Supporting Information

Mammalian lectin arrays for screening host-microbe interactions

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Figure S1. Sequence alignment of cow C-type CRDs used for lectin array.

Figures S2-S28. cDNA sequences for individual cow CRDs with PCR primers used for amplification.

Table S1. Bacterial strains used in this study.
Figure S1. Aligned sequences of bovine C-type CRDs.

Sequence alignments were adjusted manually to highlight the pattern of conserved amino acid residues highlighted in **yellow**. Additional shading indicates the five amino acid residues that form the conserved Ca\(^{2+}\)-binding site which in turn forms the primary monosaccharide-binding site, in **magenta**, and the four amino acid residues that form a secondary Ca\(^{2+}\)-binding site, in **cyan**.

**MBP-A**                             SGKKLYVTNREKMPFSSVKALCTALGATVATPKNAEENKAIQDMAS------DTAFLGI
**MBP-C**                             VGKKKAFFTNGKKMPFNEVKTLCAQFQGRVATPMNAEENRALKDLVT------EEAFLGI
**CL43**                              VGEKIFKTAGKSYSDAEQLCREAKGQLASPRSSAENAAVTLVRN------QEqAFLGI
**SP-A**                              VEGKEFSTNNGSVDGLKECVGGHIAAPRSPEENETIVSIVK------KYNTYAYLGL

**M n c l e**                             LSQYNGDSGSGV---NCCPLKWFHFQSSCYLFSPDTMSWRASLKNCSSMGAHLVVINTQEEQEFLYYTKP----RKKEFYIQL
**DC23**                               NGSVVCPEAWTQDDWDGTYVRPNERSQHSPCTEGTSDKVQCNMLQVSAQALIY------QGFRVWIGLF

**LSECtin**                            SSCEKPSWQPGCFSTRTLWAEQOCRSGAIHVLEGEGFLSLRTN---GRGNYL
**Endo180 CRD2**                       VECLFSKTVGSEKTFQDAQQICTQAGGQLPSPRSGAENEALTQLAT---AQNKAAFLSM
PCR primers and sequences of cow cDNA of current lectin array proteins

Sequences of cloned CRDs are shown in black. Appended initiation sequences and biotin tags are indicated in red. Sequences of primers used for PCR amplification are shown in green. Variations in the sequences compared to the genomic sequence in the National Center for Biotechnology Information database are highlighted in blue.

**Figure S2. Mannose-binding protein A CRD (MBP-A)**

```
MetAl aSer yLysLysLeuTyr Val Thr AsnAr
```

**Figure S3. Mannose-binding protein C CRD (MBP-C)**

```
MetAl aVal yLysLysAl aPhePheThr AsnGl
```
Figure S4. Collectin 43 CRD (CL-43)

**Met**Al aVal Gly yGlu uLys Ile ePhe Lys Thr Ala aGlu

| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 |
|----|----|----|----|----|----|----|----|----|----|
| aGlu | Met | Al | aVal | Gly | yGlu | uLys | Ile | ePhe | Lys |

Thr Ala Glu Gln Leu Val Arg Asp Gly Lys Glu Thr Val Ala Lys Gln Leu Asn Leu Lys Glu Glu Arg Leu Val Ile Cys Glu Phe Leu Asn Asp Ile Phe Glu Ala Gln Lys Ile Glu Trp His Glu***

ggaggat gatt t aaat ggcctg cgggagaagat gat t ccaagacggcaggg

Figure S5. Surfactant Protein D CRD (SP-D)

Met Al aVal Gly yGlu uLys Ile ePhe Lys Thr Ala aGlu

| 1  | 2  | 3  | 4  | 5  | 6  | 7  | 8  | 9  | 10 |
|----|----|----|----|----|----|----|----|----|----|
| aGlu | Met | Al | aVal | Gly | yGlu | uLys | Ile | ePhe | Lys |

Glu Glu Arg Leu Val Ile Cys Glu Phe Leu Asn Asp Ile Phe Glu Ala Gln Lys Ile Glu Trp His Glu***

ggaggat gatt t aaat ggcctg cgggagaagat gat t ccaagacggcaggg

Glu Phe Leu Asp Tyr Ser Asp Al aGlu uGlu aAl aVal Thr Gln Leu Val Arg Ala aLys Asn Leu ctc ccc cag cgt ct ctc cag cag aac gccc gtc cgg gagg cct gct gac aag ctc gtt ttt aag ct

ggaggagcgcctcgtgatctgtgagttcctgaatgacatcttcgaagcacagaaaaatcga

ggttcactggactattccaactgggcccccggggagcccaacaatagggcaaaagacga

ggaggacctagactagacactcaagagctctactggtgtagtttagcgctcaaggacttactgtagaagcttcgtgtcttttagctcaccgtactcatcttaag

ggagttcctgaatgacatcttcgaagcacagaaaaatcga

ggtgcagaactagacactcaagagctctactggtgtagtttagcgctcaaggacttactgtagaagcttcgtgtcttttagctcaccgtactcatcttaag
Figure S6. Collectin 46 CRD (CL-46)

MetAl aVal yLysLys IlePheLysThrAl aG

aVal aVal LysSer Tyr Ser AspAl aG nGl nI l eCysArg gGl uAl aLysGl yGl nLeuAl

ggat ccgat ct t ggagagat gat t aaat ggcccg t gggaagaagat ct t caagacgcagg
ggat ccgat ct t ggagagat gat t aaat ggcccg t gggaagaagat ct t caagacg

yAl aVal LysSer Tyr Ser AspAl aG uAsnGl uAl aVal Al aG nLeuVal Ar gAl aLysAsnAs

c t c c c c a c g t c t c gcagct gagaacgacg ggcgt ggcacagct ggt cagagccaaagacaa

nAspAl aPheLeuSer MetAsnAspl l eSerThr Gl uG yLysPheThyr Tyr PrThr Gl

t gct t t t c c t g gagcat gaa ccat c t ccccgaggggcaagt t t gacct t c c c c c c c a g g

yG uLerLeuVal Tyr Ser AsnTr pAl aSer Gl yGl uPrOAsnAsnAsnAl aG yGl

ggag cact gct t aaat ct t cagagct gagaacgt cagccaggg gggcgt ggcacagct ggt cagagccaaagacaa

nPrOGl uAsnCysVal Gl nI l eYr Ar gGl uLysTr pAsnAspVal PrOAsnSer Gl

accagagaact ggt gct ac at ggt caagacgcagtaaat c g a g t g g g g g g g g g g g g g
gcagacgcagtaaat c g a g t g g g g g g g g g g g g g
ggt cagagccaaagacaa

dPrOLeuLeuVal I l eCysGl uPheLeuAsnAspl l ePheGl uAl aG nLysI I eGl uTr

gc cact c c t g g a c t c c t g g a c t c c t g g a c t c c t g g a c t c c t g g a c t c c t
ggt cagagccaaagacaa

phl sGl u***

gcagct acat ct t t

Figure S7. Conglutinin CRD

MetAl aVal yG l uLys I I ePheLysThrAl aG

aVal aVal LysSer Tyr Ser AspAl aG uGl nLeuCysArg gGl uAl aLysGl yGl nLeuAl

ggat ccgat ct t ggagagat gat t aaat ggcccg t gggaagaagat ct t caagacgcagg
ggat ccgat ct t ggagagat gat t aaat ggcccg t gggaagaagat ct t caagacg

yAl aVal LysSer Tyr Ser AspAl aG nGl nI l eCysArg gGl uAl aLysGl yGl nLeuAl

ggag cact gct t t g c g a c t c c t g g a c t c c t g g a c t c c t g g a c t c c t g g a c t
ggt caagacgcagtaaat c g a g t g g g g g g g g g g g g g g g g g g g g g g g g g g g g g g g g g g g g
ggagacacttggt cagagccaaagacaa

nPrOGl uAsnCysVal Gl nI l eYr Ar gGl uLysTr pAsnAspVal PrOAsnSer Ly

accagagaact ggt cagagccaaagacaa

dPrOLeuLeuVal I l eCysGl uPheLeuAsnAspl l ePheGl uAl aG nLysI I eGl uTr

gc cact c c t g g a c t c c t g g a c t c c t g g a c t c c t g g a c t c c t g g a c t c c t
ggt cagagccaaagacaa

phl sGl u***

gcagct acat ct t t
**Figure S8. Collectin K1 CRD (ColK1)**

MetAl aThr Gl uGl nLysMAlg TyrLeuLeuVal LysGl uGl uLysArgTyr

gat gat t aat ggccacggagcagaagaggt gt acct gct ggt gaggaggaagaagcgt ac
gat gat t aat ggccacggagcagaagaggt gac cat gct

LeuAspAl aGl nLeuAl aCysGl nGl yArgGl yGly yThrLeuSer Met ProLysAspGl u

tt ggacgcgcagcgt ccggcggagggcgcagcact gac cat gct

Al aAl aAsnAl aLeuLeuAl aAl aTyrIl eThrGl nAl aGl yLeuAl aArgVal PheIl e

gcccgcaccgcgc ggt ccggcgcacct ccgacgagggcgcagcct gcac ccggt cac ttc cat c

Gl Il eAsnAspLeuGl uArgGl uGl yAl aPheVal TyrAl aAspArg Gl Ser ProMetGl n

ggcat cac t gacct gaggaggaagggcgcagcgt tct gc t cac gc gcaccgcgt ccgcgcag gc

Thr PheSer Lys Trp Arp Gl Ser Gl yGl uProAsnAsnAl aTyr Asp Gl uGl uAspCysVal

acct ccagcaagcgccgagggacccaaacacgcct acgcagagggagacct gcgt g

Gl uLeuVal Al aSer Gl yGl yTrpAsnAspVal Al aCysHi sLeuThr Met Hi sPheLeu

gac t ggt gcct caggggt tggacgcgcagct gcgc gcacct ccac t gcact ttt c

CysGl uPheAspLysGl uHi s Val LeuAsnAspIl ePheGl uAl aGl nLysIl eGl uTrp

tgcgag t ccgccagagggagcgcagcgt gct gat gacct ccg ccagc cag gaaat cc gagt gg

acgc ct ccagc gt tct cc gct gcac gcacc t act gt aagaagcc t ccgt gc ttt tta gacct cacc

**Figure S9. Surfactant Protein A CRD (SP-A)**

MetAl aVal Gl yGl uLysVal PheSer

ggt ccgcagct ctt gggaagat gat t aat ggccagggagagggaggt ct ct ct
gat gct ctt gggaagat gat t aat ggccagggagagggaggt ctt c

Thr AsnGl yGl nSer Val AsnPheAspAl aIl eLysGl uLeuCysAl aAr g Val Gl yGl y

acc aat ggccag ct ccagt caa ttt t gat gcc caa gaa gt aag t ct g cccag aag t a g gta acc

Hi sIl eAl aAl aPrOAr gSer ProGl uGl uAsnGl uAl aIl eVal SerIl eVal LysLys

catt gct gc ccccagagggagcagagggagata gaggcact ctt gat gacat cgt gagaag

Tyr AsnThr Tyr Al aTyr LeuGl yLeuVal Gl yGl yProThrAl aGl yAspPheTyr Tyr

t cacaacact ccacct ggt gcct ctt ccagc gccaag gc caccgcgt ggagact cc t at ac

LeuAspGl yGl aPrOVal AsnTyr Thr AsnTrp Tyr PrO Gl yGl uProOArg Gl yArg Gl y

cct gat gaggccacct ccgt gat t tta ccacc gcagg gac cag gagg gggc gc

LysGl uLysCysVal Gl uIl eTyr Thr AspGl yGl nTrpAsnAspLysAsnCysLeuGl n

aalagagaat gg gta aagaa at acacagat ggt caagt gaaaa at gaa gaa aac cc
tgc gcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcgtgcg
Figure S10. Collectin L1 CRD (ColL1)

Met Ala aThr Gl uLys Phe Tyr
ggat ccg at ctt gga gat gat taa ag gcc caa cgc aag aaaa at tct ac
ggat ccg at ctt gga gat gat taa ag gcc caa cgc aag aaaa at tct ac
Tyr I I eVal Gl nGl uGl uLys Asn Tyr Ar Gl uSer Leu Thr Hi sCys Ar Gl I eAr Gl y

t acat cg tgc agg gag agg a ga a ct ac agg ga at ccc t gac c cat cc gggt t

t acat cg t cgc
Gl yMet Leu Al aMet Pro Lys Asp Gl uAl aAl aAsn Thr Leu Leu Al aAsp Tyr Val Ser
gaat gct agc cat gcc caa cgc aag act ct gct gct gact ac gt ct cc
Lys Ser Gl yPhe Pe Ar Arg Val Ph Gl eGl yVa l Asn Asp Leu Gl uArg Gl uGl y

nTyr aagagt ggc tt ctt ccc gggt gt t cat cgg gggt gaa gc ac tt ggag gg agg ggt cag at

Val Phe Thr Asp Asn Thr Pro Leu Gl nAsn Tyr Ser Asn Tr pLys Gl uGl y uPr oSer
gt gt t cac ag at ac act cc cct gc gaa act ac ac gac t gga agg agg ggt gac cc ac gc

Asp Pro Tyr Gl yH sGl uAsp Cys Val Gl uMet Leu Ser Gl yAr gTr pAsn Asp Thr

gacct c t ctc cct ggt gat gtt taa agct ttt ttt ttt cc gaa ctt cag t cact t g

Gl uCys His sLeu Thr Met Tyr Ph eVal Cys Gl uPh el eLy sLys Lys Leu Asn Asp
gact ggc at cct ac cc at cc t gct ct gtt gt gaa t cat c caa a ga a a gact gat gac
cag ac acct t aa t g t t c t t t t c t g c t a c t g

Il I ePh eGl uAl aGl nLys I I eGl uTr Ph sGl u***
at ctt c gc agg ca ca aaat c g a t g gc ac t gag t a a g c t

t a a g a c tt cgt ctt ttt tcc a gct ct c c t c ga a

Figure S11. Mannose Receptor CRD 4 (MMR CRD 4)

Met Al aLys Cys Pr
at gcc caa at gct cc
t ggcc caa at gct cc

oGl uAsp Tr pGl yAl aSer Ser Lys Thr Ser Leu Cys Phe Lys Leu Phe Al aLys Gl yLy

agaggatt ggggt gct c cag t aaaa aag ct gtt acct aacct ct gt t gca aaaa gga a

agaggatt ggggt gcc

sh sGl uLys Lys Thr Tr pPhe Gl uSer Ar gAsp Phe Cys Ar Gl aLeu Gl yGl yAsp Le

acat gaga aaaa ac act gtt taa gat c cg a t ttt ttt ttt gt t a g a c t ct g ggt ggag at c t

uAl aSer I I eAsn Ser Lys Gl uGl nGl nAl aI I eTr pAr gLeu Val Thr Al aSer Gl
gact agt at caa t aag g a a g gc a cga a c a gcat a t gg aa tat g a ac gct ag t g gg

ySer Tyr Hi sGl uLeu Phe Tr pLeu Gl yLeu Thr Tr yGl ySer Pr oSer Gl uGl yPhe Th

gacc ac at ca a c t tt t ttt ttt ttt ttt g gg ac t gac t at a gaa gt cc t tt cc g a g g ct t t t c

rTr pSer Asp Gl ySer Pr o Val Ser Ty r Gl uAsn Tr pAl aTy r Gl yGl uPr o Asn An sTy

r t g g a t g at cc c c t g t g t c at gat aaaaa tt ggg c t t t g g a a cc t c a a a a a

r Gl nAsn Val Gl uTr yr Cys Gl yGl uLeu Lys Gl yAsp Pr oGl yMet Ser Tr pAsp l

t c a a a t g t g a at c t g t g a t t a a a g g t g a c c c t g g t at g c t g g g a t g a c t

eAsn Cys Gl uHi sLeu Asn Asn Tr pI I eCys Gl nI I eLeu Asn Asp l I ePh eGl uAl aGl
t a ac t g gact at cc t a a c ct g g g g t g c c c g a c t g a t g a c t c t c t g c g a c c t a

gaat g t t g a c t c t t c a c c g c t g a ct g at c t c t t c a c c g c t g a c t g t

nLys I I eGl uTr Ph sGl u***
gaaa at c gc a t g gact gat ag
t t t t t a g c t c a c c g c t g a c t c a t c
Figure S12. Mannose Receptor CRDs 4 and 5 (MMR CRD45)

MetAl aLys CysPr
at ggc ccaaat gt cc
tgg ccaaat gt cc

oGlu uAsp Trp PgL yAl aSer Ser Lys Thr Ser Leu Cys Phe Lys Leu Phe Al aLys G yLy agaggatt tgggt gcct ccagtt aaac aagcgt ttt gt gct t ccaacct gtt t gc t cacaagggaa
agaggatt tgggt gcc

sHi sGlu uLys Lys Thr Trp Phe G uSer Ar g Asp Phe G yAsp Ar g Al aLeu G yGlu yAsp Le
acat gagaagaaacgct tgg t t gaa act ctc cgagat ttt t gat gaga gct ct ggg t gaga gct ct gg

uAl aSer l l eAsn Ser Lys G uGlu uGlu nAl al l eTrp Ar g Leu Val Thr Al aSer G
agct agt at caat aagtagagacagcaagcaaat at ggagat t agt aacg gct agt gg

ySer Ty r Hi sGlu uLeu Phe Trp Phe G yLeu Thr Ty r G ySer Pr Ser G uGlu yPhe Th
agct acc act at ttt t ggt t ggacct gacat at ggaagt cct t ccaaggt ct t t ac

r Tr p Ser Asp G y Ser Pr Val Ser Tyr G uAsn Trp PAl aTy r G yGlu uPro Asn Asn Ty
agct gcct ggt at gcat at aaaa a t gggct t aat gaga aacct aat aat a

r G nAsn Val G uTyr Cys G yGlu uLeu Lys G yAsp Pr G yMet Ser Trp Asn Asp Pl l t caa at g tt gaagtt ct ggt aggt t aaaaagt gcaccct gtt at gtcct ggaat gacat
eAsn Cys G uHi sLeu Asn Asn Trpl l eCys G nl l eAr g Lys G yGlu nThr Pr o Ly s Pr
taact gtaa act ctc t aac act g t gtt t ggcagat acgaaagggc aacact cccaaacc

oGlu uPro Trh Pr oAl aPr oHi sAsp Asn Leu Pro Val Thr Asp Asp G yTrp Val Pl l eTy
tgagcc acc cac agct cct cc cga aac t cct caa gct gat g ggt t ggt ttt ttc

r Lys Asn Tyr G nTyr Tyr Phe Ser Lys G uLys Al aThr Met Asp Lys Al a Ar g G uPhe
caaa ac t act at ttt t t cag ctag gagggc aacacat gca c cgcac gc gaatt
eCys Lys Ar g Asn Phe G yAsp Leu Val Ser l l eAr g Ser G uSer G uLys Lys Phe Le
tgc aagaggatt ttt ggt gat ct t t gtt t cct cc gaagtt gaaat gaaagagtt cct

uTr p Lys Tyr Val Asn Ar g Asn Val G nPr oAl aTy r Phe l l eGlu yLeu Leu l l eSe
at ggaat at gt gcaa ggat gat gt acag cc ggc at ttt a gtt t ta tt gat cag

r Leu Asp Lys Tyr Phe l l eTrp Met Asp G ySer Lys Val Asp Tyr Val Al aTr p PAl aTh
tct gtag aaaa aat ttt t ggt gat ggac gaa aagt g gat gt ggct t gggcc ac

r G yGlu uPr o Asn Phe Al aAsn Asp Asp G uAsn Cys Val Thr Met Tyr Ser Asn Ser G
aggt gaac cc ccc aat ttt ccaaat gat gaa act gc t gta aac at ct t caa at c cag

yPhe Tr Pr Asn Aspl l eAsn Cys G l yTyr Pr o Asn Al aPhe l l eCys G nAr g Leu Asn
agtt ttt ggt gaa at tct c aac t gcc ttc c t gcc cgg cct gaa gat ga
agtt t aac g gat aag cc g gtt cgc ggac t t act

pl l ePhe G uAl aG Gl yLys l l eGlu uTrp Hi sGlu u***
cat ctt ccc aag cca gaaaat c cga gt c gca at g a

at g t aaga agc tt cgt gtt ttt t ag ct a ccc g t a c t c a t c c
Figure S13. Langerin CRD

```plaintext
MetAl aGl nVal Val Ser Gl nGl yTr pLys Tyr PheGl yGl yHi sPheTyr
gat gat t aaat ggc ccaggt ggt tct ccaaggt ggaag t act t cggggg cac t ct a
gat gat t aaat ggc ccaggt ggt tct ccaaggt ggaag
gggatccgatcttggag

gggatccgatcttggag

Tyr Phe Ser Ser Lys Thr Trp Tyr Ser Al aG nG nI l eCys l l eSer Ar gAsp
t act t t t ct aaat ct cgaaga ct ggt acag t gccccac gga t ct a t at c gaag gc
Ser Hi sLeu Thr Ser Val Th r Ser Gl uAr gGl uG l uPhe Leu Tyr Ar gThr Al aGl y
t ccaacact gac cc ct gact gac ct cag acgcg t gaa acg gat t c ctc acag gag cac gcgc

AspGl yThr Pr oTyr AsnLys Val Gl nSer Gl uLys Phe Pr ePl l ePr oGl yG l uPr oAsn
gat gg ccct cc act ggat cg gcct gac c acg t aag gg gaa gg gtc gat gat t ccag gaga ac ccac

AsnVal Gl yAsn Asn Gl uHi sCys Val Thr Leu Lys Thr Ser LeuLeu Ar g Ser Tr pAsn
aac g t gc gcct cc act ggat cc g cac ct gcgc ct ggt gat gat t ccag gaga ac ccac

AspAl aPhe Cys Asp Th r Phe Leu Ph e l eCys Lys Ar g Ser Tr y Lys Pr o Ser Gl u
gat gc cc t ct gtc gaa at aac at t t cct t t t at ct a ag gcg t cct a at aacc at caga

ggatccgatcttggag
ggatccgatcttggag

Pro Leu Asn Asn Pl l ePhe Gl uAl aGl nLys l l eGl uTr pHi sG l u***
cca ct gaa t gac at c t t cga ag cac caa aaa at c ga g gat g ga t agg a t t c
cca ct gaa t gac at c t t cga ag cac caa aaa at c ga g gat g ga t agg a t t c
```

Figure S14. DC-SIGN CRD

```plaintext
MetAl aGl yLeu Cys Hi sPr oCys Pr oGl nAsn Tr pGl uPhe Phe Asp Gl y
gat gat t aaat ggc ccg cc ct gtc gc c at c ct gcgc cc at t tt cc t cc gat g gat t aaat ggc ccg cc ct gtc gc c at c ct gcgc cc at t tt cc t cc
gggatccgatcttggag

gggatccgatcttggag

Ser Cys Tyr Phe Phe Ser Tr pTh r Gl nSer Asp Tr pAr g Ser Al aVal Se r Al aCys Le u
agct gct act t t ct cct cct gc c gc cc at cc gat g c t t t cc cct cc
gggatccgatcttggag

gggatccgatcttggag

Leu l eGl yAl aHi sLe u Val l l eGl u Ser Th r Gl uG l uLys Phe Leu Asn Phe
ct t at t ggc ccg cc ct a ct t a ct c gc cc c c ct cc gcc a c c a c c ct ggt g t c t g t g
Tr p Tyr Pr oAr g Asn Asn Lys Pr oTr p Pl l eLe u Ser Asp Hi sHi s Se r Gl u y
tg t gc t t cca cca aat aa aacc c c ct gga t gc cc c c gat g c c cc c c ct g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t g g a t
Figure S15. Prolectin CRD

MetAl aLe
ggat ccgat ctt ggaggat gat t aaat ggccct t
ggat ccgat ctt ggaggat gat t aaat ggccct t

uAspCysThr Ar gVal Thr Cys Pro G uG1 yTr pLeu Pr Phe G nG1 yLys Cys Tyr Ty
agact gt acc agg gtc cacc t gct ccc ctt t t cag ggt aag t gt t act a
agact gt acc agg gtc cacc t gct ccc ctt t t cag ggt aag t gt t act a

r Phe Ser Pr Ser Thr Lys Ser Tr pAsp G uAl aAr gLys Phe Cys G nG1 uAsn Tyr Se
t ctt ctc ctc caag ccag ccaag gtc tgc ggg ggg gat gtt agg cca aat t c

r Hi sL euVal l l eL eSer Asn Ser As pG1 uG1 nAsp Phe Val Al aLys Al aHi sG1 ySe
t cact t ggt cat cag t aact c t gat gaacag gact t t gat agc cag gct cag ggt c

r Pr oAr gVal Tyr Tr pLeu yL eu Asn Asp Ar gAsn Val G1 uG1 yAsp Tr Pr gTr pLe
t cca cgg ggt gtc ggt cgg ggt gat cac gaa aag t gct cgg ggg gc gtt ggt
ggat ggt cac ctc gct cag ctc t gat ggg ccc caag gaac cc ac aac c t c t a

nAsnG uAsn Cys Al aSer Me t Asn Lys G1 yG1 yThr Tr pAsn Asp Leu Ser Cy s Asp Ly
t aat gaga act t gc cag ctc t c t gat gc aac ctc ctt cgt gac a

s thr Th r Tyr Tr p l l eCy s Al uAr gLys Cy s Cy s Al aLe uAsn Asp Pl l e Phe G1 uAl
aacc cag t att gga attt gt gag cgg aag a t gtt c tc gct gac t t tc gaa gac
acactgccttttaacaggacac gggacttactgtagaagcttcg

aG1 nLys l l eG1 uTr pH1 sG1 u***
acagaaaat cgag tcggat ggt cactg ag
tgt cttttagct caccgt act cat c

Figure S16. CD23 CRD

MetAl aAsnG ySer Val Cy s Asn
ggat ccgat ctt ggaggat gat t aaat ggccac ggc t cgt gtc gca c

Thr Cys Pro G1 uAl aTr p l l e T yr Phe G1 nLys Lys Cy s Tyr Ty r Phe G yG1 uG1 yV a1 a
acgt gc ccc gcag gct gat ct t t c c a a a g a a g t gc t act t t c g g g g g g c c
acgt gc

Lys Lys Tr p l l e G1 nAl aAr g Tyr Al aCy s G1 uAsn Leu Hi s G1 yAr g Leu Val Ser l l e
aaga aat g gat ccag cc ggt acg ctc gtt gaa aat ct gc cgg cgg g gct gtt t a q c t c

Hi s Ser Pro G1 uG1 uAsp Ph e Leu Th r Lys Ar GAl aAsn Tr Pr Ar g1 ySer Tr p l l e
ca cag ccc cag agg g ac g g ac t t c c t g c c a c c a c g t gc a c t g g a g g g g c t c c t g g a t t
Gl yLeu Ar g As p Le u As pl l e G1 yG1 yPh el l e T y r P m e t Asp Asn G1 nPr o Le u Asp
 gc t t c c g g c a c t t g g a a t t g g a a g g g g t t t c t g g a t g g a c a c c a c g g c c c t c t g g a c

Ty r Ser Asn Tr p G1 nPr o G1 yG1 uPr o As n As p Al aG1 yG1 nG1 yG1 uAsn Cy s V al Me t
t ath gg a c t t g g a a g g g g g a g t t t c t g g a t g g a a g g g g a c t t t c t g g a a g g g g a c t t t c t g g g
cac

Met Le u G1 ySer G1 yLys Tr p As n As p Al a p e Cy s G1 ySer G1 uLe u Hi s G1 yT r p V al
a t g c t g g g c t c t g g a a g t g g a a g g c c t t c t g t g g a a g g g a c t t c t g g t g g g
cac

C y s Asp Ar g Le u Al aTh r Cy s G1 yLeu Asp Pl l e Phe G1 uAl aG1 nLys l l e G1 uTr p
t g g a c c g g t g g c c a c t g g a c c g c t g a t t a c t t t c a a g c c g a a a a t c g a g t g g
cactgcctgcgcacgccggtgcacgcgccacttactgtagaagcttcgggctttagctcacc

Hi s G1 u***
cat gagt aggaaat t c
gt act cat ctt t aag
Figure S17. LSECtin CRD

Met Al aSer Ser Cys Lys Gl uCys Pro Gl
ggt ccc gat ctt gggag gat ttaaat ggc cag ct cc gcc gaa agt gccc cga
ggt ccc gat ctt gggag gat ttaaat ggc cag ct cc gcc gaa agt gccc cga

uSer Tr pLeu Pro pHe Phe Ser Thr Leu Arg Al aThr Tr pVa
gt cgt ggc gtt tccag ggt tctct gtt act tct ttt cc ac gct gc gg cc ac gct ggg t
g

I Gl uAl aG nG nH sCys S uArg s Gl yAl aH sLeu Val I l eVal G yGl yLeu Gl
gag gcc ca gca gc ac t cc gcag cct cc gc gcc gc ac ct ggt gat agt cgg ag gc tt gga

uGl uG nG yPhe Leu Ser Ar gAsn Thr Ar gG yAr gG yTy r Tr pLeu Gl yLeu Ar gAl
gag cag ggt tt cct gaa t cc gcag cct gg cgt tgc cgt ccgc cc ggc ttt t ggt ggc cc tcag gc

aVal Ar gLys Val Ar gArg I l eG nG yTy r Gl nTr pVal Asp Gl yVal Al aLeu Ser Ph
cgt gc gcag ggt ggc cag gat ccag ggt tgc cgt ccgc cc ggc ttt t ggt gac gc ggt gtc gc gc
eSer H I sTr pAsn Ar gGl yP r P rAsp sGl yAr gGl uAsp P yS I l eM e
cag ccac cct gaa t cc ggg gac ccc ca cc ac gct ct at ggc gc gc ag ggt gtt t gc t at cat gat
tLeu Ar gThr Gl yM eTr pAsn Asp Al aPr oCy s Asp sGl uAs n Asp Asn Tr pl l eCy
gct ccgc cc ggg gat ggt gga ac gc gc cc ac at ct g gac at tt gc t g t g t t t g ac ct ca cc gc

sG uLy s Ar gLe uSer Cy s Gl yLe u Asn Asp Pl l ePhe Gl uAl aG nLys I l eG l uTr p H I
t gaa ag gg cc t cag ct g gct gt g gat gac at ct c gaa gc cag aa aat c gat g gc a
c t c t ct cc gcag tc gc gc gc cag ct tc t ct g gac at tt gc t g t g t t t g ac ct ca cc gc

sG u***
t gaa t ggt t
act ca t ca a

Figure S18. Endo180 CRD 2

Met Al a

ggt ccc gat ctt gggag gat ttaaat ggc cag ct cc gcc gaa agt gccc cga

Val G l uCys G l uPro Ser Tr pG l nPro pHe Gl nG yHi sCys tyr Ar gLeu Gl nAl a Gl u
gt gq ag t g t gac c gcact ggc acgc cc t tcc ga ccgc ac ct gct ac gc t gc gaa tag g

Lys Ar gSer Tr pG l nG uSer Ly sLy sMet Cy sLe uAr gG l yG l yG yA sp Ly sLe uSer
aag gc ag t gccg agagt cc gag aag at gt g t gc gc gc g ctc t gc g g gtc t g g g g

l l eH i s Ser Me t Al aG uLe uG e Ph e l l eThr Lys Gl n l l eLy sG l nG uVal G l uGl u
at c cac cgc at ggc gcag t gcg agt gcg ttc at cac aac gc at aac gc ga ggt g gg ag g

Leu Val pl l eGl yLe uAsn Asp Le uLy sLe uGl nM e t As nPhe Gl uTr p Ser Asp Gl ySer
c t ggt t ggt tct ca ac gac ct gaa at gc gaa t g gat t t t g gat ggt cc gc ac gc gc g

Leu Val Ser Phe Thr Hi s Tr pH I sPr oP he Gl uPr oAs nAs nPhe Arg Asp Ser Leu Gl u
c t ggt ggt gc ac ca cct gc cact ctc tc gg c ac cc ttc t ggc ac cc aa cc ttc cc ggc ac cgc t gc g

A sp Cys Val Tr l l eTr pG l yPr oGl uGr yAr gTr pAs nAs p Ser Pr oCy s As nG l nS er
g act g t gtc c at c c t cc gc gcg gaa ggt gcg tc g t gc gc ac ca gtc cct gct g t a cc ag t cc

Leu Pr oSer ll eCy S Ly sLe uAs nAs p Pl l ePe h e Gl uAl aG nLys l l eG l uTr p Ph s
c t gc gc gc act c t c g c a g gc t g gat gac at ct tc gaag cc a gaa as at ct ga gtc gg c a t

Gl u***
gag t gga at t c
Figure S19. Mincle CRD

MetAl aCysProLeuLysTrpPheHis sPheGlu nSerSer
ccgatctttggaggaggtatataattgccttcacacctgaaggttccatttcctaattccacgc
ccgatctttggaggaggtatataattgccttcacacctgaaggttccatttcctttcc
CysTyrLeuPheSerProAspThrMetSerTrpArgAlaSerLeuLysAsnCysSerSer
ccgatctttggaggaggtatataattgccttcacacctgaaggttccatttcctttcc
MetGl yAl aHi sLeuValVal11 eAsnThrGl nGlu uGlu nGlu uPheLeuTyrTyrThr
atgggtcactctgggtgttagtatcataccacgcaggaggageaatctcttttaccttaca
CysTyrLeuPheSerProAspThrMetSerTrpArgAlaSerLeuLysAsnCysSerSer
ccgatctttggaggaggtatataattgccttcacacctgaaggttccatttcctttcc
MetGl yAl aHi sLeuValVal11 eAsnThrGl nGlu uGlu nGlu uPheLeuTyrTyrThr
atgggtcactctgggtgttagtatcataccacgcaggaggageaatctcttttaccttaca

Figure S20. Dectin-2 CRD

MetAl aLeuThrCysPheSerGl uGlu yThrArValThr
ccgatctttggaggaggtatataattgccttcacacctgaaggttccatttcctttcc
CysTyrLeuPheSerProAspThrMetSerTrpArgAlaSerLeuLysAsnCysSerSer
ccgatctttggaggaggtatataattgccttcacacctgaaggttccatttcctttcc
MetGl yAl aHi sLeuValVal11 eAsnThrGl nGlu uGlu nGlu uPheLeuTyrTyrThr
atgggtcactctgggtgttagtatcataccacgcaggaggageaatctcttttaccttaca
Figure S21. Dectin-1 wild type extracellular region (Dectin-1 WT)

MetAl aLeuAsnAspI l ePheGl
taat ggccct gaat gacat ctt cga

uAl aGl nLysI l eGl uTrpH I sGl uGl ySerGl yI I eTrpArgSer Ser Gl yAsnAs
gacacagaaaa ctgagtt gcat gaagat ct ggt att tggagat ccagt t cagggaaacaa

aaagat ct ggt at t tggagat ccagt t cagggaaac

nLeuLeuLysSer AspSer PhePro oSer Ar gAsn Lys Asp AsnG nSer Gl nPro oThr Gl
t c t g t g a g a g a g t gacacg ttt cccaat caagaaat aaagacaacagagt caacccacaca

nSer Ser LeuG l uAspSer Val I l ePro Thr Lys Al aLeuThr Thr Gl yVal PheSe
at c t t t t a g a g a g at g t g at acct accaaggtct cagacaccagagaatttt ctc

r Ser Ser CysPro oProAsnTr pI l eThr Hi sGl uAspSer Cys Tyr LeuPheSer Thr Le
tagct ctt gt cccccc taact ggat cacaat gaggat agct gt t at c t a t t a gacact

uLeuAspSerTr pAspGl ySer LysAr gGl nCys PheGl nLeuG l ySer Hi sLeu LeuL y
attagat cct gggat ggaagt aaagacaat gctttcaact cggctc t catt cct gaa

sI l l eAspSerSer LysG l uLeuGl uPheI l eSer Ar gGl nVal Ser Ser Gl nPro oAspHi
gatagacagct cttgagtt t at at c t a c g g c a g g t g c t c t c c a g g c t gat ca

sSer PheTrpl l eGl yLeuSer Ar gArgGl nThr Gl uG uPro oTr pLeuTr pGl uAspGl
tcattttggat agggcttt ctcgcccgt cagacagaagact cggctc t cggagagt gg

ySer Thr LeuLeuSer Asn Leu PheGl nI l e Ar gSer Thr Val Thr Gl uLys Asp Ser Se
tccaccttttg t gct caact ggct c c t c c a a a t c g a a g t acagt t a c c g a a a a gact c t c

r Hi sAsnCysAl aTrpl l eHi sVal Ser Asp Gl eTyr AspGl nLeuCys Ser Val Hi sSe
tcacaact g t gcat g gat ccag t g cat g c a g c t t t a c g a c c a a c t t g t a g g c t a g t gc t t c

r Tyr Ser I l eCysGl uLysLysLeuSer Val ***
atcagtt t t g t gagaagaagt gt cag t a a a a g g c

** t c t c a c a c g t c a t a t t t c c c g

**
Figure S22. Dectin-1 mutant extracellular region (Dectin-1 Mut)

MetAl aLeuAsnAsp l l ePheGl
taat ggccct gaat gacat ctt cga

uAl aGl nLys l l eGl uTrpH l sGl uGl ySerGl yl l eTrpArgSerSerSerGl yAsnAs
gacacagaaat cgaat ggaat gat att tgtt ggaat ccagt t cagg gaac a

aaagat ct ggt at tgtt ggaat ccagtt c cagg gaac

nLeuLeuLysSerAspSerPheProSerArgAsnLysAspAsnGl nSerGl nProThrGl
tct tgt gaaagttt gacac gtttt ccat c a gaat aaagc acca caggt c aac cc aca

nSerSerLeuUq uAspSerVal l l eProThrLysAl aLeuThrThrThrGl yValPheSe
ata ctt tgttaagaagat aggt tat acct accaaggct t ctc a ac c a a c a ga ggt gtttt ctc

rSerSerCysProProAsnTrpl l eThrH l sGl uAspSerCysTyrLeuPheSerThrLe

tagct ctt gct c c ccct aacct cggat cacacat cagga t a gct gtt ttct at t cat t a gc a c act

uLeuAspSerTrpAspGl ySerLysArgGl nCysPheGl nLeuGl ySerH l sLeuLeuLy
atatag t cct ggat ggaat aaagac a ca t gct t g ca c act c t gct c t c t gaa

sll eAspSerSerLysGl uLeuGl uPhe l l eSerArgGl n Val Ser Ser Gl nProAspHl
gat agacagct c a a a ga gttt gat a t c t c ac c c c agct c t gta

sSerPheTrpl l l eGl yLeuSerArgArgGl nThrGl uGl uPr0 rPLeuTrpPGl uAspSe
	t c atttt t gat a gggcttt c tcgcgc gt cagacagaa cacat ggct c t g g g a g t a g

rSerThrLeuLeuSerAsnLeuPheGl n l l eArgSerThrValThrGl uLysAspSerSe
tccacct t gtt gttct aacct gtt cc a a c tt c t g a gtt t c cc c c g a g g t t c t g

rHi sAsnCysAl aTrpl l eHl sVal Ser Aspl l eTyrAspGl nLeuCysSerValHl sSe
t c a a c act gt gcat ggt tat ccat gtt tac gaca tttta c a c ca a c a c t t g t a g t g ca t t c

rTyrSer l l eCysGl uLysLysLeuSerVal***
at acagt at tt gt gagaagaag t gt c agt at a a a g g g c

 ttct caacagct c at attttt c c c g
Figure S23. Asialoglycoprotein Receptor subunit 1 CRD (ASGPR1)

```
MetAl aSer CysG l nMet
ggat ccgat ctt ggaggat gatt t aat ggccagct gt cagat g

Al aVal LeuG l nG yAsnG l ySer G l uLysAl aCysCysProVal AsnTrp Pl I eAspTyr

G l uG ySer CysTyr TrpHeSer Ar gSer G l yLysProTrp pPr oG l uAl aG l uLysTyr
gaaggcagct gt t act ggt t cct cct cgct cccggaagccct ggc cagaggt c gagaat ac

CysG l nLeuG l uAsnAl aH i sLeuVal Val Val G l ySerTrp pG l uG l nLysPhel I e
t gccagt t ggagaat gcc cacct ggt ggt ggt gggct cct gggagagcagaa at t t at c

G l nH i sH i sMet G l yProVal AsnThr Trp Pl I eG l yLeuMet AspG l nAsnG l yProTrp

cacgccacat gggccct gt aat acct ggt aggct ct cat ggt aaaa at gggccct g g

LysTrpVal AspG l yThr AspTyr G l uThr G l yPheLysAsnTrp pA l aProG l uG l nPro

aaat ggtt ggacgggacgacct acagagcggtggt t ccaagaact gggacccagacagcc a

AspAspTrpTyr G l yH i sG l yLeuG l yG l yG l uAspCysAl aH i sI l eThrVal Asp
gat gact ggt at ggcagc gggct cggagggggt gaagact ggt gccacat cacggt ggac

G l yAr gTrpAsnAspAspVal CysLeuArgprTyr Ar gTrpVal CysU l aG l nAr g
ggccccgt ggaat gat gacgt ct gcct gaggccct accgct ggtt ct gt gaggccacagcg

gtcgccccc

AspG l yG l yAsnAspSer LeuAsnAspL l ePheG l uAl aG l nLysI l eG l uTrpH i sG l

gagcggagcct gacagccct gaat gacat ctt cgaagcacagaa at cagat ggc ct gagct ct cct

tact gtt ccgacct t act gtaaagct t cgt t ctt t agct caccct act c

***
taggaatt t c
at ccct t aag
```
Figure S24. Asialoglycoprotein Receptor subunit 2 CRD (ASGPR2)

MetAl aThr Cys Gl nMetAl a
atggccactt tgt cagat ggca
tggccactt tgt cagat ggca

His Phe Gl nSer Asn Gl yThr Gl uCys Cys Pro Val Asn Tr p Val Asp Hi s Asp Gl y Ser
cacct tc cagagc aaat gcgc ac gaga at gct g cccag t ga act gggt gg accat gat gg cac gc
caaccttcag

Cys Tyr Trp Phe Ser Arg Ser Gl y Lys Pro Trp p Leu Gl a Gl u Lys Tyr Cys Gl n Leu
tgct act ggtt tc t ct cgc t cagg gaac ccct gg cc c cag gct gaga at g ct g c ca g c t g

Gl u Asn Al a Hi s Leu Val Val l l e Asn Ser Ar g Gl u Gl u Lys Phe Gl l e Val Gl n Hi s
gaga at g cccac cct cgt ggt cat c at ca act ccag ag gaac caga at tc at t gt ca aac ac

Thr Asn Pro Phe Ar g Val Tr pl l e Gi y Leu Thr Asp Ser Asp Gl y Ser Tr p Lys Trp p Val
acaaaccccttt ttagct cggat aggt ct cact gcac gc gat ggtc cct ggaat gggt g

Asp Gl y Thr Asp Tyr Lys Hi s Ser Tyr Lys Asn Tr p Asp Pro Al a Gl n Pro o Asp Asp Tr p
gac gc acag act caa g cca cag ct caa ga at g ggtt c c c gct cag c c c gat g ac t gg

Arg Gl y Hi s Gl u Leu Gl y Al a Ser Gl u Asp Cys Al a Gl ul l e Ar g Tr p Asp Gl y Ar g Tr p
cgggggc acag acgt ggggg cc c gc g agg gact gt gcag agat cag at gg gat gg g gc t gg

Asn Asp Asp Phe Cys Gl n Gl Val Lys Ar g Tr p Val Cys Gl u Thr Lys Ar g Asn l l e Thr
aat gcag at t ct ct gcag caa gt gaaac gct gggt gt gt gqacaa agcg cc gac at ca cc
cc ctt gtt tc gcct t g t agt gg

Met Leu Asn Asp Gl l e Phe Gl u Al a Gl n Lys l l e Gi u Tr p Hi s Gl u ***
at gct g aat gcac t cc t c gaag c caa aaat c g a g t gc c at g a g t t a g t ta gg
tagcacttactgtagaagctctgt tttttagctcaccgtactcatccttaag
Figure S25. Macrophage Galactose Receptor CRD (MGL)

Met

Al aLeuThr CysLys Met AspAl aLeuLys Ser AsnGl ySer Gl nAsnThr Al aCysCys
gcct gcacct gcagat ggtct ct caagagcaat ggct ct caaaaacagcct gct gt
gcct gcacct gcagat ggtct ct

ProAl aAsnTrp LeuGl uHi sGl uGl yHi sCysTyr TrpPheSer Ser LeuArg CygPro
cgcc gcacct gcagat ggtct ct caagagcaat ggct ct caaaaacagcct gct gt

TrpProGl uAl aGl uLysAspCys Gl nLeuLys AsnAl aGl nLeuVal Val I I eAsnSer
tgcc gcagagct gagaagacct gccaact gaagaat gccaacct ggt act cat ccaact cc

ArgAspGl uGl nAspPhel I eG I nAl aAsnLeuHi sProTyr PheThr TrpMet G I yLeu
gagacgagcagagat ttct at ccaggcccaacct acat cctt act t cacct ggt act aggccct c

Ser Asp Pr oAspGl yVal TrpLys Trp Val AspGl ySer AspTyr G I uThr AsnI eLgT
gat cgc ggt gc ggt act gaaat ggtt ggt cggact at gagaccacacat caag

AsnTrp pLys ProGl yG I nProAsp PheHi sG I yHi sG I yLeu Gl yGl yG I uAsp
aat t gaaagccccagccagccggcagact cttct cat ggc gact ggt act gggggct aggac

CysAl aH sPheTyr ProAsp Gl yG I uTrp Asn AspAl aCyGl nArg Leu Tyr Tyr
tgt gcacct ttt act ggt act ggaat gacag tgcct gc ccaagact ct act ac

TrpI eCysGl uAl aG I yLeuSer Gl nVal Gl sAsnLys Met Gl sLeu Asn Asp I ePhe
t ggt act gcg gaggct gact gac gaaagct acacact aaaaat gcacct gact gacct cct c
cct gact ccgt tcat gt ttat tt at acgt ggact t t act gt aag

Gl uAl aG l nLys I eGl uTrp Hi s***
gagacgcagaaat cgagt gcct ggt aggact t
cct ccgc tct ttat gat caccgt act cat cctt aag

Figure S26. Scavenger Receptor C-type Lectin CRD (SRCL)

Met Al aG I uAsp Asn Gl yCysLeu ProTyr Trp Lys Asp Phe Thr Asp Lys Cys Tyr Tyr
at gcgcc gaggaca acggct gcct gcctt act gga gaaact ttc aca gac ccaat gct act at
gccgc gaggaca acggct gcct gccttt ac

Phe Ser Thr Gl uArg Gsp Phe Phe Gl uAsp Al aLys Leu Phe Cys Gl uArg Met Ser Ser
tttt caact gaggact tttt tttt gaggact gcagaaact ttttt gcaaagact gt tttt ca

Hi s Leu Val Phe I eAsn Thr Gl yG I uG I uG I nTrp Pl I eLys Asn Gl nMet Val Al aCat t cgt ttt tt cttt ctaaaagccggagaggcagcagact gat cc aaaaaccagcat gttt ggc

Lys Gl nAsn Tyr Trp I eG I yLeu Thr Asp Leu Gl uG I uAsn Gl uTrp Arg Trp Peu
aaacaga act act ggt act gcggct caag cgaact tttt gggact gaaagat tttt tttt gggct tttt gggc tttt tttt tttt

Asp Gl yThr Leu Leu Gl uTyrr Lys Asn Trp Lys Al aG I yGl nPro Asp Asn Trp Gl yHi s
gat gcggact tc ggct act gaaagat tttt gggact gaaagct gcagaaact tttt tttt
gct act cat

Gl yHi s G I yPro Gl yG I uAsp Cys Al aG I yLeu I eAsn Phe Gl yG I nTrp Asn Asp Phe
gccgc gaggct gagaagact tgcgc gcact gact gatt aatttt gggcag ct tttt tttt

Pro Cys Gl uAsp Met Asn Hi s Phe I e Cy Gl uLys Asp Arg Gl uArg Gl uLeu Al I eLc
cat tttt ga gact cat ctc gcgcagagcagcaaaaat ccagct ggtt gagat gaaagtt t

tttt tttt tttt agcct caccgt act cat cctt aag

Thr Leu Leu Asn Asp I ePhe Gl uAl aG I nLys I eGl uTrp Hi s***
acatt act gaa act t ctc gaaagct ccaaaat ccagct ggtt gagat gaaagtt t
tttt tttt tttt tttt ccact tttt tttt tttt tttt tttt tttt tttt tttt
Figure S27. Kupffer Cell Receptor CRD (KCR CRD)

**Met** Al a

ggat ccgat ctt ggaggat gat t aat ggcc

ggat ccgat ctt ggaggat gat t aat ggcc

Tyr Ser Gly Ser Leu Tyr Ty r Phe Ser Ser Al aLys Lys Thr Tr p Gl nGI uAl aGI uGI n

tacagt gggag ct t g t a t c t c t c tacctt cct gccaagaagacgg ggcaggagggcg acag

tacagt gggag ct t g t a t c t c t c tacctt cct gccaagaagacgg ggcaggagggcg acag

Phe Cys Val Ser Gl y Gl y Leu Al a Ser Val Th r Ser Gl uGI uGI uLys Thr Phe
t c t g t g t g t c c c a t g g g c c c a c c t g g c c t c g g t g a c c t c g g a g g g a g a g a g a c a t t t

Leu l eGI nPhe Thr Ser Ser Val Ty r Hi s Tr p l l eGI y Leu Thr Asp HI sGI yThr Gl u
c t g a c a g t t c a c g a g t t c t g t t a c c a c t g g a t t g g g c c t c a c t g a c c c a g g t a c g g a g

Gl yGI sTr pAr gTr pThr AspGl yThr Al aPhe Asp Ar gAl aAr gSer Ar gAl aPheTr p
ggccacct ggcgcct gcacagat ggcacagcacctcgat cgt gcggaggagccgcgt gcgt t t t g g

Al aGI uAsnGI nP r Asp Asn TrpGl nHI sGl yGl yGly nSer GI uAsp Cys Val Gl n
gct gagaat cagcagat aacct gggcaacagcgt att gggcaat cggaagactgt gtc ccag

Met Gl nGI nLys Tr pAsn Asp l l eSer Cys Ser Thr Leu Cys Ar gTr p l l eCys Lys Lys

at gcacagagat ggaat gacat at cct gct c c a c t c c t g cc g c t g g a t c t g g a a g a g

Pro Met Val Gl nLeu Leu Asn Asp l l ePhe Gl uAl aGI nLys l l eGI uTr p Gl sGl u***
cct at ggt cca gct gct gaa t gacat ct t cgaagc a c a g g a a t c g a g t g g a t g a g g a t a c c a g g t c c g a c a c t t a c t g t a g a a g c t t c g t g t c t t t a g c t c a c c g t a c t c a c t c
Figure S28. Kupffer Cell Receptor extracellular region (KCR ECD)

MetAl aLeuAsnAspI l ePh
at ggccct gaat gacat ctt
eGl uAl aGl nLys l l eGl uTrpH l sGl uGl ySerThrGl nThrPheValAr gGl ySerLe
gaagcagcagaaaat cgact gggatt cccaccacgccctt ttt gtaaagggcagt tt

ggattccaccagaccccttgtaaagggcaggt
guAspAsnThrSerAl aGl nL l eGl nValLeuAr gSerHi sLeuGlu uAr gAl aGl yGl yGl
gagcagcagaaaat cgact gggatt cccaccacgccctt ttt gtaaagggcagt tt
gaaaggtct gggagt gglact gcccagacccaaacagcaagcag
ul l eHi sLeuLeuLysAr gAspLeuGl uAsnValThrAl aGl nThrGl nThrAl aSerSe
gattctcactt gtaaaagatat ttt ggaagagct gggagt gglact gcccagacccaaacagcaagcag
rHi sLeuGlu nThrAspAl aGluMe tAr gVal LeuLysThrGl uLeuGl uSerAl a l l
tgcct gaat t ccagac t cgt gac t gtaaag ggccctt ttt ggaagagct cgt

eGl aLeuSerSerLys l l eGl nValLeuAsnGlu yLeuLeuAr gAsnAl aSerGl nGl ul l
tgcct gaat t ccagac t cgt gac t gtaaag ggccctt ttt ggaagagct cgt
eGl nThrLeuLysGl nGl yMetLysAspAl aAl aLeuGlu nSerGl nThrGl nMetL
acagcctt aaaaagaat gaagct ggcagagcccctt aacat gcccacccaaat gtt

guAr gSerLeuGl nGl uAl aAr gThrGl ul l eGl nThrLeuAr gLysAspLeuGl yAs
gagcagcagaaaat cgact gggatt cccaccacgccctt ttt gtaaagggcagt tt

guThrLysThrLeuAr gThrThrGl l l eGl nGl uGl nAr gSerLeuGl uSerPheArgTh
ccacccaaact gggacaaaaacctgcagagcagcagaaacct ggtaggt cctt cccgcac
rAl aLeuAl aSerGl nGl uAl nLeuGl nAr gAsnHi sAsnGl nLeuPheGl nLeuPheGl e
agccttt gcctt ccagagcagctt ccagagcagaaacct ggtaggt cctcctt cccgcac

guGl yTrpPlyPheTyrSerGl ySerLeuTyrTyrPheSerSerAl aLysLysThrTr
gcagagt ggaagtctt caacgt gggagctt gttattacttt cttct gcaagagccgat
pGl nGl uAl aGl nPheCysVal SerHi sGl yAl ahGl sLeuAl aSer Val ThrSerGl
ccagaggccgagcaagctct tctgt gtt gccaagccacact ggcct cggct gacct cggga

guGl uLysThrPheLeul l eGl nPheThrSerSerVal TyrHi sTrpl l l eGl yLeuTh
ggcagaaaacctt ggtgacagt ccagagcccact ggcctt gccgt gcagagt gcaccagagctt
rgAspHi sGl yThrGl uGl yHl sTrpAr pTrpAspGl yThrAl aPheAspAr gAl aAr
tgaccagctt acggagggccacact gcgcct gcacagat gcaccagagctt ccagagctt

gSerAr gAl aPheTrpAl aGl uAsnGl nProAspAsnTrpPnl sHi sGl yll eGl yGl nSe
gagcgtt gcctt ggacctatt caacgt actgcgcacagtt gcaacagctt ccagagctt
rGl uAspCysValGl nMetGl nGl nLysTrpPAsnpl l eSerCysSerThrLeuCysAr

ggagggtt gtt gcagagt gcaccagagctt gcacagct gcagagt gcaccagagctt ccagagctt

gTrpl l l eCysLysLysProMetValGl nVal ***
cct ggtact gacagacagct ttt ggcagct gag
cgtt ctcgt cagacggtcagacac
Table S1
Bacterial strains used in this study.

| Bacterial strain                          | Serotype   | Plasmid                  |
|-------------------------------------------|------------|--------------------------|
| Enteropathogenic *E. coli* strain E2348/69| O127:H6    | pACYC184-GFP             |
| Enterohaemorrhagic *E. coli* strain EDL933| O157:H7    | pUltra-GFP/Gm            |
| *K. pneumoniae* strain 43816              | K2:01      | pUltra-GFP/Gm            |
| *K. pneumoniae* strain B5055              | K2:O1      | pUltra-GFP/Gm            |
| *K. pneumoniae* strain B5055nm            | K:-O1      | pUltra-GFP/Gm            |
| *E. coli* strain BL21(DE3)                |            | pET28a-eGFP              |
| *E. coli* strain ClearColi                |            | pET28a-eGFP              |
| *E. coli* strain K12                      |            | -                        |
| *S. aureus* strain Wood 46                |            | -                        |
| *M. bovis* strain bacillus Calmette-Guerin|            | pCB22-Turbo635-ASV-YFP   |
| *Pasteur ΔpanCD*                          |            |                          |