

## **Electronic Supplementary Material**

**Simple and Efficient Molecularly Imprinted  
Electrochemical Sensor for Selective  
Determination of Tryptophan**

**Table S1.** Influence of coexisting substances on the determination of 10  $\mu\text{M}$  Trp

Coexisting substance	Concentration / mM	Change of peak current / %	Coexisting substance	Concentration / mM	Change of peak current / %
$\text{Na}^+$	1.0	3.27	glycine	0.01	1.24
$\text{K}^+$	1.0	-1.65	alanine	1.0	0.84
$\text{Mg}^{2+}$	1.0	1.23	valine	1.0	0.54
$\text{Cu}^{2+}$	1.0	0.86	leucine	1.0	-1.25
$\text{Ca}^{2+}$	1.0	0.52	isoleucine	1.0	1.12
$\text{Al}^{3+}$	1.0	2.87	phenylalanine	1.0	0.83
$\text{Pb}^{2+}$	1.0	-1.48	histidine	1.0	0.35
$\text{Cl}^-$	1.0	1.52	aspartic acid	1.0	0.97
$\text{NO}_3^-$	1.0	2.37	glutamic acid	1.0	1.25
$\text{SO}_4^{2-}$	1.0	-1.12	lysine	1.0	2.04
oxalic acid	0.1	3.46	arginine	1.0	1.16
citric acid	1.0	-2.75	serine	1.0	0.57
glucose	1.0	1.84	threonine	1.0	0.34
lactic acid	1.0	2.35	cysteine	1.0	0.31
tartaric acid	1.0	-1.17	proline	1.0	0.24

**Table S2.** Reusability of MIP/ABPE

Determination times	1	2	3	4	5	6	7
Peak current / $\mu\text{A}$	2.075	2.045	2.112	2.050	2.015	2.057	2.108
Relative standard deviation (RSD)	1.70%						

**Table S3.** Reproducibility of MIP/ABPE

Electrode number	1	2	3	4	5	6	7	8
Peak current / $\mu\text{A}$	2.048	2.171	2.265	2.017	2.190	2.035	2.148	2.187
Relative standard deviation (RSD)	4.18%							

**Table S4.** The storage stability of MIP/ABPE

Day	1	2	3	4	5	6	7
Peak current / $\mu\text{A}$	2.065	2.153	2.049	2.127	2.036	2.064	2.083
Day	8	9	10	11	12	13	14
Peak current / $\mu\text{A}$	2.051	2.024	2.017	2.029	2.018	2.014	1.987
Day	15	16	17	18	19	20	
Peak current / $\mu\text{A}$	1.957	1.923	1.915	1.908	1.894	1.875	