

Table S1 The collection localities of strains in this study.

Taxon	Strain	collection locality	GPS
<i>Strombomonas borystheniensis</i>	SHNUQ6C2	Shanghai, Pujiang Forest Park	31°05'29"N 121°52'42"E
	SHNUS11B5	Shanghai, Shangta Town	31°12'62"N 120°92'89"E
	SHNUS14B6	Shanghai, Shangta Town	31°12'62"N 120°92'96"E
	SHNUS33B5	Shanghai, Ancient Yi garden	121.322682,31.298075
<i>Strombomonas fluviatilis</i>	SHNUQ6B2	Shanghai, Pujiang Forest Park	31°05'29"N 121°52'42"E
	SHNUS28B1	Jiangsu Province, Suzhou River	31°15'47"N 121°62'56"E
<i>Strombomonas gibberosa</i>	SHNUQ6A1	Shanghai, Pujiang Forest Park	31°05'29"N 121°52'42"E
<i>Strombomonas maxima</i>	SHNUS6A3	Shanghai, Shanghai Normal University, pond	31°16'83"N 121°42'47"E
<i>Strombomonas ovalis</i>	SHNUS49C6	Shanghai, Caohejing Development Zone Park	31°17'43"N 121°40'71"E
<i>Strombomonas</i> cf. <i>borystheniensis</i>	SHNUQ6C3	Shanghai, Pujiang Forest Park	31°05'29"N 121°52'42"E
<i>Strombomonas triquetra</i>	SHNUQ6A4	Shanghai, Pujiang Forest Park	31°05'29"N 121°52'42"E
<i>Strombomonas verrucosa</i>	SHNUS28C1	Jiangsu Province, Suzhou River	31°15'47"N 121°62'56"E
<i>Trachelomonas</i> sp.	SHNUS12C2	Shanghai, Shangta Town	31°12'62"N 120°92'89"E
<i>Trachelomonas armata</i>	SHNUS50B3	Shanghai, World Exhibition Park	31°19'24"N 121°48'73"E
<i>Trachelomonas</i> cf. <i>bacillifera</i> var. <i>minima</i>	SHNUQ4B2	Heilongjiang Province, Harbin City, Hulan District, Liye street, Binshui Avenue	45°54'17"N 126°41'26"E
<i>Trachelomonas bernardinensis</i>	SHNUWeijian	Shanghai, Pujiang Country Park	31°14'91"N 121°37'75"E
<i>Trachelomonas cervicula</i>	SHNUS39D1	Shanghai, Pujiang Country Park	31°14'91"N 121°37'75"E
<i>Trachelomonas</i> cf. <i>crebea</i>	SHNUS39B2	Shanghai, Pujiang Country Park	31°14'91"N 121°37'75"E
<i>Trachelomonas hispida</i>	SHNUQ1D6	Sichuan Province, Luzhou City	28°89'35"N 105°44'36"E
<i>Trachelomonas</i> sp.	SHNUS26A3	Heilongjiang Province,	45°54'17"N 126°41'26"E

		Harbin City, Hulan District, Liye street, Binshui Avenue	
<i>Trachelomonas</i> cf. <i>intermdia</i> var. <i>subinermis</i>	SHNUC4C3	Shanghai, Qingxi Country Park	31°07'36"N 121°00'02"E
	SHNUS17C3	Shanghai, Guilin Park	31°17'19"N 121°42'42"E
<i>Trachelomonas lefevrei</i>	SHNUCC	Heilongjiang Province, Harbin City, Hulan District, Liye street, Binshui Avenue	45°54'17"N 126°41'26"E
<i>Trachelomonas</i> <i>planctonica</i> var. <i>oblonga</i>	SHNUS2C1	Shanghai, Shanghai Normal University, pond	31°16'83"N 121°42'47"E
<i>Trachelomonas</i> <i>playfairii</i>	SHNUN14B1	Shanghai, World Exhibition Park	31°19'24"N 121°48'73"E
	SHNUS28C2	Jiangsu Province, Suzhou River	31°15'47"N 121°62'56"E
<i>Trachelomonas similis</i>	SHNUS41C3	Shanghai, World Exhibition Park	31°19'24"N 121°48'73"E
	SHNUC2D	Heilongjiang Province, Harbin City, Hulan District, Liye street, Binshui Avenue	45°54'17"N 126°41'26"E
	SHNUS27B5	Inner Mongolia Autonomous Region, Squirrel Lake	47°41'30"N 120°50'45"E
	SHNUS28B5	Jiangsu Province, Suzhou River	31°15'47"N 121°62'56"E
	SHNUS4C3	Jiangsu Province, Suzhou River	31°15'47"N 121°62'56"E
	SHNUN16B5	Shanghai, Gongqing National Forest Park	31°32'69"N 121°56'04"E
<i>Trachelomonas</i> sp.	SHNUS11B6	Shanghai, Shangta Town	31°12'62"N 120°92'89"E
	SHNUS24D1	Heilongjiang Province, Harbin City, Hulan District, Liye street, Binshui Avenue	45°54'17"N 126°41'26"E
	SHNUS36C1	Shanghai, Pujiang Forest Park	31°05'29"N 121°52'42"E
	SHNUS30A1	Shanghai, Century park	31°22'17"N 121°55'63"E
	SHNUS40A5	Shanghai, World Exhibition Park	31°19'24"N 121°48'73"E
	SHNUS25D1	Heilongjiang Province, Harbin City, Hulan District, Liye street, Binshui Avenue	45°54'17"N 126°41'26"E

<i>Trachelomonas subplanctonica</i>	SHNUS17C2	Shanghai, Guilin Park	31°17'19"N 121°42'42"E
<i>Trachelomonas undulaticollum</i>	SHNUS35D5	Shanghai, Pujiang Country Park	31°14'91"N 121°37'75"E
<i>Trachelomonas</i> cf. <i>sydneyensis</i> var. <i>minima</i>	SHNUC1D1	Heilongjiang Province, Harbin City, Hulan District, Liye street, Binshui Avenue	45°54'17"N 126°41'26"E
