Supplemental Figure 1

A

B

Supplemental Figure 2

A

anti-His
(C-term tag)

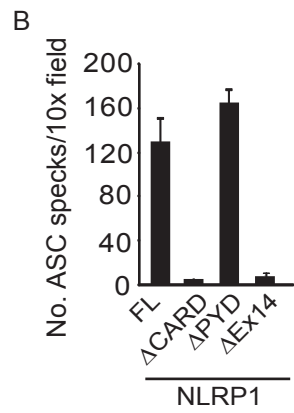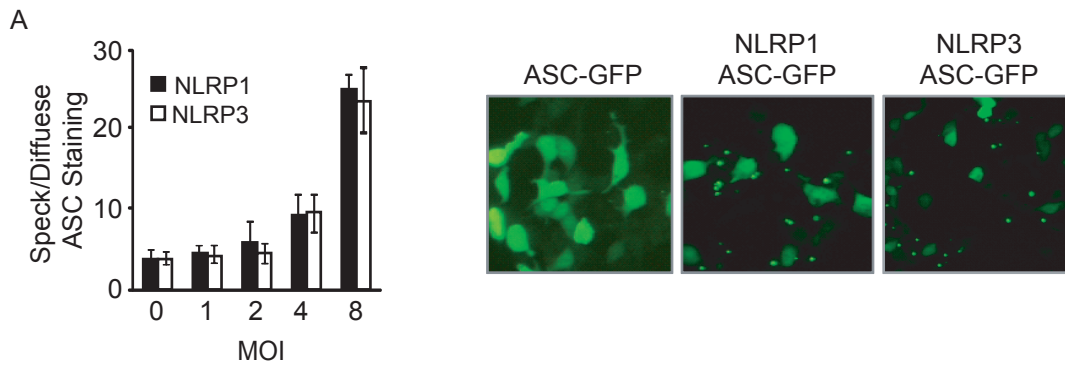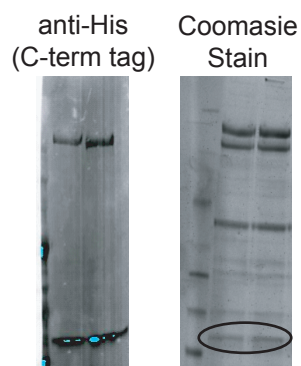Coomasie
Stain

B

MAGGAWGRLA CYLEFLKKEE LKEFQLLLAN KAHSRSSSGE TPAQPEKTSGMEVASYLVAQ YGE
QRAWDLA LHTWEQMGLR SLCAQAQEGA GHSPSFPYSPSEPHLGSPSQ PTSTAVLMPWIHELPA
GCTQ GSERRVLRQL PDTSGRRWRE SASLLYQAL PSSPDHESPS QESPNAPTST AVLGSWGSPP
QPSLAPREQEAPGTQWPLDE TSGIYYTEIR EREREKSEKG RPPWAAVVGT PPQAHTSLQPHHHP
WEPSVR ESLCSTWPWK NEDFNQKFTQ LLLLQRPHPR SQDPLVKRSWPDYVEENRGH LIEIRDLF
GP GLDTQEPRIV ILQGAAGIGK STLARQVKEAWGRGQLYGDR FQHVFYFSCR ELAQSKVVSLA
ELIGKDGTA TPAPIRQILSRPERLLFILD GVDEPGWVLQ EPSSELCLHWSQPQPADALL GSLLGK
TILPEASFLITART TALQNLIPSL EQARWVEVLG FSESSRKEYF YRYFTDERQA RAFRLVKSN KE
LWALCLVP WVSWLACTCL MQQMKRKEKL TLTSKTTTTLCLHYLAQALQ AQPLGPQLRD LCSLAA
EGIWQKKTLFSPDD LRKHGLDGAIISTFLKMGIL QEHPIPLSYS FIHLCFQEFF AAMSYVLEDE K
GRGKHSNCIIDLEKTLEAY GIHGLFGAST TRFLLGLLSD EGEREMENIF HCRLSQGRNLMQWVPS
LQLL LQPHSLESLH CLYETRNKTF LTQVMAHFEE MGMCVETDMELLVCTFCIKF SRHVKKLQLI
EGRQHRSTWS PTMVVLFRWV PVTDAYWQILFSVLKVTRNL KELDLSGNSL SHSAVKSLCK TLRR
PRCLLE TLRLAGCGLTAEDCKDLAFG LRANQTLTEL DLSFNVLTDA GAKHLCQRLR QPSCKLQR
LQLVSCGLTSDC CQDLASVLSA SPSLKELDLQ QNNLDDVGVR LLCEGLRHPACKLIRLGLDQ TT
LSDEMRQE LRALEQEKPQ LLIFSRRKPS VMTPTEGLDTGEMSNSTSSL KRQRLGSERA ASHVA
QANLK LLDVSKIFPI AEIAEESSPEVVPVELLCVP SPASQGDLHT KPLGTDDDFWGPTGPVATEV
VDKEKNLYRVHFPVAGSYRWPNTGLCFVMR EAVTVEIEFC VVDQFLGEIN PQHSWMVAGPLLDI
KAEPGA VEAVHLPHFV ALQGGHVDTS LFQMAHFKEE GMLLEKPARVELHHIVLENP SF<u>SPLGVL
LK MIHN</u>ALR FIP VTSVVLLYHR VHPEEVTFHLYLIPSDCSIR KAIDDLEMKF QFVRIHKPPP LTPL
YMGCRY TVSGSGSGMLEILPKELELC YRSPGEDQLF SEFYVGHLGS GIRLQVKDKK DETLVWEA
LVKPGDLMPATT LIPPARIAVP SPLDAPQLLH FVDQYREQLI ARVTSVEVVLDKLHGQVLSQ EQY
ERVLAEN TRPSQMRKLF SLSQSWDRKC KDGLYQALKETHPHLIMELWEKGSKKGLLP LSSKGGR
ADP AFLYKVVGTD YKDDDDKHHHHHHDV

Supplemental Figure 3

ZU5   ↓   UPA

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Human      PHFVALQGGHVDTSLFQMAHFKEEGMLLEKPARVELHHIVLENPSFSPLGVLLKMIHNALRFIPVTSVVLLYHRVHPEEVTFHLYLIPSDCSIRKAIDDLEMKFQFVRIHKPPPLTPLYM
Chimp      PHFVALQGGHVDTSLFQVAHFKEEGMLLEKPARVELHHIVLENPSFSPLGVLLKMIHNALRFIPVTSVVLLYHRLHPEEVTFHLYLIPSDCSIRKAIDDLEMKFQFVRIHKPPPLTPLYM
Orangutan  PHFVALQGGHVDTSLFQVAHFKEEGMLLEKPARVELHHIVLENPSFSPLGVLLKMIHNALRFLPVTSVVLLYHRLHPEEVTFHLYLIPSDCSIRKAIDDLEMKFQFVRIHKPPPLTPLYM
Rhesus     PHFVALQGGHVDTSLFQVAHFKEEGMLLEKPARVELHHIILENPSFSPLGVLLKVIHSTLRFFPVNSLVLLYHRLHPEEVTFHLYLIPSDCSIRKAIDDEETKFQFVRIHKPPPLTPLYM
Marmoset   PHFVSLQGGHIDTSLFQVAHFKEEGMLLEKPAKVELHHIVLEDPSFSPMGVLLRMIHNALRIFPVTSMVLLYHRIHPEEVTFHLYLIPSDCSIRKAIDDEETKFQFVRLHKPPPLTPLYM
Panda      PHFVDLRGGHVDTSLFQVAHLKEEGMLVENPTRVELYHVVLEDPSFSPIGVLLRTINAALRFFPVISVVLLYHRLQLDEIAFHLYLVPSDCCIQKAIDDKEKKFQFVQIHKPPPLAQLYV
Dog        PHFVDLQGSSVDTSLFYAAHLKDEGMLVETPARVEADHVVLENPSFSPIGVLLRTIHAALRFLPVTCVVLLYHHLRPGEVAFHLYLIPSDYSIRKAIDNEEKKFQFVQIHKPPPLASLYM
Cow        PHFVAFRGNDVDISQFQVAHFKEEGMLLEKPARVTPCYAVLENPSFSPMGVLLRMVQTALRFIPITSTVLLYHYLQPEEVTFHLYLIPSDCSIQKAIDNEEKMFQFVRIHKPPPLTPLYM
Horse      PHFVVLQGAHVDISLFQVAHFKEEGMLLEKPARVEPCYAVLENPSFSPVGVLLRMIHAALPFIPVTSTVLLYYHFQPEEVTFHLYLIPNDCTIRKAIDDEEKKFQFVRIHKPPPLTPLYV
Rat        PHFVSLQEGKVDSSLFHVAHFQDHGMVLETPARVEPHFAVLENPSFSPMGVLLRMIPAVGHFIPITSITLIYYRLYLEDITFHLYLVPNDCTIRKAIDEEELKFQFVRINKPPPVDALYV
Mouse      PHFVSLKDTKASTFDFKVAHFQEHGMVLETPDRVKPGYTVLKNPSFSPMGVVLRIIPAARHFIPITSITLIYYRVNQEEVTLHLYLVPNDCTIQKAIDDEEMKFQFVRINKPPPVDNLFI
Opossum    PHFVHLQGGKVDISLFKIAHFKEEGMVLENPTRMESSHAILENPSFSPMGVLLRIVHSTFRFIPIYSTTLIYFRLRAEDITLHLYLIPSDCTIRKAIDEEEAKFHFLRLHKPSPVTPLYI
           ****:: . * **:::.**::*.* :: . :*::****:**:*: : . ::*: . .*:*. . :::*****:*.* *:****: * *:*::::**.*: *::
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UPA

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Human      GCRYTVSGSGSGMLEILPKELELCYRSPGEDQLFSEFYVGHLGSGIRLQVKDKKDETLVW
Chimp      GCRYTVSGSGSGMLEILPKELELCYRSPGEDQLFSEFYVGHLGSGIRLQVKDKKDETLVW
Orangutan  GCRYTVSGSGSGMLEILPKELELCYRSPGEDQLFSEFYVGHLGSGIRLQVKDKKDETLVW
Rhesus     GCRYTVSGSGSGMLEILPKELELCYRSPGEAQLFSEFYVGHLGSGIRLQMKDKKDETLVW
Marmoset   GSRYAVSGSEE--LEIIPEELELCYRSPGEPQLFSEFYVGHLGSGIRLQMKNKTDETLVW
Panda      GSRYIVSGSGT--LEAIPKELELCYRSPGEPQIFSEFYVSHLGSGIRLQVRDKKYGTVVW
Dog        GSRYTVSGSEK--LEIIPKELELCYRSPREPQLFSEFYVSHLGSGIRLQVRDKKDDTVVW
Cow        GSRYIVSGSEK--LEILPEELELCYRSPRESQLFSEFYVRHLRSGIRLQIRSKKDGTVVW
Horse      GSRYTVSGSKK--LEIIPKELELCYRSPGESQLFSEFYIDHFGTGIKLQMRDKKDGTVVW
Rat        GSRYIVSSSKE--VEILPKELELCYRSPRESQLFSEIYVGNIGSGINLQLTDKKYMNLIW
Mouse      GSRYIVSGSEN--LEITPKELELCYRSSKEFQLFSEIYVGNMGSEIKLQIKNKKHMKLIW
Opossum    GSRFLVSGSKH--LEIMPTELELCYQSAGECQFFSEIYTSNVKEIISLDLRDPK-GTVVW
           *.*: **.* :* * ******:*. * *:***:* :. * *:: . . ..:*
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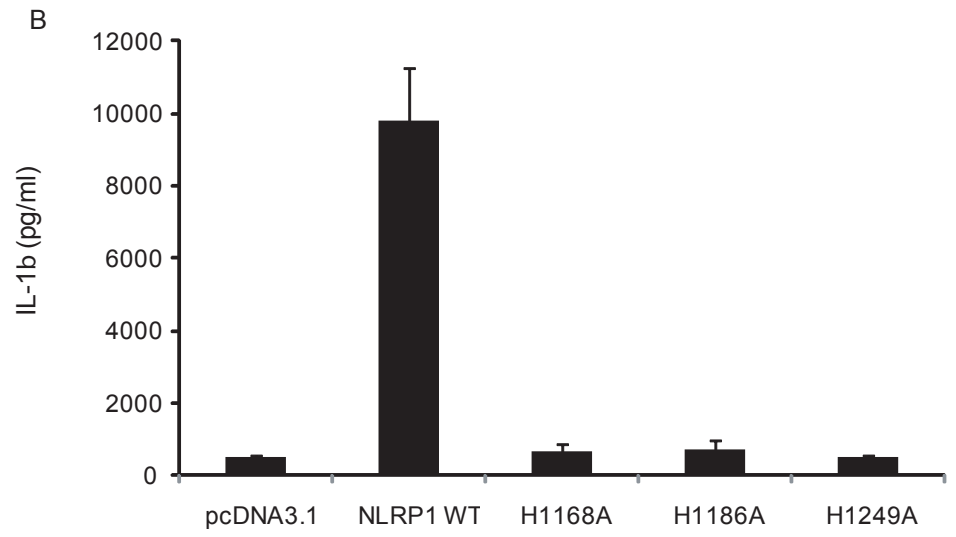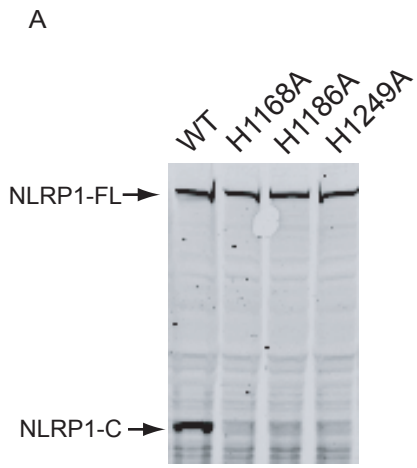
Supplemetary Figure 4

A

NLRP1-FL→

NLRP1-C→

WT
H1168A
H1186A
H1249A

B

IL-1b (pg/ml)

12000
10000
8000
6000
4000
2000
0

pcDNA3.1   NLRP1 WT   H1168A   H1186A   H1249A

Supplemetary Figure 5