domain containing
10 [Homo sapiens]"

#NLRP12_rat "gi|109458044|ref|XP_218181.3| PREDICTED: similar to PYRIN-
containing APAF1-like protein 7 isoform 2 [Rattus norvegicus]"

-----MLPATAKDALHRLSTYLEELEEAGELKKFKLYLG-IAEEL
GQDKIPRG-----RMEMAGPLEMAQLMVAHMGTKAWLLALSTFERIHRKDLWERGQG
EDLVRVTP-----SNGLCS
LESQSTCLSDVSPDAPRKDPQITYKDYVRRKFRLMEDRNARLGECVNLSHRYTRLLLVKE
HSNP IWAQQKLEETGWEHSRTRGHQASPIQMETLFEPEERPEPPRTVVVLQGAAGMGKSM
LTHKVMLDWADGRLFQDFDYVFYISCRELNRSHTQCSVHDLSSCWPEHGAPLEDLIRA
PDRLLFIIDGFHELHPSFHD----VQGPWCHCWEKRPTELLLGSLIRLLLLPQLSLIT
TRPCALEKLHGLLEHPRHVEILGFSEAEREEFYRYFHNTG-----QASQVFSFMR
DYEP LFTMCFVPMVSWVCTCLKQQLSEGELLRQTSRTTTAVYMFYLLSLMQPKPGT---
PTFKVPANQRGLVSLAAEGLWN-QKILFEEEDLGKHGLDGAEVSTFLNVNIFQKGIK-CE
KFYSFIHLSFQEFFTAMYCALHGRE-----AVRRALAEYGF SERNFL
AHTVRF LFGLLNEEMRCYLERNLGTISPQVKEEALAWIQNKARS-----
-----EGSTLQHGSLLELLSCLYEIQEEDFIQQALSHFQ-----
-VVVVRNLSTKMEHVVCFCARYCRGTEVLHLYGSAYSTGAEDGPPPEPPGAQTQSTHS--
---QERNILPDIYSAYLSATICNTSNLIELALYRNALGSQGVRLLCQGLRHA-----NCK
LQNLRLKRCRCHISGSACQDLAAAI IANRNLI RLDLSGNSIGV-LGLELLCEGLQHMPCLRQ
MIQ-----LRKCLLEAAAGRALASVLSNNSHLVELDLTGNPLED
LGLKLLCQGLRHPVCLRLRTLWLKICHLGQASCEDLASTLKMNQSLMELDLGLNDLGDGSGA
LLL-----
-----CEGLRHPDCKLQTLRLGICRLGSDACAGVASVLQVNTCLRELDLSFN
DLGDRGLWLLGEGLRHQTCRLQKLWLDSCGLTSKACEDLSSVLGISQTLNELYLTNNALG
DTGVRLLCRRLRHPGCKLRVLWLFGM DLNKVTHRRMAALRVTKPYLDIGC-----

#NLRP12_chimpanzee "gi|114678929|ref|XP_524387.2| PREDICTED: PYRIN-containing
APAF1-like protein 7 isoform 5 [Pan troglodytes]"

-----MLRTAGRDGLCRLSTNLEEELEAVELKKFKLYLG-TATEL
GEGKIPWG-----RMKKAGPLEMAQLLITHFGEAEAWRLALSTFERINRKDLWERGQR
EDLVRDTP-----PGGPS
LGNQSTCLLEVSLVTPRKDPQETYRKYVRRKFRLMEDRNARLGECVNLSHRYTRLLLVKE
HSNPMQAQQQLLDTGRGHARTVGHQASPIKIETLFEPEERPEPPRTVVVMQGAAGIGKSM
LAHKVMLDWADGKLFQGRFDYLFYINCREMNSATECSMQDLISGCWPEPSAPLQELIRV
PERLLFIIDGFDELKPSFHD----AQGPWCLCWEKRPTELLLNLSLIRKLLPELSLLIT
TRPTALEKLHRLLEHPRHVEILGFSEAERKEYFYKYFHNAE-----QAGQVFNYVR
DNEP LFTMCFVPLVCWVCTCLQQQLEGGGLLRQTSRTTTAVYMLYLLSLMQPKPGA---
PRLQPPPNQRGLCSLAADGIWN-QKILFEEQDLRKHGLDGEDVSAFLNMNIFQKDMN-CE
RYYSFIHLSFQEFFAAMYIILDEGERGAGPD-----QDVTRLLTEYAFSERSFL
ALTSRFLFGLLNEETRSHLEKSLCWKVSPHIKMDLLQWIQSKAQS-----
-----DGSTLQQGSLEFFSCLYEIQK-EFTQQALSHFQ-----
-VIVVSNIAASKMEHMVSSFLKHC RSAQVLHLYGATYSADGEDRARC SAGHTLLVQL--
---PERTVLLDAYSEHLAAALCTNPNI ELSLYRNALGSRGVKLLCQGLRHP-----NCK
LQNLRLKRCRISSACEDLSAALIANKNLTRMDLSGNGVGF-PGMMLLCEGLRHPQCLRQ
MIQ-----LRKQLESGACQEMASVLGTNPHLVELDLTGNALD
LGLRLLCQGLRHPVCLRLRTLWLKICRLTAAACDELASTLSVNQSLRELDLSLNELGDLGV
LLL-----
-----CEGLRHPTCKLQTLRLGICRLGSAACEGLSVVLQANHNRELDLSFN
DLGDWGLWLLAEGLQHPACRLQKLWLDSCGLTAKACKNLYFTLGINQTLTDLYLTNNALG

DTGVRLCKRLSHPGCKLRVLWLFGMDLNKMTHSRLAALRVTKPYLDIGC-----

#NLRP12_dog "ENSCAFT00000004310 peptide:ENSCAFP00000003989
pep:NOVEL_protein_coding"

-----MPRAPPSSGLCRLSAYLEELEAVELKFKLFLG-TEAEA
G--RIPWG-----RLEAAGPLDTAQLLVAHCGPHAAWPLALGLFQRINRRDLWEKGRR
EEPVRDTP-----SGDPSS
PGSQSACSLEVFPALRRDPRETYRDYVRRKFRLMEDRNARLGECVNLSHRYTRLLLVKE
HSNPMWAQQKLLDTGWGQARTVGHQASFIQMETLFEPDEERPEPPRTVVVLOGAAGMGKSM
LAHKVMLDWADGRLFQDRFDYLFYINCRKMNQSTAEQSAQDLISSCWPEPSVPLQELVRV
PERLLFIIDGFHELKPSFHD----PQGPWCLCWECKRPTTELLSSLIKRLKLLPELSVLIT
IRPTALEKLRHLLHPRHVEILGFSEAERKEYFYKYFHNAE-----QAGQVFNFIR
DNEPLFTLCFVPMVCWVCTCLKQQLLEDGGLLRQTSRTTTAVYMLYLLSLMQPKPGS---
PILQSPPNQRGLCSLAADGLWN-QKILFEEQDLRKHGLDGDVSSFLNMNIFQKDIN-CE
KFYSFIHLSFQEFAAMYIILDPGESRSSPE-----HNVTRLLAEYEFSEFSFL
ALTVRFLFGLLNEETRSYLEKSLCWKVSPHVKVELLEWIQRKAQS-----
-----EGSTLQQGSLELFSCLYEIQEEDFIQQALSPFQ-----
-VVVNNIATKMEHMISFVCVKNCRSALVHLHGAAYSPDEDDGGRWASGPQMLPTQI--
---PEKNVLPDAYSKQLAAALSTNPNLTELVLRSALGSRGVRLLCQGLRHP-----SCK
LQNLRLKRCVASSACQDLAAALMANQNLRMDLSSNRLGL-PGLRALCKGLRHRPCKLQ
VIQ-----LRKCQLEAEACQEIASVLSTSRHLEELDITGNALED
LGLKLLCQGLRHPVCRLLQILWLKICHLTAAACEDLASTLGVNQSLIELDLSLNDLGDGPV
LLL-----
-----CEGLRHPQCRLQALRLGICRLSSAACKGLCTVLQVNPCLRDLDLDFN
DLGDAGVWPLCEGLRHPTCRLQKLWLDSCGLTAKACEDLSSALGVSQTLRELYLTNNALG
NAGVRLCKGLSHPGCKLQVLWLFGMELNKMTHRRLAALRVVVKPQLDIGC-----

#NLRP12_human "gi|21955154|ref|NP_653288.1| NLR family, pyrin domain containing
12 isoform 2 [Homo sapiens]"

-----MLRTAGRDGLCRLSTYLEELEELEAVELKFKLYLG-TATEL
GEGKIPWG-----SMEKAGPLEMAQLLITHFGEPEAWRLALSTFERINRKDLWERGQR
EDLVRDTP-----PGGPSS
LGNQSTCLLEVSLVTPRKDPQETRYRDYVRRKFRLMEDRNARLGECVNLSHRYTRLLLVKE
HSNPMQVQQKLLDTGRGHARTVGHQASPIKIETLFEPDEERPEPPRTVVVMQGAAGIGKSM
LAHKVMLDWADGKLFQGRFDYLFYINCREMNQSAATECSMQDLIFSCWPEPSAPLQELIRV
PERLLFIIDGFDELKPSFHD----PQGPWCLCWECKRPTTELLNSLIKRLKLLPELSLLIT
TRPTALEKLRHLLHPRHVEILGFSEAERKEYFYKYFHNAE-----QAGQVFNYVR
DNEPLFTMCFVPLVCWVCTCLQQLLEGGGLLRQTSRTTTAVYMLYLLSLMQPKPGA---
PRLQPPPQRGLCSLAADGLWN-QKILFEEQDLRKHGLDGEDVSAFLNMNIFQKDIN-CE
RYYSFIHLSFQEFAAMYIILDEGEGGAGPD-----QDVTRLLTEYAFSEFSFL
ALTSRFLFGLLNEETRSHLEKSLCWKVSPHIKMDLLQWIQSKAQS-----
-----DGSTLQQGSLEFFSCLYEIQEEEFIQQALSHFQ-----
-VIVVSNIAASKMEHMVSSFLKRCRSAQVLHLYGATYSADGEDRARCASAGAHTLLVQL--
---PERTVLLDAYSEHLAAALCTNPNLIELSLYRNALGSRGVKLLCQGLRHP-----NCK
LQNLRLKRCRISSACEDLSAALIANKNLTRMDLSGNGVGF-PGMMLLCEGLRHPQCRLQ
MIQ-----LRKCQLESGACQEMASVLGTNPHLVELDITGNALED
LGLRLLCQGLRHPVCRLLTLWLKICRLTAAACDELASTLSVNQSLRELDLSLNELGDLGV

LLL-----
-----CEGLRHPTCKLQTLRLGICRLGSAACEGLSVVLQANHNLRELDLSFN
DLGDWGLWLLAEGHQHPACRLQKLWLDSCGLTAKACENLYFTLGINQTLTDLYLTNNALG
DTGVRLLCKRRLSHPGCKLRVLWLFGMDLNKMTHSRLAALRVTKPYLDIGC-----

#NLRP12_mouse

-----MLPSTARDGLYRLSTYLEELEAGELKKFKLFLG-IAEDL
SQDKIPWG-----RMEKAGPLEMAQLMVAHMGTTREAWLLALSTFQRIHRKDLWERGQG
EDLVRVTP-----NNGLCL
FESQSACPLDVSPNAPRKDLQTTYKDYVRRKFQLMEDRNARLGECVNLNRYTRLLLVKE
HSNP IWTQQKFVDVEWERSRTRRHQTSPIQMETLFEPEERPEPPHTTVVLQGAAGMGKSM
LAHKVMLDWADGRLFQGRFDYVFYISCRELNRSHTQCSVQDLISSCWPERGISLEDLMOA
PDRLLFIIDGFDKLP SFHD---AQGPWCLCWEEKQPTVLLGSLIRRLLLPQVSLIT
TRPCALEKLHGLLEHPRHVEILGFSEEARKEYFYRYFHNTG-----QASRVLSFLM
DYEP LFTMCFVPMVSWVCTCLKQQLSEGLLRQTPRTTAVYMFYLLSLMQPKPGT---
PTFKVPANQRGLVSLAAEGLWN-QKILFDEQDLGKHGLDGADVSTFLNVNIFQKGIK-CE
KFYSFIHLSFQEFFAAMYCALNGRE-----AVRRALAEYGF SERNFL
ALTVHFLFGLLNEEMRCYLERNLGSISPOVKEEVLAWIQNKAGS-----
-----EGSTLQHGSLLELLSCLYEVEEDFIQQALSHFQ-----
-VVVVRISITKMEHMVCSFCARYCRSTEVLHLHGSAYSTGMEDDPPEPSGVQTQSTYL--
---QERNMLPDVYSAYLSAAVCTNSNLIELALYRNALGSQGVRLLCQGLRHA-----SCK
LQNLR-----

#NLRP3_chicken_Q5F3J4

-----MAGEESTILLEALEG
LTLEDFQEF-----KKKLPHTDIKGGWNIGRDELEKVTHPSSLISYMGDSYREGAAMD
IAIS-----
-----LFEEMNQRDLAEKILDEKVKEYKQKYTEHVAREFLQYKEANSCLGENLSV
RDGYTNLTIARKSWDQHGDEPGDVSSDTVTQTLLLEPSKDGQVPPITVVLG-ASGMGKTM
TIRKVMMEWVEG-TLCTQFDYVFCIDCKELS-FSKEVSMVDLISKCCPQQRMPAGRILGN
PEKILFIFDSFEALGLPLAQ---PKDELSTDPTEAKPLETTLLSLLRRTVLPSSVLIA
TRPAALQSLGQCLEGKHYVEILGFSPAAREEYFHRYFGNDN-----KADVAFRFTR
GNEVLYSLCVIPVMSWTVCTVLERELYERNQLLACS-KTTTQMIMFYLSWLMKHRVSN
QNLQQ--FLHKLCSLAADGIWK-HKVLFEKEIEEDQGLNQPQLLSLFLNEKGLEKGT
NVYSFSLHLHLQELFAAMFYVLEDQDGMVSDSRILA-----KDVNMLLESYHTSRMDL
NVTVRLLFGLVNPKSVEYAGEGIGCRISLQPRELLRWLQTRPRGTSHPRE-----
-----VMKIEDLDTFHLLFETNEKS FVQSVLGSFTG-----
-IALQDVKLTLYDQAALCFCIKQWAGLLSVTLRSCSFHQHHR-----
-----QEPAKGLPRQSWRQEELHSPHPLCQALGHP-----GS
SLQSLR-----
-----LQWCGLTEGDSGALGTLATLPSLVHLELGDGALGD

DGVRMLCAGLRQPGCQLRVLR-----

