SUPPORTING INFORMATION FOR:

Diastereoisomer- and Enantiomer-specific Profiles of Hexabromocyclododecane in the Atmosphere of an Urban City in South China

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Table S1 Atmospheric HBCDs concentrations in the literature

location	type	year	total HBCDs (mean, range)	Ref.
Rural/remote			pg/m^3	
Michigan, USA	remote	2002-2003	1.2, 0.2-8.0	14
Louisiana, USA	remote	2002-2003	0.6, 0.2-6.2	14
Arkansas, USA	semirural	2002-2003	1.6, 0.2-11	14
Indiana, USA	semirural	2002-2003	1.0, 0.2-3.6	14
Remote locations, Finland and Sweden	remote	2000-2001	2-280	13
Urban			pg/m^3	
Stockholm, Sweden	urban	2000-2001	76-610	13
Chicago, USA	urban	2002-2003	4.5, 0.9-9.6	14
Guangzhou, China	urban	2004	3.1, 2.2-3.9	this study
Guangzhou, China	city background	2004	1.7, 1.1-2.3	this study
Guangzhou, China	industrial sites	2004	0.7, 0.3-1.2	this study
Guangzhou, China	industrial sites	2004	0.9, 0.4-1.8	this study
Point sources			μg/m^3	
Plant, Sweden	producing XPS	2000	1.07	3
Plant, Norway	producing XPS	2007	12.2, 0.2-150	12

Table S2 Particle- and Gas-Phase Concentrations (pg/m^3) of HBCDs in the Guangzhou

	particle-phase, mean (SE)			
	U-1	B-1	Ind-1	Ind-2
α-HBCD	2.01 (0.20)	0.92 (0.10)	0.36 (0.07)	0.54 (0.17)
β-HBCD	0.33 (0.02)	0.18 (0.02)	0.08 (0.02)	0.10 (0.03)
γ-HBCD	0.64 (0.07)	0.42 (0.09)	0.16 (0.03)	0.15 (0.04)
	gas-phase, mean (SE)			
	U-1	B-1	Ind-1	Ind-2
α-HBCD	0.06 (0.005)	0.07 (0.007)	0.04 (0.006)	0.05 (0.001)
β-HBCD	0.03 (0.001)	0.03 (0.002)	0.02 (0.002)	0.02 (0.002)
γ-HBCD	0.02 (0.001)	0.02 (0.002)	0.02 (0.003)	0.02 (0.002)

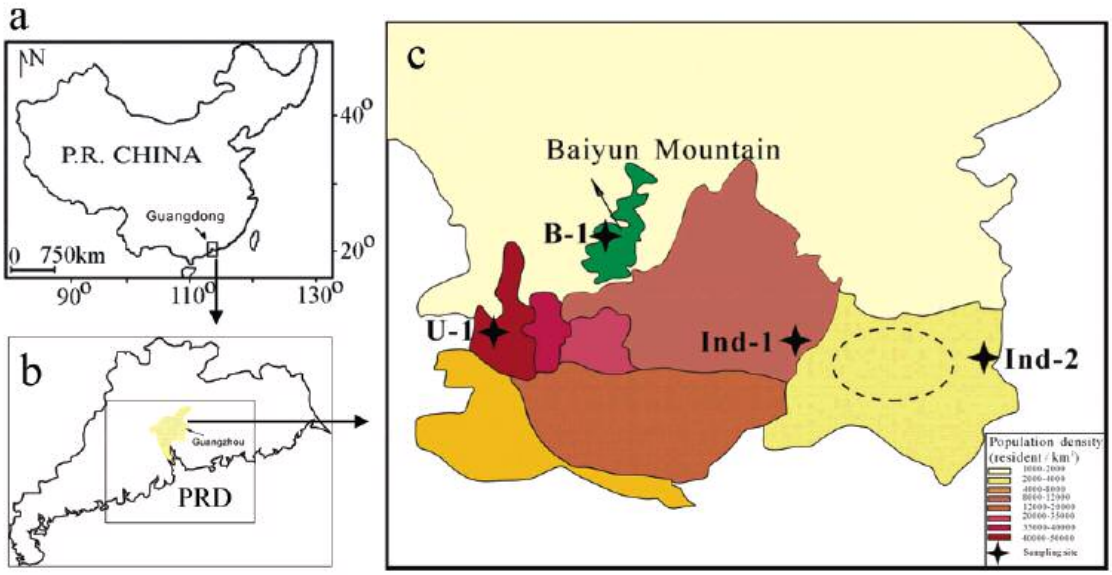

Figure S1. Map of air sampling sites. (a) the Guangdong Province in China; (b) the city of Guangzhou in the Guangdong Province and Pearl River Delta (PRD) region; and (c) the sampling sites within Guangzhou with colors indicating the population densities.

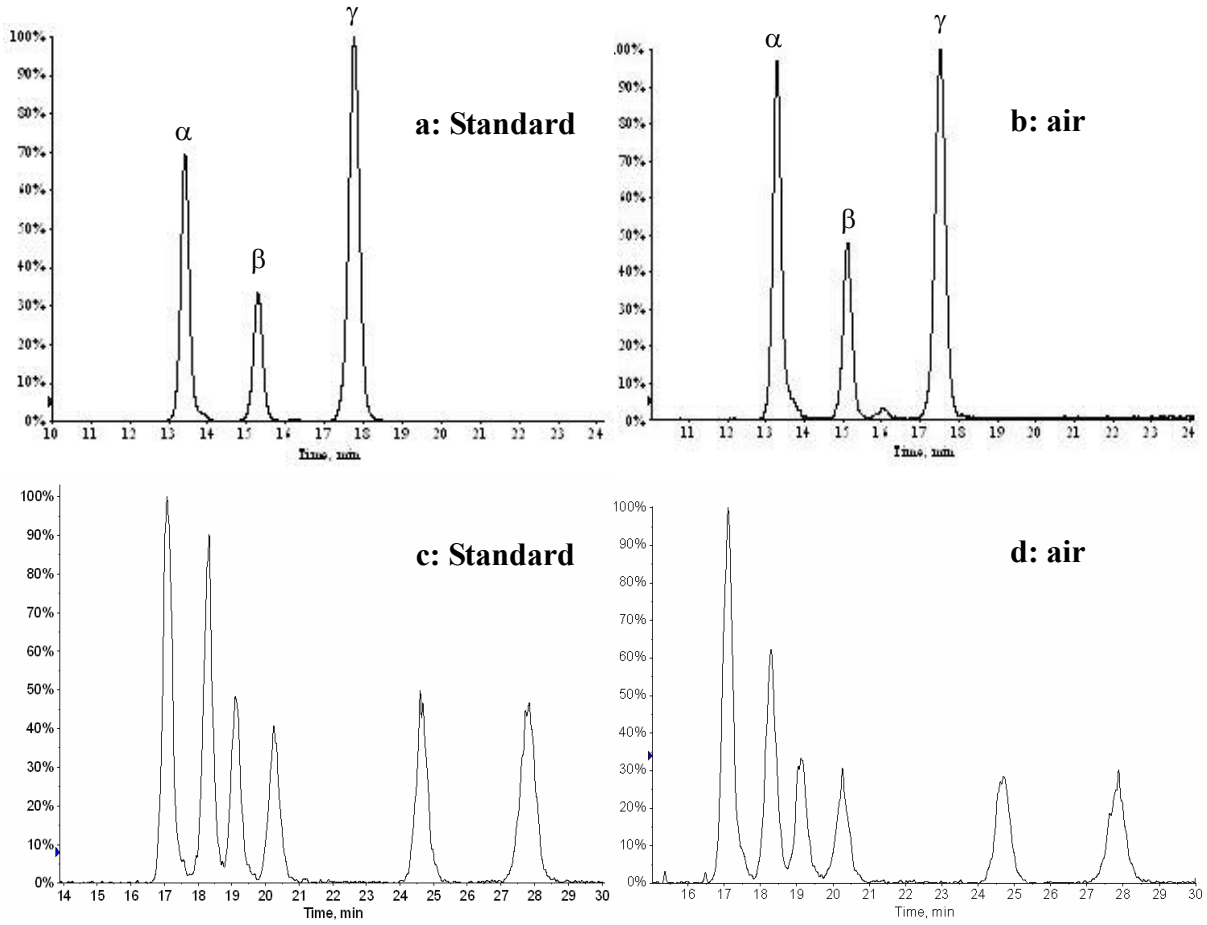

Figure S2 Chromatographic separation of HBCD diastereoisomers (Figure S2-a, -b) and enantiomers (Figure S2-c,-d) in a standard mixture and air samples.