

### Supplementary Data S1: The microscopic agglutination test (MAT) protocol

The MAT was performed on all sera by standard method as briefly explain. The living antigens used were 5–7 days old autoagglutination-free cultures grown in Elinghausen McCullough Johnson Harris (EMJH) medium (Difco, Sparks, MD) with approximately  $1 \times 10^8$  to  $2 \times 10^8$  organisms/mL. The MAT was done at doubling dilutions starting from 1 in 25. The reaction was observed after 3 hrs incubation at room temperature by dark field microscopy. Positive samples were titrated up to end titers. A single reciprocal titer of 100 or greater was considered seropositive and indicative of exposure to leptospirosis. A set of 24 reference *Leptospira* serovars was showed in Table below.

#### The reference serovars and strains of *Leptospira* spp. utilized in MAT.

Genospecies	Serovars <sup>a</sup>	Strain <sup>a</sup>
<i>L. interrogans</i>	Autumnalis	Akiyami
	Bataviae	A Swart
	Bratislava	Jez Bratislava
	Canicola	Houd UtrechtIV
	Djasiman	Djasiman
	Hebdomadis	Hebdomadis
	Icterohaemorrhagiae	RGA
	Pomona	Pomona
	Pyrogenes	Salinem
<i>L. noguchii</i>	Louisiana	LSU 1945
	Panama	CZ 214 K
<i>L. borgpetersenii</i>	Ballum	MUS 127
	Javanica	Veldrat Batavia 46
	Mini	Sari
	Sejroe	M 84
	Tarassovi	Perepelitsin
<i>L. santarosai</i>	Shermani	1342 K
<i>L. weilii</i>	Celledoni	Celledoni
	Manhao	L 105
	Sarmin	Sarmin
<i>L. kirschneri</i>	Cynopteri	3522 C
	Grippotyphosa	Moskva V
<i>L. meyeri</i>	Ranarum	ICF
<i>L. biflexa</i>	Patoc	Patoc 1

<sup>a</sup> The serovars and strains of the *Leptospira* were kindly provided by National Institute of Animal Health, department of Livestock Department, Thailand.