

## Supplementary materials

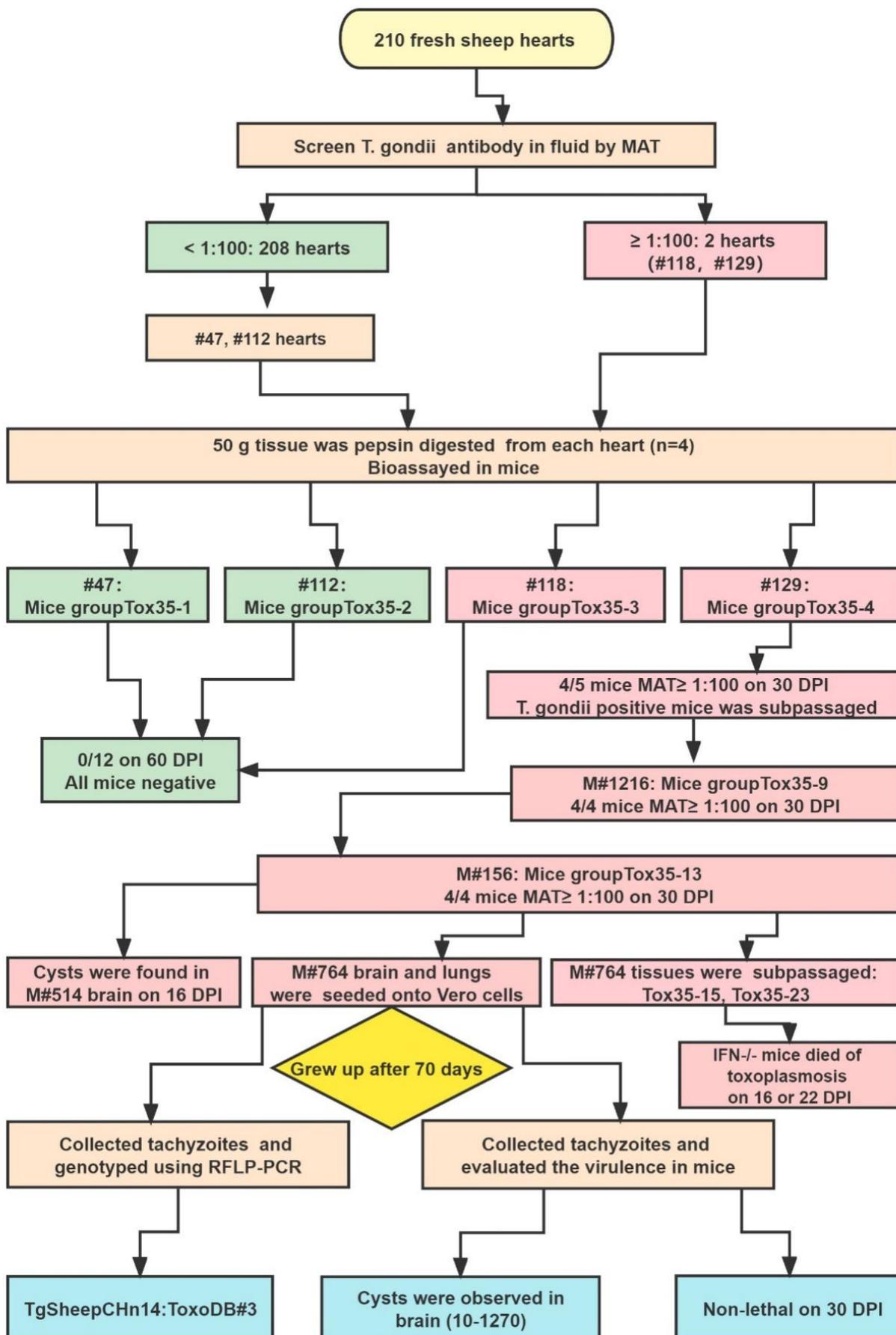
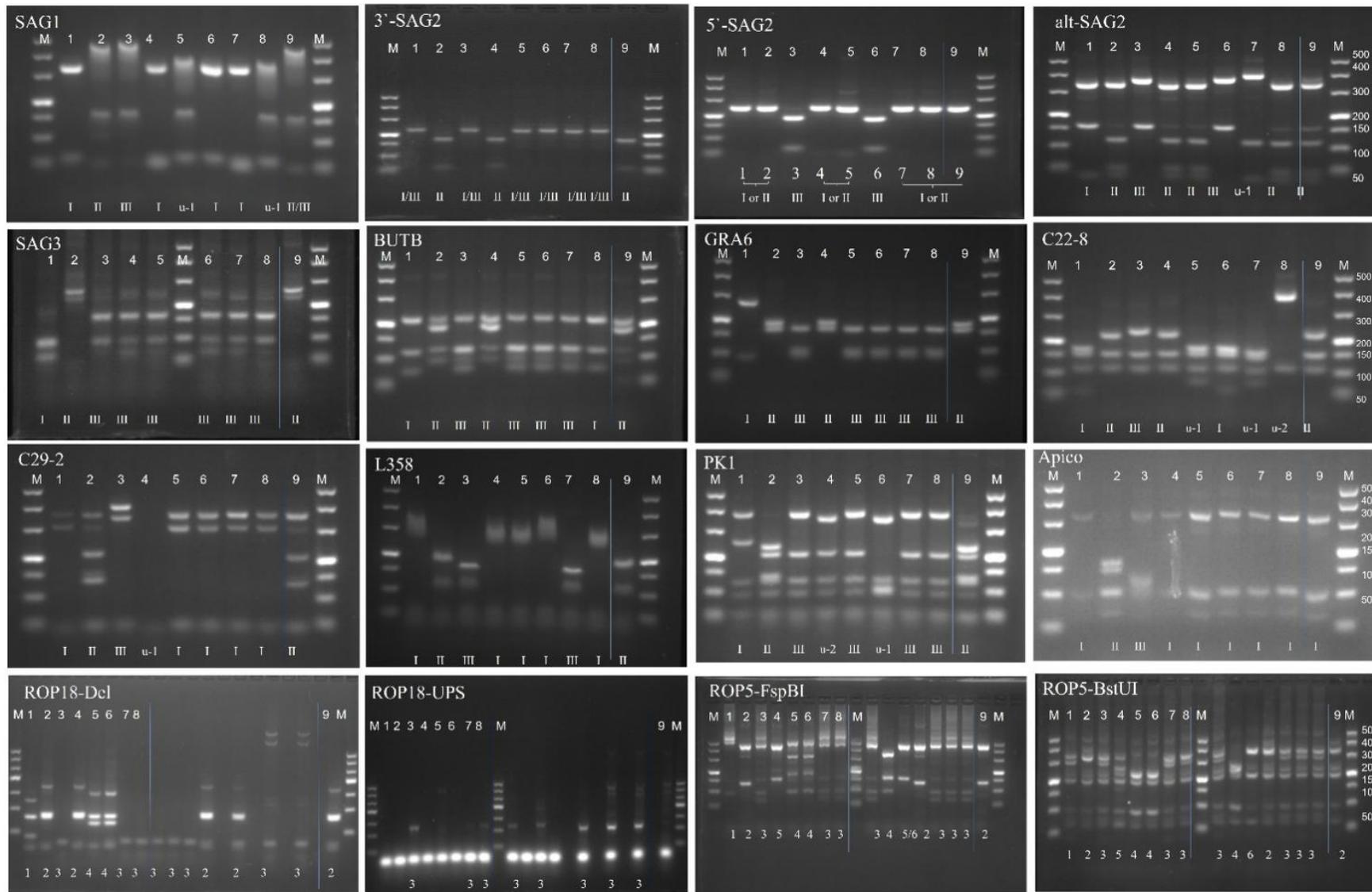


Figure S1. Flow chart for sheep infected *Toxoplasma gondii* assay procedure.



**Figure S2. Genotyping of *Toxoplasma gondii* isolated strains from sheep.**  
 1:GT1, 2: PTG, 3: CTG, 4: TgCgCal, 5: MAS, 6: TgCatBr5, 7: TgCatBr64, 8: TgToucan (TgRsCr1),  
 9: TgSheepCHn14, M: markers.

**Table S1 Summary of viable *Toxoplasma gondii* isolates from animals and human in China (n = 169)**

Province	species	No. of animls	Seroprevalence	Bioassay of tissues <sup>b</sup>			Genotype ToxoDB #	References
			Test, cut-off titer (%)	Number	Positive	Strain ID		
Beijing	Stray cat	64	MAT, 20 (58)	23	11	TgCatBj1-11	All #9	[1]
Anhui (22), Hubei (23), Guangdong (20), Shanxi (24)	cat	211	ND	89	14	TgCtys1,2 TgCtwh1-8, TgCtgd1,2 TgCtsx1,2	12 #9, 2 #205	[2]
ND	Human cat	ND	ND	ND	23	TgHuZSE, TgHuZS2, TgHuAh1-2, TgCtwh9-12,14,19 TgCtxz1-8, TgCtsd1-5	15 #9, 2 #10, 1 #1, 1 #204, 4 #205	[3]
Guizhou (23+17), Anhui (24), Hubei (13)	Cat,Pig, Chicken,vole	77	ND	B	11	TgCtgy1-5, TgCtgy1-4 TgCksz1, TgVowh1	10 #9, 1 #205	[4]
Guangdong	Market cat	34	MAT, 40(79)	27	17	TgCtPRC1-17	2#18, 15#9	[5]
Guangdong	Human, Pig, Cat, Sheep	ND	ND	ND	17	SH, CN,NT, TgC1-TgC8 GYS,PYS,ZC,ZS,ZS1,QHO	3 #10, 1 #3, 12 #9, 1 # MIX	[6]
Shanghai	rabbit	77	MAT,25(23)	18	1	SHR	SAG2, SAG3, GRA6, BTUB All type III	[7]
Liaoning	pig	2063	MAT,25(11.3)	233	23	TgPigCn3-2, 3-12, 5-5,5-6,5-7, 8-16, 8-18,10-34,14-56,19-24, 22-10,27-8, 29-5, 33-6,40-10, 58-14, 61-11,69-2, 69-14,77-2,80-11,80-25,80-27	1#3, 1#3 or #1, 13#9	[8]
Kunming	feline feces	115	Morphology, (4)	ND	1	KM isolate	type II	[9]
Guizhou	Pig, cat	70+19	ELISA, (49+12)	ND	5	TGGZ1-3(pig), TGGZ4-5(cat)	All #9	[10]
Jiangsu	human fetus pigs	ND	ND	ND	3	KS, YZ-1, YZ-2	1 #10, 2#9	[11-12]
Henan , Zhejiang	Stray cat, pet cat	42	MAT, 100(50)	42	8+1=9	TgCatCHn1-3, TgCatCZg1-5 TgCatCHn4 (feces)	6 #9, 1 #1, 1 #2, 1 #17	[13]
Henan	Hospital cat	28	MAT,25(7)	8,	1	TgCatCHn5	#9, 1	[14]
Henan	Sheep	840	MAT,25(20.7)	26	2	TgSheepHn1-2	All #9	[15]
Henan	Sheep	166	MAT,100(25)	67	11	TgSheepHn3-13	7 #2, 4 #4	[16]
Henan	Sheep	224	MAT,100(1.8)	4	1	TgSheepHn14	#3	This study
Henan	Kangaroo	4	MAT,25(75)	4	1	TgRooCHn1	#292	[17]
Henan	Kangaroo	3	MAT,25(67)	3	2	TgRooCHn2-3	#3, #2	[18]
Henan	Kangaroo	26	MAT,25(50)	6	1	TgRooCHn4	#3	[19]
Henan	Red panda	14	MAT,25(14)	8	1	TgRedpandaCHn1	#20	[20]
Henan	Serval	1	MAT,25(100)	1	1	TgServalCHn1	#20	[21]

Henan	Tiger	10	MAT,25(80)	6	2	TgTigerCHn1-2	All #9	[22]
Henan	Tiger	4	MAT,25(100)	4	2	TgTigerCHn3-4	#20, #2	[23]
Henan	Caracal	2	MAT,25(100)	2	1	TgCaracalCHn1	#2	[24]
Henan	Caracal	1	MAT,25(100)	1	1	TgCaracalCHn2	#5	Ren HJ et al., unpublished
Henan	White spoonbills	7	MAT,4(29)	2	1	TgSpoonbillCHn1	#2	[25]
Henan	Monkey	15	MAT,8(47)	9	1	TgMonkeyCHn1	Mix	[26]
Henan	Monkey	13	MAT,8(62)	9	1	TgMonkeyCHn2	#9	Yang LL et al., unpublished
Henan	Monkey	9	MAT,8(22)	3	1	TgMonkeyCHn3	#6	Ma YH et al., unpublished
Henan	Cheetah	6	MAT,25(100)	6	2	TgCheetahCHn1-2	#319, #9	Zhu NP et al., unpublished
Henan	Fur seal	4	MAT,25(50)	4	1	TgfursealCHn1	#5	Mao GH et al., unpublished
Total	110 #9, 12 #2, 7 #205, 6 #10, 6 #3, 4 #4, 3 #20, 2 #1, 2 #18, 2 #5, 1 #6, 1 #204, 1 #17, 1 #292, 1 #319							

ND: experiment not done;

MAT: modified agglutination test;

ELISA: enzyme-linked immunosorbent assay.

Table S2 Raw data about the number of *Toxoplasma gondii* TgSheepCHn14 brain cysts and survival time in mice.

Survival time Brain cysts	<30 days	30-60 days	>60 days
1	1190	760	400
2	70	160	130
3	1270	190	360
4	500	680	180
5	1140		370
6	1000		90
7			60
8			10
9			110
10			450
11			40
12			260
13			350
14			420
15			570
16			10
M±SE	862±194	448±158	238±45

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