

Supplemental Table S2. Sequencing data quality information of 124 *Brachymystax lenok tsinlingensis* individuals in this study.

	Sample id	Total reads	Total bases	Clean reads	Clean bases	Clean rate (%)	Q20 rate(%)	Q30 rate(%)	GC(%)
1	A1	168,333,192	25,249,978,800	165,035,760	24,677,866,278	0.9773	97.52	92.47	44.68
2	A2	213,263,412	31,989,511,800	209,127,282	31,269,715,460	0.9775	97.57	92.55	45.87
3	A3	162,092,166	24,313,824,900	158,156,598	23,639,208,208	0.9723	97.25	91.71	46.01
4	A4	169,798,726	25,469,808,900	166,368,574	24,878,438,550	0.9768	97.42	92.25	44.24
5	A5	164,176,812	24,626,521,800	159,745,774	23,878,691,734	0.9696	97.05	91.16	45.27
6	A6	210,716,508	31,607,476,200	206,840,574	30,919,703,684	0.9782	97.58	92.57	45.67
7	A7	200,979,106	30,146,865,900	195,891,984	29,265,230,674	0.9708	97.19	91.43	45.7
8	A8	163,391,368	24,508,705,200	159,070,546	23,770,990,758	0.9699	97.19	91.51	44.9
9	A9	167,653,314	25,147,997,100	164,014,028	24,512,503,250	0.9747	97.38	92.09	44.46
10	A10	162,751,674	24,412,751,100	158,990,150	23,759,861,444	0.9733	97.27	91.82	46.21
11	A11	145,966,824	21,895,023,600	142,261,396	21,259,300,000	0.971	97.11	91.31	45.36
12	A12	180,816,234	27,122,435,100	177,656,328	26,575,150,778	0.9798	97.72	93.02	44.98
13	A13	160,171,778	24,025,766,700	157,573,910	23,559,288,556	0.9806	97.76	93.13	42.85
14	A14	164,910,170	24,736,525,500	160,367,446	23,960,497,872	0.9686	96.98	90.93	46.73
15	A15	177,923,130	26,688,469,500	174,054,408	26,014,547,164	0.9747	97.42	92.12	46.22
16	A16	165,441,500	24,816,225,000	161,448,208	24,122,866,910	0.9721	97.16	91.4	45.53
17	A17	173,728,902	26,059,335,300	169,699,702	25,366,287,908	0.9734	97.36	92.01	42.89
18	A18	186,986,122	28,047,918,300	184,356,256	27,592,169,884	0.9838	97.98	93.79	43.24
19	A19	166,413,168	24,961,975,200	161,579,248	24,140,889,740	0.9671	96.79	90.42	43.2
20	A20	174,401,484	26,160,222,600	172,094,644	25,755,350,302	0.9845	98.02	93.93	43.06
21	A21	166,137,740	24,920,661,000	162,674,788	24,323,584,970	0.976	97.5	92.41	43.84
22	A22	174,513,516	26,177,027,400	170,520,588	25,476,336,976	0.9732	97.39	92.02	43.05

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23	A23	168,637,934	25,295,690,100	165,380,184	24,727,103,396	0.9775	97.62	92.81	43.25
24	A24	157,179,752	23,576,962,800	154,530,290	23,104,211,254	0.9799	97.75	93.13	43.29
25	A25	171,548,982	25,732,347,300	167,650,708	25,059,329,708	0.9738	97.18	91.52	43.72
26	A26	192,628,300	28,894,245,000	189,717,402	28,388,910,176	0.9825	97.92	93.55	43.7
27	A27	166,808,030	25,021,204,500	164,269,728	24,578,212,854	0.9823	97.86	93.49	43.94
28	A28	165,968,258	24,895,238,700	161,838,832	24,207,720,550	0.9724	97.2	91.65	43.21
29	A29	175,426,600	26,313,990,000	171,927,224	25,704,489,670	0.9768	97.6	92.75	43.3
30	A30	179,531,936	26,929,790,400	176,350,866	26,383,189,314	0.9797	97.76	93.12	43.05
31	C1	166,266,036	24,939,905,400	163,440,550	24,235,552,508	0.9718	98.28	93.83	42.57
32	C2	140,786,174	21,117,926,100	137,664,448	20,399,390,160	0.966	97.15	91.57	42.75
33	C3	146,981,818	22,047,272,700	143,704,962	21,310,227,386	0.9666	97.2	91.61	42.72
34	C4	148,453,130	22,267,969,500	146,011,410	21,683,252,932	0.9737	98.36	94.12	42.42
35	C5	173,670,398	26,050,559,700	169,600,622	25,209,404,026	0.9677	97.91	92.1	42.59
36	C6	154,600,608	23,190,091,200	150,280,698	22,321,292,176	0.9625	97.61	91.06	42.44
37	C7	150,423,336	22,563,500,400	147,735,296	21,947,481,528	0.9727	98.17	93.12	42.2
38	C8	156,371,606	23,455,740,900	153,934,766	22,836,126,138	0.9736	98.39	94.23	42.33
39	C9	139,902,002	20,985,300,300	137,711,704	20,454,396,428	0.9747	98.29	93.68	42.57
40	C10	137,224,938	20,583,740,700	135,177,684	20,065,641,396	0.9748	98.39	94.17	42.37
41	C11	149,836,626	22,475,493,900	147,381,492	21,879,621,930	0.9735	98.27	93.73	42.53
42	C12	144,346,640	21,651,996,000	141,668,608	21,002,265,978	0.97	98.11	93.18	42.67
43	C13	146,300,094	21,945,014,100	143,722,962	21,320,236,498	0.9715	98.25	93.66	42.36
44	C14	157,888,106	23,683,215,900	153,781,326	22,814,632,548	0.9633	97.65	92.18	42.45
45	C15	169,703,314	25,455,497,100	165,250,410	24,497,743,216	0.9624	97.54	91.92	42.49

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46	C16	155,391,406	23,308,710,900	151,722,904	22,524,204,602	0.9663	97.78	92.67	42.54
47	C17	171,983,842	25,797,576,300	167,698,710	24,881,597,212	0.9645	97.81	92.54	42.37
48	C18	147,000,774	22,050,116,100	143,386,426	21,274,046,938	0.9648	97.72	92.5	42.66
49	D1	171,223,392	25,683,508,800	166,770,882	24,758,222,272	0.964	97.61	91.82	42.59
50	D2	149,178,480	22,376,772,000	145,478,042	21,583,854,368	0.9646	97.62	92.25	42.58
51	D3	170,082,438	25,512,365,700	166,169,286	24,636,115,572	0.9657	97.66	92.32	42.51
52	D4	167,260,988	25,089,148,200	163,034,522	24,182,920,526	0.9639	97.62	92.1	42.48
53	D5	156,717,502	23,507,625,300	152,665,362	22,636,026,628	0.9629	97.51	91.8	42.54
54	D6	135,488,314	20,323,247,100	132,119,902	19,569,983,078	0.9629	97.84	92.88	42.78
55	D7	170,306,202	25,545,930,300	167,486,160	24,840,759,846	0.9724	98.29	93.68	42.45
56	D8	161,681,268	24,252,190,200	157,748,130	23,359,163,072	0.9632	97.49	91.85	42.59
57	D9	155,856,454	23,378,468,100	152,282,986	22,609,020,800	0.9671	97.72	92.41	42.68
58	D10	157,936,506	23,690,475,900	153,770,150	22,804,884,830	0.9626	97.59	92.04	42.58
59	D11	160,573,380	24,086,007,000	156,701,718	23,247,385,618	0.9652	97.65	92.21	42.63
60	D12	154,224,148	23,133,622,200	151,613,942	22,656,750,128	0.9794	98.23	93.78	43.77
61	D13	168,465,282	25,269,792,300	164,191,472	24,355,339,450	0.9638	97.52	91.73	42.5
62	D14	168,327,674	25,249,151,100	164,048,118	24,322,470,920	0.9633	97.68	92.27	42.45
63	D15	183,036,978	27,455,546,700	178,677,034	26,499,402,622	0.9652	97.8	92.59	42.49
64	D16	163,059,994	24,458,999,100	158,890,736	23,551,836,898	0.9629	97.59	92.02	42.29
65	D17	172,366,122	25,854,918,300	167,977,588	24,896,706,824	0.9629	97.77	92.5	42.3
66	D18	152,915,024	22,937,253,600	149,104,270	22,112,840,340	0.9641	97.64	92.24	42.41
67	D19	157,881,792	23,682,268,800	153,925,474	22,815,909,284	0.9634	97.64	92.3	42.43
68	D20	170,842,922	25,626,438,300	166,383,784	24,684,971,664	0.9633	97.65	92.14	42.57

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69	D21	173,499,700	26,024,955,000	169,563,576	25,163,005,372	0.9669	97.72	92.38	42.59
70	D22	160,739,450	24,110,917,500	156,564,314	23,219,541,716	0.963	97.65	92.18	42.38
71	E1	167,021,128	25,053,169,200	162,718,916	24,140,624,090	0.9636	97.71	92.37	42.61
72	E2	142,371,222	21,355,683,300	139,583,140	20,732,819,124	0.9708	98.07	92.95	43.7
73	E3	158,871,822	23,830,773,300	155,326,166	23,035,814,714	0.9666	97.69	92.37	42.5
74	E4	160,377,042	24,056,556,300	155,828,592	23,141,670,332	0.962	97.5	91.49	42.44
75	E5	177,825,482	26,673,822,300	173,496,088	25,757,532,190	0.9656	97.81	91.76	42.44
76	E6	180,006,150	27,000,922,500	175,318,268	26,012,342,560	0.9634	97.7	91.37	42.24
77	E7	161,484,432	24,222,664,800	158,852,866	23,567,588,186	0.973	98.3	93.93	42.45
78	E8	143,648,990	21,547,348,500	141,204,620	20,943,729,940	0.972	98.21	93.56	42.37
79	E9	126,767,592	19,015,138,800	124,595,824	18,507,291,600	0.9733	98.29	93.81	42.5
80	E10	140,221,308	21,033,196,200	137,789,508	20,450,482,294	0.9723	98.3	93.87	42.39
81	E11	145,805,326	21,870,798,900	143,217,802	21,244,804,124	0.9714	98.25	93.58	42.29
82	E12	138,855,292	20,828,293,800	136,487,474	20,258,640,000	0.9727	98.31	93.8	42.25
83	E13	149,080,356	22,362,053,400	146,335,552	21,720,740,330	0.9713	98.2	93.28	42.4
84	E14	136,734,858	20,510,228,700	134,243,714	19,922,244,136	0.9713	98.2	93.37	42.33
85	E15	151,428,088	22,714,213,200	148,770,820	22,069,355,540	0.9716	98.25	93.62	42.49
86	E16	144,769,320	21,715,398,000	142,318,420	21,112,838,024	0.9723	98.28	93.82	42.48
87	E17	151,848,648	22,777,297,200	149,134,788	22,126,796,434	0.9714	98.27	93.86	42.41
88	E18	134,047,474	20,107,121,100	131,459,964	19,486,112,306	0.9691	98.13	93.33	42.46
89	E19	175,412,556	26,311,883,400	172,587,972	25,619,985,780	0.9737	98.33	93.87	42.46
90	E20	152,334,496	22,850,174,400	149,754,888	22,228,895,786	0.9728	98.32	93.79	42.6
91	E21	156,029,408	23,404,411,200	153,450,968	22,760,882,252	0.9725	98.3	93.86	42.32

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92	E22	149,039,186	22,355,877,900	146,513,776	21,729,457,844	0.972	98.26	93.77	42.68
93	E23	142,744,446	21,411,666,900	139,911,950	20,766,123,026	0.9699	97.81	91.89	42.57
94	P1	137,172,232	20,575,834,800	134,731,722	19,961,914,890	0.9702	98.23	93.68	42.39
95	P2	161,378,174	24,206,726,100	158,344,842	23,473,248,854	0.9697	98.18	93.46	42.5
96	P3	158,808,006	23,821,200,900	156,768,426	23,363,702,946	0.9808	98.53	94.47	43.2
97	P4	145,924,332	21,888,649,800	143,076,064	21,207,566,610	0.9689	98.11	93.15	42.37
98	P5	169,031,390	25,354,708,500	166,288,684	24,675,398,414	0.9732	98.34	94.04	42.6
99	P6	147,929,834	22,189,475,100	145,397,268	21,608,441,564	0.9738	98.28	93.51	43.04
100	P7	160,204,252	24,030,637,800	155,917,798	23,125,077,936	0.9623	97.65	91.34	42.48
101	P8	137,770,988	20,665,648,200	134,439,156	19,871,971,106	0.9616	97.84	92.42	42.72
102	P9	144,546,692	21,682,003,800	142,067,356	21,085,625,096	0.9725	98.24	93.64	42.64
103	P10	136,209,272	20,431,390,800	133,085,184	19,663,315,980	0.9624	97.91	92.73	42.49
104	P11	141,783,740	21,267,561,000	139,320,768	20,704,184,520	0.9735	98.17	93.13	43.19
105	P12	142,896,428	21,434,464,200	139,830,138	20,686,363,770	0.9651	97.95	92.81	42.88
106	P13	133,340,124	20,001,018,600	130,668,802	19,346,251,622	0.9673	98.11	93.43	42.59
107	P14	138,066,508	20,709,976,200	135,059,016	19,978,358,746	0.9647	97.95	92.85	43.03
108	P15	135,086,544	20,262,981,600	132,276,364	19,561,850,880	0.9654	97.99	93.01	42.6
109	P16	136,862,814	20,529,422,100	133,789,568	19,750,920,852	0.9621	97.88	92.71	42.43
110	P17	157,333,542	23,600,031,300	153,105,710	22,688,909,224	0.9614	97.6	91.27	42.6
111	P18	177,096,368	26,564,455,200	172,207,336	25,537,061,022	0.9613	97.61	91.07	42.15
112	P19	146,284,140	21,942,621,000	143,400,988	21,237,900,602	0.9679	98.11	93.16	42.59
113	P20	164,719,472	24,707,920,800	161,445,724	23,919,709,638	0.9681	98.08	93.17	42.59
114	P21	171,935,426	25,790,313,900	167,315,058	24,809,817,720	0.962	97.66	91.25	42.61

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115	P22	143,884,754	21,582,713,100	139,712,528	20,723,174,692	0.9602	97.58	91.08	43.36
116	P23	140,976,340	21,146,451,000	137,967,996	20,447,984,610	0.967	97.97	92.71	43.47
117	P24	147,073,408	22,061,011,200	144,082,378	21,392,459,414	0.9697	98.1	93.07	43.84
118	P25	152,881,260	22,932,189,000	149,448,252	22,207,194,110	0.9684	98.05	92.29	43.05
119	P26	151,049,390	22,657,408,500	149,035,764	22,199,950,574	0.9798	98.54	94.42	45.32
120	P27	143,854,710	21,578,206,500	140,583,580	20,833,572,432	0.9655	97.05	91.35	42.69
121	P28	151,615,816	22,742,372,400	148,035,568	21,944,968,258	0.9649	97.18	91.58	42.71
122	P29	148,745,478	22,311,821,700	145,493,202	21,557,246,476	0.9662	97.4	92.22	42.5
123	P30	139,025,796	20,853,869,400	135,574,618	20,083,626,198	0.9631	97.02	91.29	43.13
124	P31	150,388,444	22,558,266,600	146,923,406	21,770,338,098	0.9651	97.27	91.88	42.67