

**Determination of robenidine in shrimp, and chicken samples
using indirect competitive enzyme-linked immunosorbent
assay and immunochromatographic strip assay
(Supplementary Material)**

Contents

Fig. S1. Synthesis of the hapten for robenidine hydrochloride.

Fig. S2. Characterization of the ROBH hapten. (A) The structures and full scan mass spectra of ROBH hapten; (B) ^1H -NMR spectra; (C) ^{13}C -NMR spectra.

Fig. S3. MALDI-TOF mass spectrum of proteins and conjugates. (A) BSA (black), ROBH-BSA 50:1 (red), ROBH-BSA 100:1 (green), and ROBH-BSA 200:1 (blue). The hapten loadings were respectively 12.6, 16.1, and 17.1. (B) OVA (black) and ROBH-OVA 30:1 (red). The hapten loading was 4.1.

Fig. S4. Complete inhibition curves of the four monoclonal antibodies. (A) 1H6; (B) 5D2; (C) 10B8; (D) 12C9.

Fig. S5. Matrix effect for ic-ELISA and immunochromatographic strip assay. (A) ROBH standard curves in PBS and diluted samples (★ PBS solution, ● tenfold dilution for shrimp sample, ◆ tenfold dilution for chicken breast sample, ▼ tenfold dilution for chicken liver sample); (B) PBS solution; (C) shrimp sample; (D) chicken breast sample; (E) chicken liver sample (1=0 ng/g, 2=10 ng/g).

Table S1. Titer and specificity screening of antisera.

Table S2. Screening of hybridoma cell lines.

Table S3. Curve parameters of the four monoclonal antibodies.

Table S4. The cross reaction rates with anticoccidial drugs.

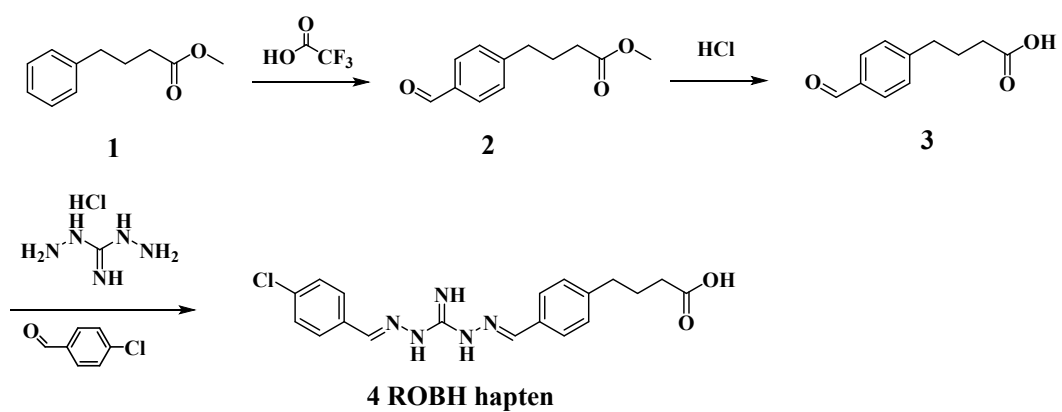


Fig. S1. Synthesis of the haptin for robenidine hydrochloride.

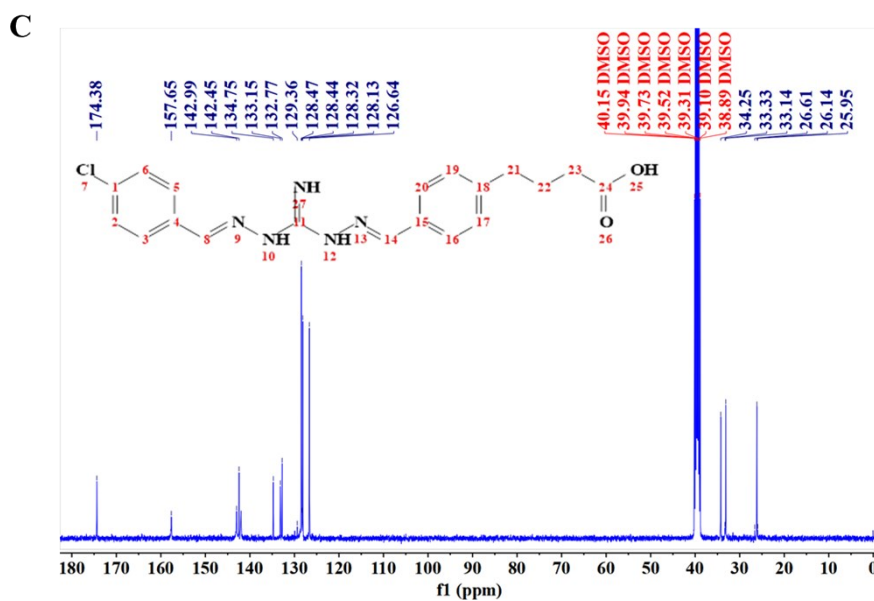
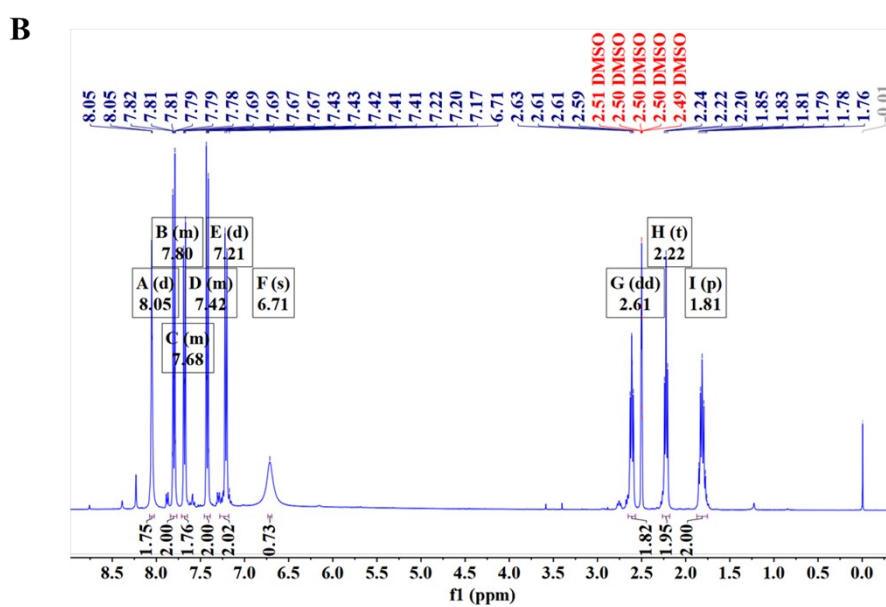
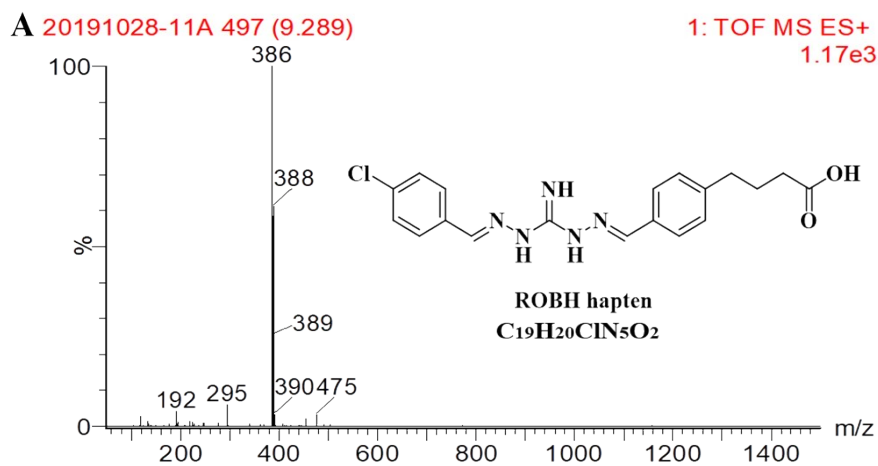


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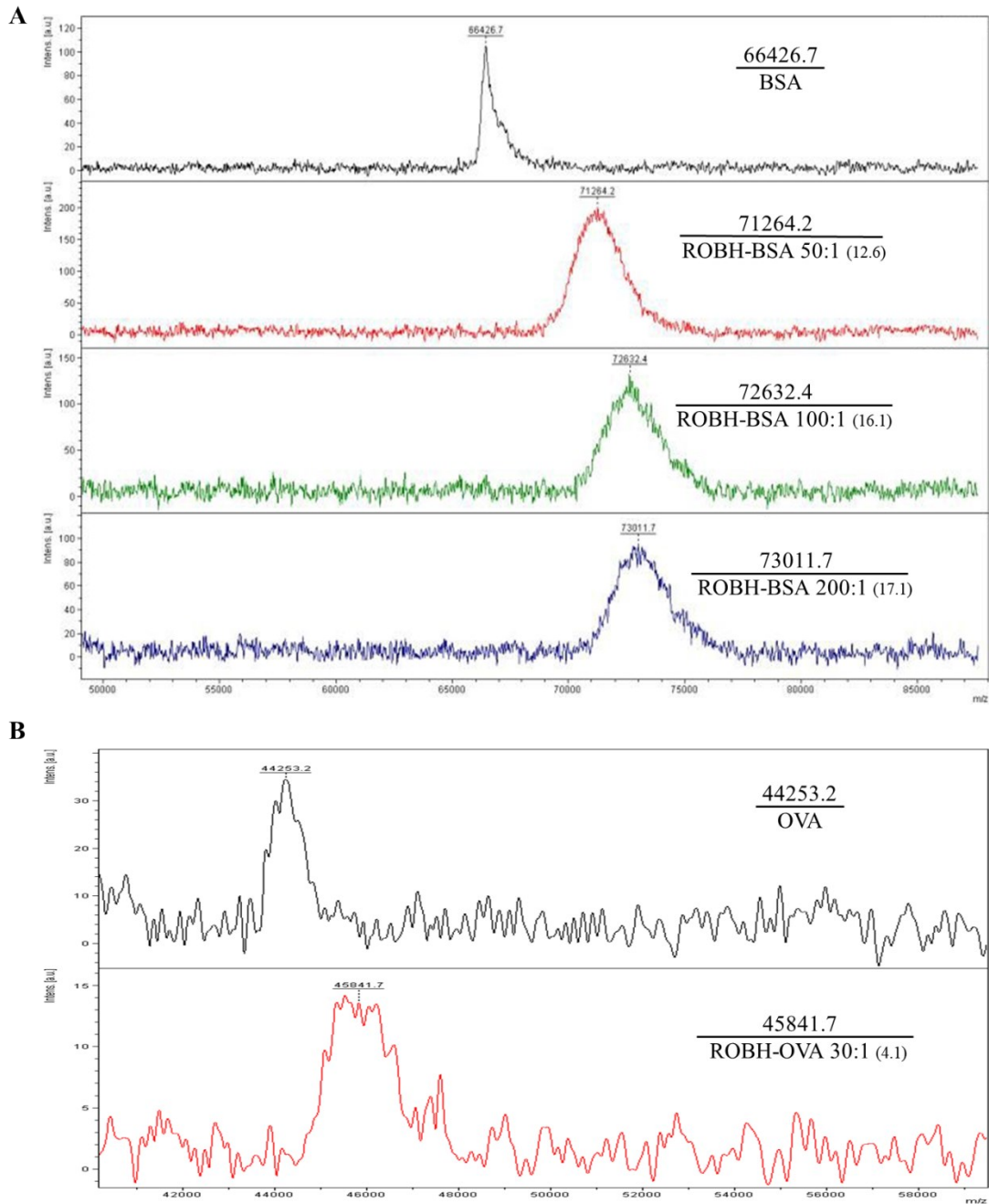


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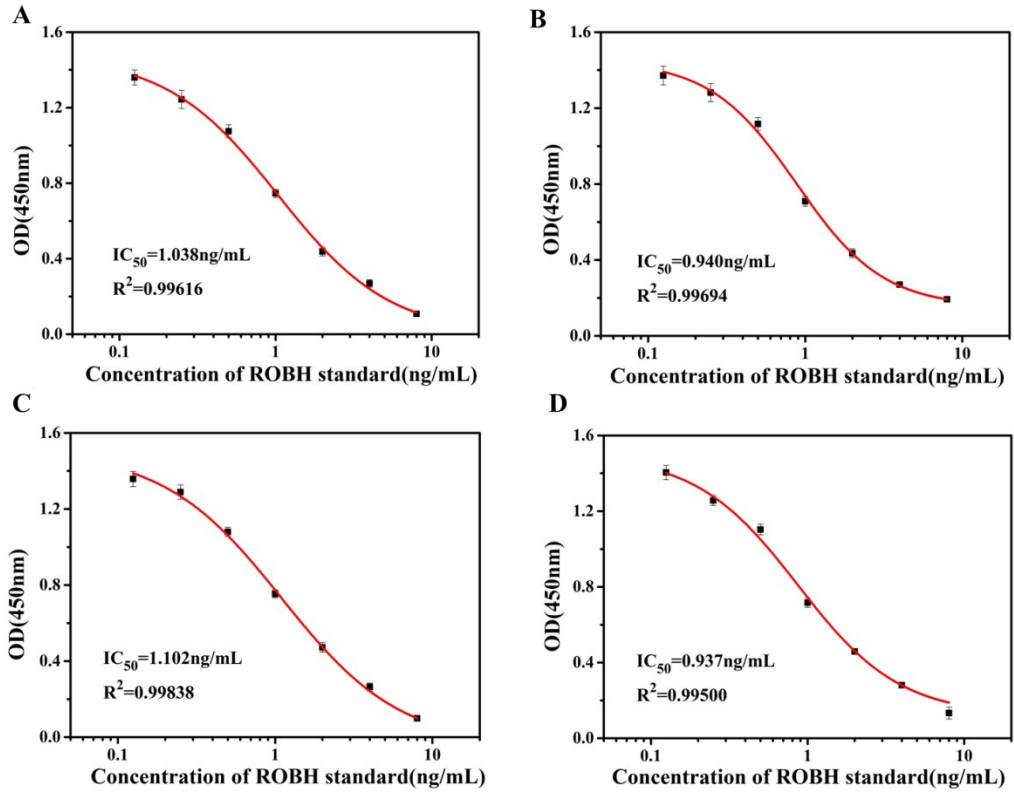


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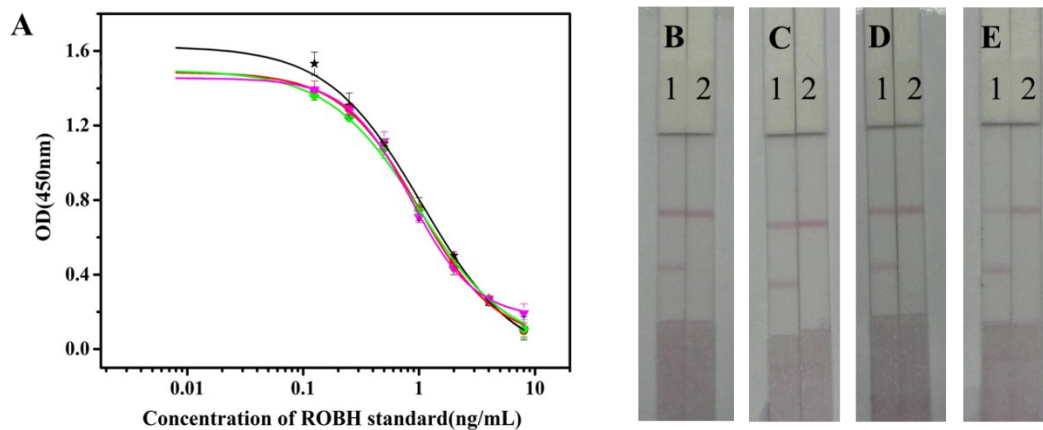


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Table S1. Titer and specificity screening of antisera.

Immunogen (X:1)	Coating antigen ($\mu\text{g/mL}$)	Standard Concentration (ng/mL)	Titres(1:X)					(B ₀ - B)/B ₀ $\times 100\%$				
			Mouse 1	Mouse 2	Mouse 3	Mouse 4	Mouse 5	Mouse 1	Mouse 2	Mouse 3	Mouse 4	Mouse 5
50	0.3	100	1000	3000	3000	1000	3000	25	33	55	36	45
	0.1	50	3000	9000	9000	3000	3000	30	35	60	33	40
	0.1	20	9000	9000	9000	3000	3000	41	40	78	36	47
100	0.3	100	3000	1000	1000	1000	3000	18	20	21	19	22
	0.3	50	3000	3000	3000	1000	3000	25	22	25	23	26
	0.1	20	3000	9000	9000	3000	3000	30	31	33	36	35
200	0.3	100	1000	1000	1000	1000	1000	26	30	29	31	34
	0.3	50	3000	3000	3000	3000	3000	30	32	35	35	36
	0.1	20	9000	3000	9000	3000	3000	33	40	42	38	40

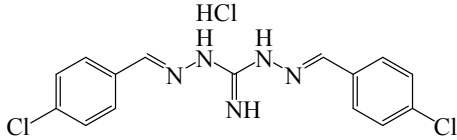
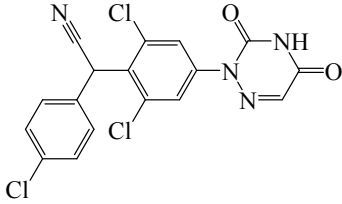
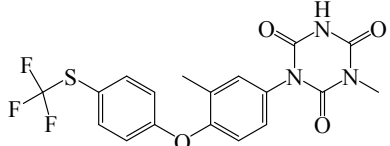
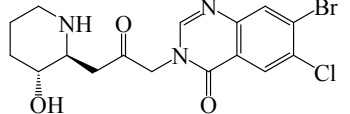
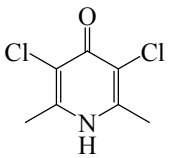
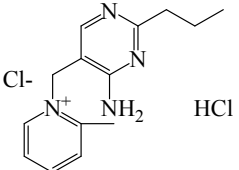
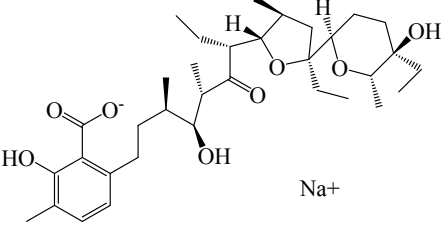
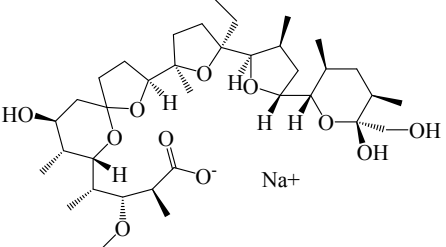
Table S2. Screening of hybridoma cell lines.

Hybridoma cell lines	Coating antigen ($\mu\text{g}/\text{mL}$)	Titres (1:X)	(B ₀ -B)/B ₀ ×100% values		
			ROBH (5 ng/mL)	ROBH (2 ng/mL)	ROBH (1 ng/mL)
1H6	0.1	27	0.65	0.50	0.50
5D2	0.1	9	0.58	0.53	0.57
10B8	0.1	27	0.68	0.55	0.51
12C9	0.1	81	0.60	0.54	0.52

Table S3. Curve parameters of the four monoclonal antibodies.

ROBH-OVA (30:1)				
Monoclonal antibody No.	1H6	5D2	10B8	12C9
Coating antigen ($\mu\text{g/mL}$)	0.3	1.0	0.3	0.1
Monoclonal antibody ($\mu\text{g/mL}$)	0.3	0.3	0.3	0.1
OD _{max}	1.518	1.452	1.494	1.509
IC ₅₀	1.038	0.940	1.102	0.937

Table S4. The cross reaction rates with anticoccidial drugs.

Anticoccidial drugs	Structure	IC ₅₀ (ng/mL)	CR (100%)
Robenidine hydrochloride		0.927	100
Diclazuril		—	<0.1
Toltrazuril		—	<0.1
Halofuginone		—	<0.1
Clopidol		—	<0.1
Amprolium Hydrochloride		—	<0.1
Lasalocid		—	<0.1
Monensin		—	<0.1