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Life Sciences Reporting Summary

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For final submission: please carefully check your responses for accuracy; you will not be able to make changes later.

Experimental design

1. Sample size

   Describe how sample size was determined.

   Sample size have been pre-calculated by power analysis base on previous experience with infection experiments published by our group e.g. Gerlini PLoS path 2014 or Manco Infect Immun 2006.
   For the CD169-ko C57BL/6 mouse infection experiments we used the same parameters as for the CD1 mice.
   Sample sizes of fields evaluated for microscopic observations are all detailed in the text.

2. Data exclusions

   Describe any data exclusions.

   no data were excluded

3. Replication

   Describe the measures taken to verify the reproducibility of the experimental findings.

   Some experiments could be preformed only with the sample size of 1 (i.e. spleen perfusion) and those experiments were repeated at least 3 times in different weeks. Experiments listed in Figure 1 are replicate experiments run in the past with other mice and data are comparable.
   The animal experiment for the testing of the therapeutic efficacy of antibiotics was preformed twice (sample size of five in each of the three groups in both replicas) with comparable results.
   The CD169-ko mouse infection experiment was replicated twice with identical results which both showed no difference between the ko and wt groups.
   Also the challenge experiment testing effect of anti-CD169 antibodies in CD1 mice was repeated twice (n5). Both experiments had the same outcome and both showed a significant difference between treatment group and control group.

4. Randomization

   Describe how samples/organisms/participants were allocated into experimental groups.

   In the mice studies the animals were allocated randomly to the different groups before start of the procedures. For time course experiments were preassigned to a time group.

5. Blinding

   Describe whether the investigators were blinded to group allocation during data collection and/or analysis.

   The analysis of bacterial distribution in ko mouse spleens was made blind. The microscopy operator was not aware of the genetic background of the mice.

Note: all in vivo studies must report how sample size was determined and whether blinding and randomization were used.

6. Statistical parameters

For all figures and tables that use statistical methods, confirm that the following items are present in relevant figure legends (or in the Methods section if additional space is needed).

n/a	Confirmed
☐	☒ The exact sample size (*n*) for each experimental group/condition, given as a discrete number and unit of measurement (animals, litters, cultures, etc.)
☐	☒ A description of how samples were collected, noting whether measurements were taken from distinct samples or whether the same sample was measured repeatedly
☐	☒ A statement indicating how many times each experiment was replicated
☐	☒ The statistical test(s) used and whether they are one- or two-sided *Only common tests should be described solely by name; describe more complex techniques in the Methods section.*
☒	☐ A description of any assumptions or corrections, such as an adjustment for multiple comparisons
☐	☒ Test values indicating whether an effect is present *Provide confidence intervals or give results of significance tests (e.g. P values) as exact values whenever appropriate and with effect sizes noted.*
☐	☒ A clear description of statistics including central tendency (e.g. median, mean) and variation (e.g. standard deviation, interquartile range)
☐	☒ Clearly defined error bars in all relevant figure captions (with explicit mention of central tendency and variation)

See the web collection on statistics for biologists for further resources and guidance.

Software

Policy information about availability of computer code

7. Software

Describe the software used to analyze the data in this study.	Graphpad PRISM (version 6), Fisher exact test calculator (http://www.socscistatistics.com/tests/fisher/Default2.aspx), T-test calculator (http://www.socscistatistics.com/tests/studentttest/).

For manuscripts utilizing custom algorithms or software that are central to the paper but not yet described in the published literature, software must be made available to editors and reviewers upon request. We strongly encourage code deposition in a community repository (e.g. GitHub). *Nature Methods* guidance for providing algorithms and software for publication provides further information on this topic.

Materials and reagents

Policy information about availability of materials

8. Materials availability

Indicate whether there are restrictions on availability of unique materials or if these materials are only available for distribution by a third party.	Two reagents used in this work are not commercially available. The CR-Fc protein used to stain CD169+ cells can be obtained form our coauthor Luisa Martinez-Pomares (Univ. Nottingham). The CD169 knock out mice can be obtained from our coauthor paul Crocker at the University of Dundee.

9. Antibodies

Describe the antibodies used and how they were validated for use in the system under study (i.e. assay and species).

Anti-mouse/human CD45R/B220, α-B220, B cells, conjugation none, catalogue 103201, clone, RA3-6B2, supplier Biolegend, dilution 1:200, reference Alrefai H, et al. 2016. Nat Commun. 7:11724.
Anti-mouse CD3, α-CD3, T cells, conjugation none, catalogue ab33429, clone, KT3, supplier Abcam, dilution 1:200, reference Kumar L, et al. 2014. J Exp Med 211:929-42 (2014).
Anti-mouse CD169 (Siglec-1), α-CD169, Metallophilic MΦa, conjugation none, catalogue 142401, clone, 3D6.112 , supplier Biolegend, dilution 1:200, reference Guzzo C, et al. 2017. Sci Immunol.
Rat IgG2a control, IMC, N/A, conjugation none, catalogue 400501, clone, RTK2758, supplier Biolegend, dilution 10 µg/mouse , reference Nishimoto H, et al. 2005. Blood 106:4241
CR-Fc, CR-Fc, Metallophilic MΦ, conjugation none, catalogue clone, supplier 15, dilution 1:200, reference Martinez-Pomares L, et al. 1996 J Exp Med 184, 1927-1937
Anti-mouse F4/80, α-F4/80, Red pulp MΦ, conjugation none, catalogue 14-4801-81, clone, BM8, supplier eBioscience, dilution 1:200, reference Ogura M, et al 2017. Sci Rep. Sep 8;7(1):11028.
Anti-mouse SIGN-R1 [ER-TR9], α-SIGN-R1, Marginal zone MΦ, conjugation none, catalogue ab37220, clone, ER-TR9, supplier abcam, dilution 1:200, reference Kretschmer K, et al. 2003. J Immunol171:6495-501.
Anti-mouse [ER-TR9] to SIGN Related 1 (Biotin), α-SIGN-R1b, Marginal zone MΦ, conjugation biotinylated, catalogue ab51819, clone, ER-TR9, supplier abcam, dilution 1:200, reference Kretschmer K, et al. 2003. J Immunol171:6495-501.
Anti-mouse Ly-6G (GR1), α-GR1, Neutrophils, conjugation none, catalogue 127602, clone, 1A8, supplier Biolegend, dilution 1:200, reference Esbona K, et al. 2016. Breast Cancer Res. 18:35.
Anti-porcine CD169 3B11/11, α-CD169p, CD169+ MΦ, conjugation none, catalogue MCA2316GA, clone, 3B11/11, supplier Biorad, dilution 1:200, reference Revilla C, et al. 2009. Vet Res. May-Jun;40(3):14.
Anti-porcine CD163 2A10/11, α-CD163, CD163+ MΦ, conjugation none, catalogue MCA2311GA, clone, 2A10/11, supplier Biorad, dilution 1:200, reference Garba A, et al. 2017. PLoS ONE 12(10): e0186343.
Anti-human CD3 | CD3-12, α-CD3, T cells, conjugation none, catalogue MCA1477A488, clone, CD3-12, supplier Biorad, dilution 1:200, reference Houser KV, et al. 2017. PLoS Pathog 13(8): e1006565
Anti-pneumococcal type 2 capsule, α-type2, Bacteria, conjugation none, catalogue 16745, clone, supplier Statens serum institute, dilution 1:500,
Anti-pneumococcal type 4 capsule, α-type4, Bacteria, conjugation none, catalogue 16747, clone, supplier Statens serum institute, dilution 1:500,
Chicken anti-Rabbit IgG (H+L), AF488, Secondary Abb, conjugation Alexa Fluor® 488, catalogue A-21441, clone, polyclonal, supplier Thermoscientific, dilution 1:500, reference Omiya S, et al. 2016. Am J Physiol Heart Circ Physiol. 311(6):H1485-H1497
Goat anti-Rat IgG (H+L), AF568, Secondary Ab, conjugation Alexa Fluor® 568, catalogue A-11077, clone, polyclonal, supplier Thermoscientific, dilution 1:500, reference Himmels P, et al. 2017. Nat Commun. 8:14583.
Chicken anti-Rat IgG (H+L), AF647, Secondary Ab, conjugation Alexa Fluor® 647, catalogue A-21472, clone, polyclonal, supplier Thermoscientific, dilution 1:500, reference Sos KE, et al. 2017. Brain Struct Funct. 222(1):287-299.
Goat anti-Human IgG (H+L), AF568b, Secondary Ab, conjugation Alexa Fluor® 568, catalogue A-21090, clone, polyclonal, supplier Life technologies, dilution 1:500, reference Biswas U, et al. 2016. PLoS Genet. 12(10):e1006389.
Goat anti-Mouse IgG (H+L), AF568c, Secondary Ab, conjugation Alexa Fluor® 568, catalogue A-11004, clone, polyclonal, supplier Thermoscientific, dilution 1:500, reference Gray JD, et al. 2016. Mol Psychiatry.
Streptavidin 488 Conjugate, AF488s, Biotin, conjugation Alexa Fluor® 488, catalogue S32354, clone, supplier Thermoscientific, dilution 1:500,
Wheat Germ Agglutinin, AF633, Membranes, conjugation Alexa Fluor® 633, catalogue 11550816, clone, supplier Molecular Probes, dilution 5 µL,
Phalloidin, pAF647, Actin, conjugation Alexa Fluor® 647, catalogue A22287, clone, , supplier Thermoscientific, dilution 5 µL,

10. Eukaryotic cell lines

a. State the source of each eukaryotic cell line used.

no eukaryotic cells have been used

b. Describe the method of cell line authentication used.

Describe the authentication procedures for each cell line used OR declare that none of the cell lines used have been authenticated OR state that no eukaryotic cell lines were used.

c. Report whether the cell lines were tested for mycoplasma contamination.

Confirm that all cell lines tested negative for mycoplasma contamination OR describe the results of the testing for mycoplasma contamination OR declare that the cell lines were not tested for mycoplasma contamination OR state that no eukaryotic cell lines were used.

d. If any of the cell lines used are listed in the database of commonly misidentified cell lines maintained by ICLAC, provide a scientific rationale for their use.

Provide a rationale for the use of commonly misidentified cell lines OR state that no commonly misidentified cell lines were used.

Animals and human research participants

Policy information about studies involving animals; when reporting animal research, follow the ARRIVE guidelines

11. Description of research animals

Provide all relevant details on animals and/or animal-derived materials used in the study.

-Mouse, females, CD1, 8 weeks old
-Mouse, males, C57BL/6J CD169 KO, 9-10 weeks old (Oetke et al., Mol Cell Biol 2006)
-Pig, mixed, Large white, 4 months

Policy information about studies involving human research participants

12. Description of human research participants

Describe the covariate-relevant population characteristics of the human research participants.

this study did not involve human participants