

SUPPLEMENTARY MATERIAL

Characterization and protective activity of monoclonal antibodies directed against *Streptococcus suis* serotype 2 capsular polysaccharide obtained using a glycoconjugate

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Table S1. Anti-CPS titers of mAb-containing supernatants for the determination of their immunoglobulin classes.

Antibody				
Isotype / Subclass	Z3	13C8	9E7	16H11
IgM	9084	107	112	0 ¹
IgG	0	0	0	89
IgG1	0	0	0	68
IgG2a	0	0	0	0
IgG2b	0	0	0	0
IgG3	0	0	0	0
Conclusion	IgM	IgM	IgM	IgG1

¹ 0 indicates that the titer is negative.

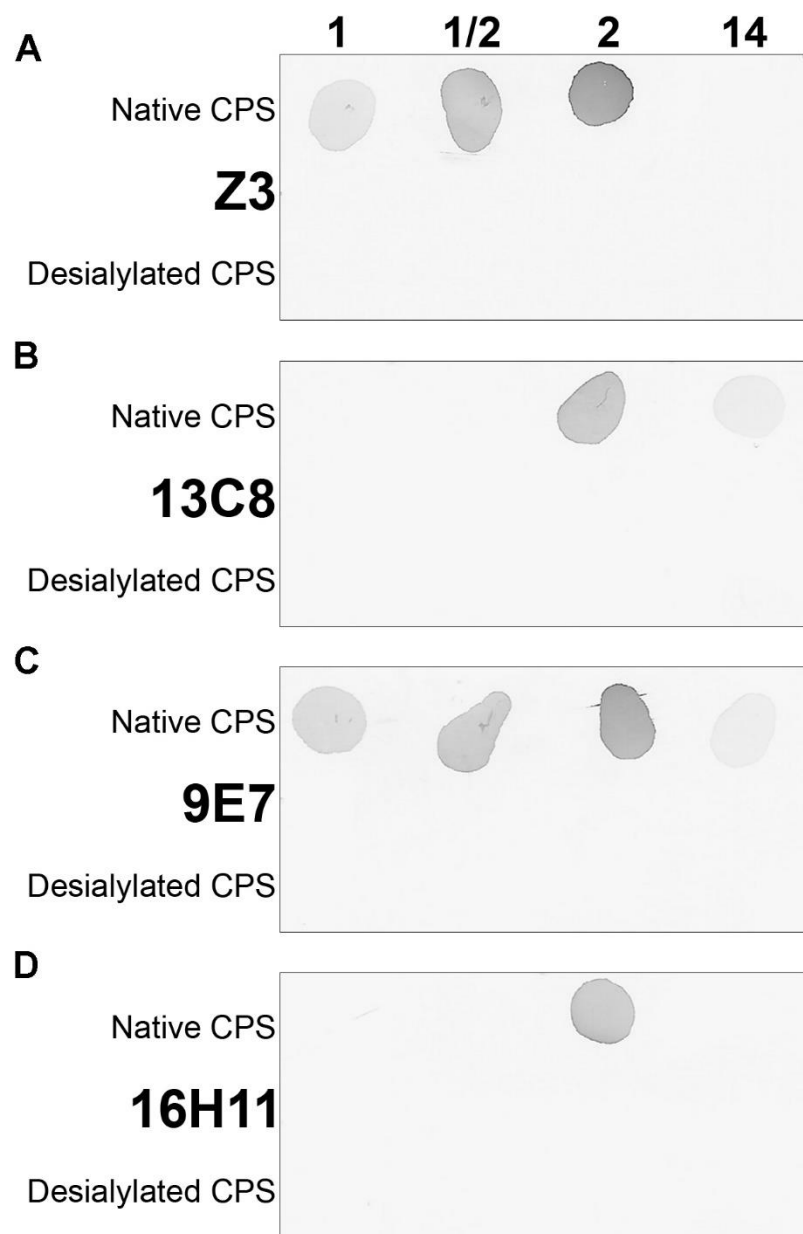


Figure S1. Specificity of mAbs for the capsular sialic acid. Dot-blot analyses with 10 μ g of either native or desialylated CPSs from serotypes 1, 1/2, 2, or 14 using different mouse mAb culture supernatants: mAb Z3 (A), mAb 13C8 (B), mAb 9E7 (C), or mAb 16H11 (D).

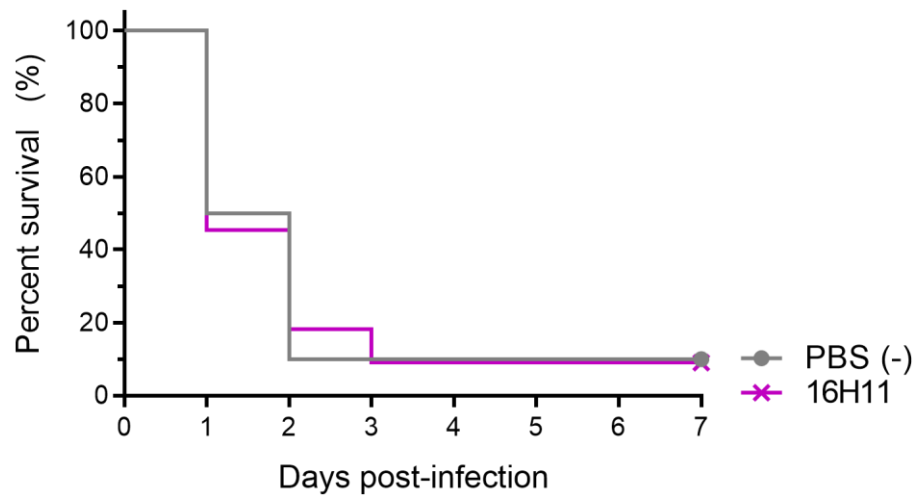


Figure S2. Passive immunization of CD-1 mice with murine IgG1 mAb 16H11 and survival after lethal challenge with *S. suis* type 2. Mice (n = 10) received doses of 20 µg of purified mAb intraperitoneally 1 h prior to the challenge. Mice were then challenged with a LD90 dose of 1×10^8 CFU of *S. suis* serotype 2 strain P1/7 by intraperitoneal inoculation. Negative control used for protection was PBS.

Figure S3. Staining controls for the phagocytosis of *S. suis* serotype 2 by confocal laser scanning microscopy (Fig. 7). *S. suis* opsonized with positive rabbit sera (A, B) or sterile culture media (C) was added to cells. After a bacteria–cell contact of 1 h, cells were fixed and stained as follows: (A) cells were labelled with rabbit serum against *S. suis* followed by an anti-rabbit IgG (Alexa-Fluor 488, green) then stained with DAPI (blue); (B) cells were labelled with serum against *S. suis* (no conjugate) and a mAb specific for LAMP-1 (Alexa-Fluor 647, red), then stained with DAPI; (C) cells were labelled with rabbit serum against *S. suis* followed by an anti-rabbit IgG (Alexa-Fluor 488) and a mAb specific for LAMP-1 (Alexa-Fluor 647), then stained with DAPI. Scale bar = 5 μ m.

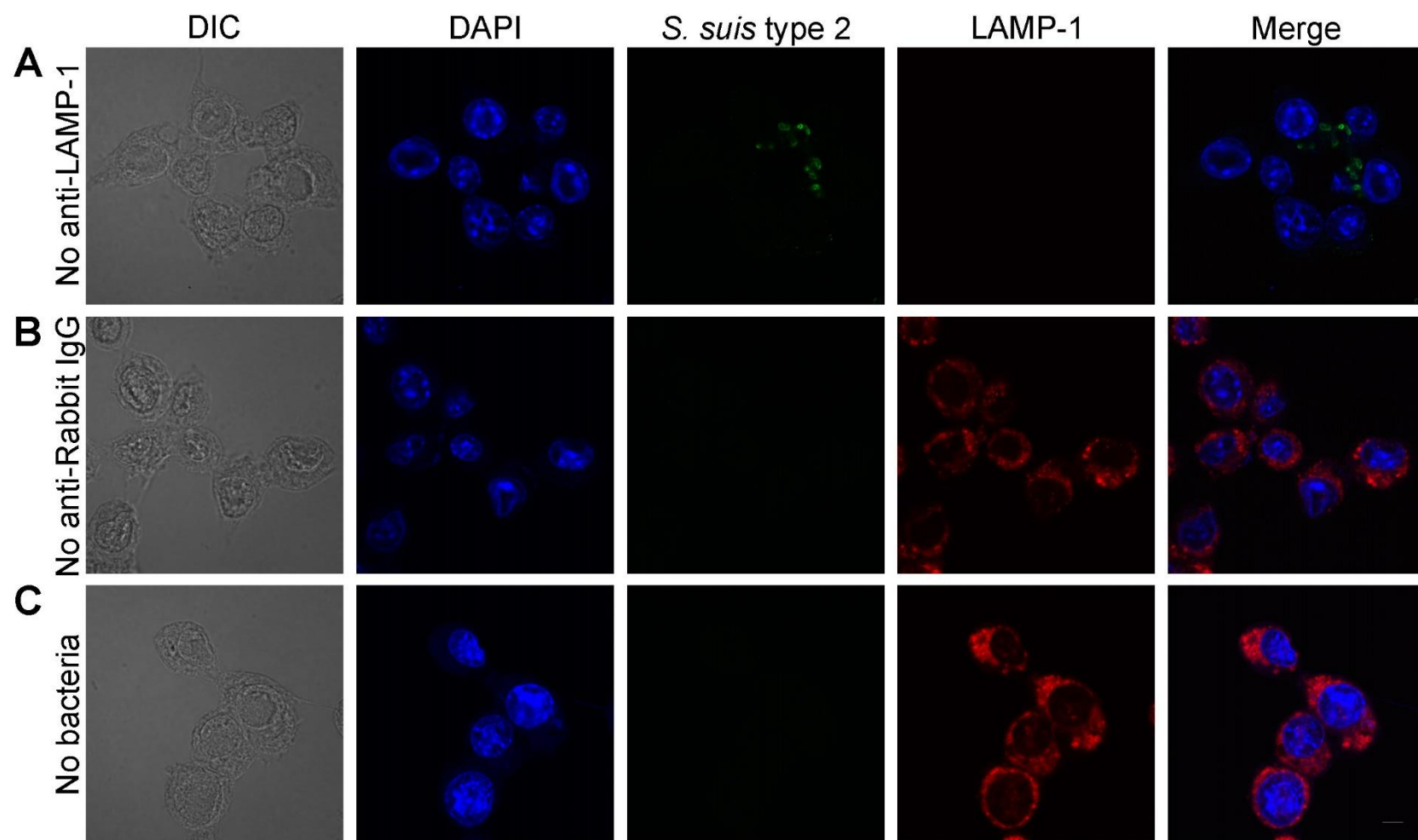


Figure S3