

Supporting information for

**UHPLC-MS/MS combined with microdialysis for simultaneous
determination of nicotine and neurotransmitter metabolites in the rat
hippocampal brain region: application to pharmacokinetic and
pharmacodynamic study**

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Table.S1 Comparison of the LOD and LOQ of the proposed method with other methods.

Analyte	LOD (ng/mL)	LOQ (ng/mL)	LOD ^[1] (ng/mL)	LOQ ^[1] (ng/mL)	LOD ^[2] (ng/mL)	LOQ ^[2] (ng/mL)	LOD ^[3] (ng/mL)	LOQ ^[3] (ng/mL)	LOD ^[4] (ng/mL)	LOQ ^[4] (ng/mL)
DA	0.05	0.2	-	-	0.05	0.25	0.20	0.50	0.05	0.25
DOPAC	0.02	0.05	-	-	--	--	2.50	5.00	-	-
L-DOPA	0.01	0.02	-	-	0.26	0.50	-	-	0.50	0.75
3-MT	0.01	0.04	-	-	0.25	0.75	-	-	0.10	0.25
HVA	0.01	0.05	-	-	17.1	50.0	15.0	450	-	-
5-HT	0.004	0.01	-	-	0.07	0.25	0.01	0.03	0.01	0.05
5-HIAA	0.004	0.01	-	-	0.16	0.50	1.00	3.00	0.10	0.25
NE	0.01	0.03	-	-	0.96	2.00	1.00	3.00	0.75	2.00
E	0.02	0.10	-	-	-	-	0.02	0.05	-	-
GABA	0.01	0.03	-	-	0.008	0.03	30.0	100	0.75	1.00
GA	0.10	0.20	-	-	0.02	1.25	-	-	-	-
ACh	0.004	0.01	-	-	0.03	0.10	-	-	0.03	0.05
Nic	0.01	0.03	0.01	0.04	-	-	-	-	-	-
Cot	0.01	0.02	0.02	0.05	-	-	-	-	-	-
NorNic	0.02	0.10	0.03	0.09	-	-	-	-	-	-
NorCot	0.01	0.03	0.02	0.07	-	-	-	-	-	-
NNO	0.01	0.02	0.02	0.05	-	-	-	-	-	-
CNO	0.02	0.10	0.03	0.10	-	-	-	-	-	-
3OH-Cot	0.03	0.10	0.04	0.14	-	-	-	-	-	-
NicGlu	0.01	0.04	0.08	0.27	-	-	-	-	-	-

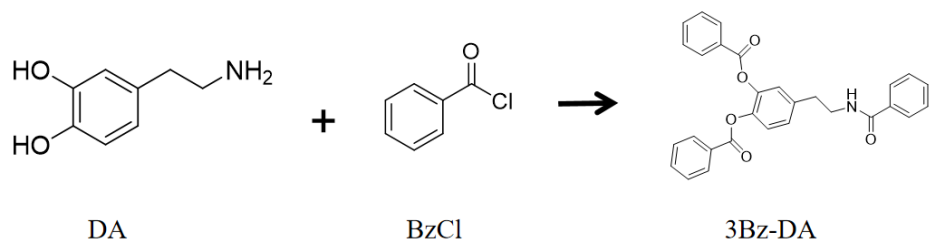


Fig.S1 Chemical formula of the reaction of DA with benzoyl chloride

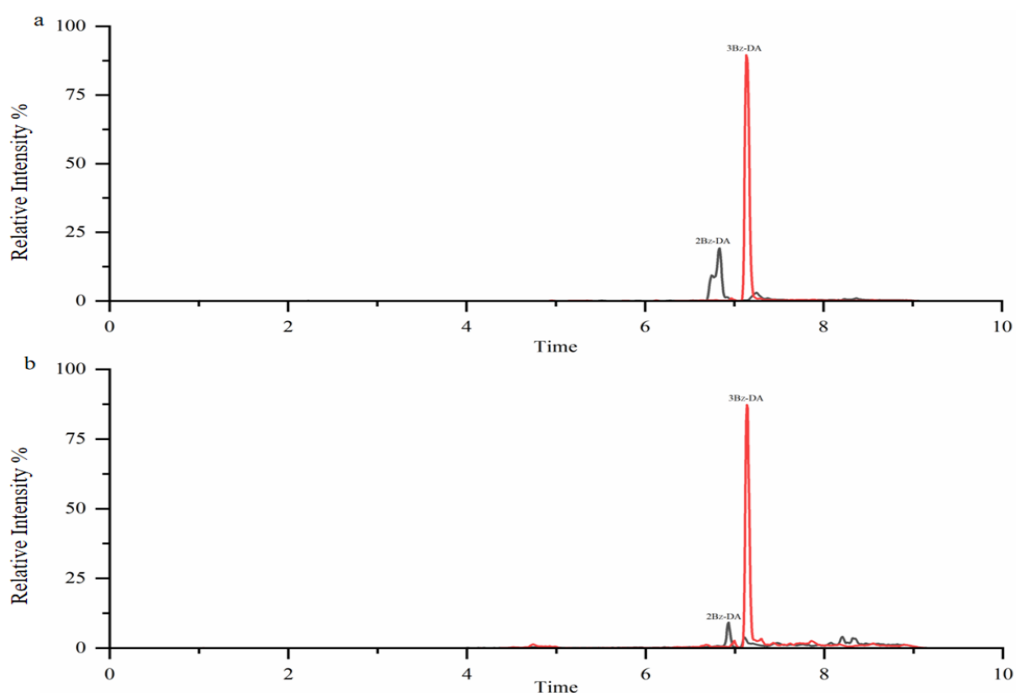


Fig.S2 (a)Chromatograms of 3Bz-DA and 2Bz-DA under the condition of 2:1:1;
 (b)Chromatograms of 3Bz-DA and 2Bz-DA under the condition of 1:2:2.

References:

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