

Supplementary Table S1 Sequencing output for samples.

<i>Gymnocypris eckloni</i>							
Sample	Raw Reads	Clean Reads	Clean Bases	Error rate	Q20	Q30	GC content
Muscle	4.7E+07	4.5E+07	6.76G	0.03	96.78	91.92	47.18
Liver	5.8E+07	5.6E+07	8.36G	0.03	96.86	92.12	45.56
Spleen	4.6E+07	4.5E+07	6.74G	0.03	96.65	91.74	44.59
Skin	6.4E+07	6.2E+07	9.24G	0.03	96.74	91.95	45.09
Swim bladder	5.5E+07	5.2E+07	7.86G	0.02	97.88	94.39	44.63
Gut	1E+08	9.9E+07	14.80G	0.03	96.65	91.70	44.85
Eye	6.2E+07	6E+07	9.04G	0.03	96.58	91.70	43.13
Gill	4.8E+07	4.6E+07	6.90G	0.03	96.39	91.15	45.20
Kidney	5.1E+07	4.9E+07	7.40G	0.03	96.47	91.48	42.99
Heart	5.9E+07	5.7E+07	8.52G	0.03	96.72	91.88	44.32
Brain	5.6E+07	5.3E+07	8.02G	0.03	95.69	89.83	44.13
Gonads	6.5E+07	6.2E+07	9.32G	0.03	96.50	91.57	47.71
Fat	5E+07	4.7E+07	7.10G	0.03	96.96	92.16	50.40
Blood	4.7E+07	4.6E+07	6.86G	0.03	96.63	91.74	44.56
<i>Gymnocypris selincuoensis</i>							
Sample	Raw Reads	Clean Reads	Clean Bases	Error rate	Q20	Q30	GC content
Muscle	6.1E+07	5.9E+07	8.86G	0.02	97.95	94.74	47.52
Liver	5E+07	4.8E+07	7.22G	0.02	97.42	93.30	46.59
Spleen	5.8E+07	5.6E+07	8.42G	0.02	98.03	94.88	46.92
Swim bladder	5.2E+07	5E+07	7.52G	0.02	97.98	94.79	47.52
Gut	5.9E+07	5.6E+07	8.46G	0.02	98.02	94.86	46.09
Eye	5.7E+07	5.5E+07	8.24G	0.02	98.10	95.06	45.73
Gill	5.6E+07	5.4E+07	8.09G	0.02	98.08	94.99	46.68
Kidney	5.8E+07	5.6E+07	8.43G	0.02	98.12	95.06	46.72
Heart	5.4E+07	5.2E+07	7.86G	0.02	97.98	94.82	46.43
Brain	5.1E+07	4.9E+07	7.40G	0.02	98.00	94.86	45.79
Gonads	5.5E+07	5.2E+07	7.84G	0.02	97.68	94.39	48.07
Fat	4.7E+07	4.5E+07	6.82G	0.02	98.29	95.33	49.66
Blood	5.2E+07	5E+07	7.46G	0.02	98.21	95.21	48.45
<i>Schizopygopsis younghusbandi</i>							
Sample	Raw Reads	Clean Reads	Clean Bases	Error rate	Q20	Q30	GC content
Muscle	5.3E+07	5.1E+07	7.68G	0.02	96.88	92.15	47.86
Liver	5.2E+07	5E+07	7.49G	0.02	97.02	92.45	46.85
Spleen	4.3E+07	4.1E+07	6.14G	0.02	97.12	92.53	50.80
Skin	4.3E+07	4.1E+07	6.20G	0.02	96.84	92.00	46.84
Swim bladder	4.5E+07	4.3E+07	6.52G	0.02	96.88	92.06	46.64
Gut	5.1E+07	4.8E+07	7.25G	0.02	96.96	92.26	46.03
Eye	5.2E+07	5E+07	7.43G	0.02	96.61	91.54	46.65
Gill	5E+07	4.8E+07	7.24G	0.02	96.80	91.98	45.59
Kidney	4.4E+07	4.2E+07	6.34G	0.02	96.83	92.00	46.10
Heart	5.2E+07	4.9E+07	7.42G	0.02	96.81	91.98	45.96

Brain	5E+07	4.8E+07	7.19G	0.01	97.36	93.24	44.13
Gonads	4.6E+07	4.4E+07	6.62G	0.02	96.76	92.18	46.92
<b><i>Schizopygopsis pylzovi</i></b>							
Sample	Raw Reads	Clean Reads	Clean Bases	Error rate	Q20	Q30	GC content
Muscle	4.8E+07	4.5E+07	6.73G	0.01	97.66	93.87	49.23
Liver	4.3E+07	4.3E+07	6.48G	0.01	97.73	94.06	47.79
Spleen	4.6E+07	4.3E+07	6.49G	0.01	97.39	93.37	47.84
Skin	4.9E+07	4.6E+07	6.95G	0.01	97.39	93.33	48.77
Swim bladder	4.6E+07	4.3E+07	6.45G	0.01	97.33	93.21	48.83
Gut	4.4E+07	4.3E+07	6.13G	0.01	97.43	93.49	46.88
Eye	5E+07	4.7E+07	7.01G	0.01	97.50	93.56	48.81
Gill	5.3E+07	4.9E+07	7.39G	0.01	97.55	93.68	47.54
Kidney	5.1E+07	4.8E+07	7.25G	0.01	97.44	93.44	47.31
Heart	4.3E+07	4E+07	5.93G	0.01	97.50	93.59	47.33
Brain	5E+07	4.7E+07	7.08G	0.01	97.30	93.22	45.34
Gonads	5E+07	3.6E+07	5.45G	0.01	97.18	93.09	48.20
<b><i>Platypharodon extremus</i></b>							
Sample	Raw Reads	Clean Reads	Clean Bases	Error rate	Q20	Q30	GC content
Muscle	4.5E+07	4.3E+07	6.40G	0.01	97.97	94.64	47.96
Liver	5.5E+07	5.2E+07	7.83G	0.01	97.96	94.66	46.72
Spleen	5.1E+07	4.9E+07	7.28G	0.01	97.83	94.40	47.55
Skin	4.8E+07	4.6E+07	6.86G	0.01	97.82	94.36	48.99
Swim bladder	4.7E+07	4.5E+07	6.78G	0.01	97.82	94.32	49.06
Gut	4.5E+07	4.3E+07	6.45G	0.01	97.96	94.65	47.54
Eye	4.3E+07	4.2E+07	6.28G	0.02	96.87	92.34	48.91
Gill	5.4E+07	5.1E+07	7.71G	0.01	97.81	94.39	47.45
Kidney	5E+07	4.8E+07	7.18G	0.01	97.74	94.24	47.25
Heart	4.6E+07	4.4E+07	6.57G	0.01	97.80	94.35	48.26
Brain	5.7E+07	5.4E+07	8.10G	0.01	97.78	94.32	45.66
Gonads	5.2E+07	4.9E+07	7.37G	0.01	97.83	94.33	49.92
<b><i>Schizothorax oconnori</i></b>							
Sample	Raw Reads	Clean Reads	Clean Bases	Error rate	Q20	Q30	GC content
Muscle	6.2E+07	6E+07	9.08G	0.03	96.56	91.50	47.91
Liver	7E+07	6.8E+07	10.16G	0.03	96.84	92.06	46.41
Spleen	6.6E+07	6.4E+07	9.56G	0.03	96.69	91.82	46.08
Skin	4.4E+07	4.3E+07	6.44G	0.03	96.32	91.00	47.19
Swim bladder	5.2E+07	5.1E+07	7.62G	0.03	96.06	90.46	46.97
Gut	6.2E+07	6E+07	9.06G	0.03	96.57	91.57	45.95
Eye	5.3E+07	5.2E+07	7.76G	0.03	96.61	91.62	46.20
Gill	5.4E+07	5.2E+07	7.86G	0.03	96.55	91.52	45.78
Kidney	5.2E+07	5.1E+07	7.60G	0.03	96.39	91.17	45.90
Heart	6.1E+07	5.9E+07	8.84G	0.03	96.75	91.93	45.86
Brain	5.7E+07	5.5E+07	8.18G	0.03	96.57	91.57	44.60
Gonads	6.2E+07	5.9E+07	8.86G	0.04	94.97	88.56	48.12
vibrissa	7.3E+07	6.9E+07	10.40G	0.03	96.16	90.76	45.55

Fat	6.1E+07	6E+07	8.96G	0.03	96.98	92.28	50.19
Blood	4.5E+07	4.3E+07	6.50G	0.03	96.32	91.02	45.71
<b><i>Schizothorax lissolabiatius</i></b>							
Sample	Raw Reads	Clean Reads	Clean Bases	Error rate	Q20	Q30	GC content
Muscle	4.5E+07	4.3E+07	6.44G	0.02	97.28	93.53	49.89
Liver	4.3E+07	4.2E+07	6.34G	0.03	97.38	93.38	47.65
Spleen	6.9E+07	6.6E+07	9.96G	0.03	96.68	92.35	47.72
Skin	5.3E+07	5E+07	7.56G	0.03	96.81	92.67	49.73
Swim bladder	5.8E+07	5.5E+07	8.32G	0.03	96.05	91.46	49.18
Gut	5.4E+07	5.2E+07	7.84G	0.03	97.08	93.15	47.18
Eye	4.1E+07	3.9E+07	5.90G	0.02	97.23	93.41	48.87
Gill	4.5E+07	4.4E+07	6.54G	0.02	97.31	93.34	47.32
Kidney	4.4E+07	4.3E+07	6.48G	0.02	97.41	93.48	47.52
Heart	5E+07	4.8E+07	7.20G	0.02	97.19	93.40	49.22
Brain	5E+07	4.8E+07	7.26G	0.03	97.10	93.18	46.94
Gonads	4.6E+07	4.5E+07	6.68G	0.02	97.26	93.06	48.44
vibrissa	5.4E+07	5.2E+07	7.74G	0.03	97.08	93.16	48.59
Blood	5.1E+07	4.9E+07	7.32G	0.03	96.73	92.05	49.61
<b><i>Schizothorax nukiangensis</i></b>							
Sample	Raw Reads	Clean Reads	Clean Bases	Error rate	Q20	Q30	GC content
Muscle	4.4E+07	4.3E+07	6.48G	0.03	97.10	92.61	48.61
Liver	4.5E+07	4.3E+07	6.46G	0.02	97.39	93.78	47.66
Spleen	4.1E+07	3.9E+07	5.88G	0.02	97.26	93.50	47.65
Skin	3.9E+07	3.8E+07	5.72G	0.02	97.37	93.28	48.22
Swim bladder	5.3E+07	5E+07	7.50G	0.03	97.10	93.16	49.30
Gut	6E+07	5.7E+07	8.60G	0.02	97.24	93.45	48.59
Eye	5.4E+07	5.1E+07	7.70G	0.03	96.94	92.86	47.58
Gill	5.5E+07	5.3E+07	7.94G	0.03	97.07	93.19	47.43
Kidney	5.1E+07	4.9E+07	7.30G	0.03	97.14	93.27	47.62
Brain	4.7E+07	4.5E+07	6.78G	0.03	97.07	93.15	46.30
Gonads	3.8E+07	3.6E+07	5.48G	0.03	97.25	92.97	46.56
vibrissa	5.6E+07	5.4E+07	8.06G	0.03	96.76	92.15	47.19
Blood	4.5E+07	4.4E+07	6.58G	0.03	96.67	91.97	46.51
<b><i>Schizothorax plagiostomus</i></b>							
Sample	Raw Reads	Clean Reads	Clean Bases	Error rate	Q20	Q30	GC content
Muscle	4.6E+07	4.5E+07	6.72G	0.03	96.51	91.56	48.93
Liver	3.5E+07	3.4E+07	5.08G	0.03	96.57	91.69	46.37
Spleen	4.7E+07	4.6E+07	6.82G	0.03	96.44	91.44	49.39
Swim bladder	4.3E+07	4.2E+07	6.24G	0.03	96.42	91.42	46.19
Gut	3.8E+07	3.7E+07	5.50G	0.03	96.40	91.44	44.85
Eye	4.3E+07	4.2E+07	6.26G	0.03	96.29	91.22	45.85
Brain	4.2E+07	4.1E+07	6.16G	0.03	96.04	90.81	44.00
Gill	5.2E+07	5E+07	7.49G	0.03	97.36	93.16	46.25
Kidney	4.6E+07	4.5E+07	6.68G	0.03	97.41	93.25	46.45
Heart	5.8E+07	5.6E+07	8.45G	0.03	97.47	93.37	46.66

Brain	4.2E+07	4.1E+07	6.16G	0.03	96.04	90.80	44.00
Blood	5.6E+07	5.4E+07	8.05G	0.03	97.31	93.09	47.86
<b><i>Schizothorax labiatus</i></b>							
Sample	Raw Reads	Clean Reads	Clean Bases	Error rate	Q20	Q30	GC content
Muscle	5.4E+07	5.2E+07	7.77G	0.01	97.41	93.19	47.83
Liver	5E+07	4.8E+07	7.25G	0.02	97.28	92.96	46.65
Spleen	5.4E+07	5.2E+07	7.85G	0.02	97.28	93.02	45.99
Skin	4.8E+07	4.6E+07	6.84G	0.02	97.22	92.90	47.05
Swim bladder	4.6E+07	4.4E+07	6.54G	0.02	97.22	92.87	46.71
Gut	5.1E+07	4.9E+07	7.33G	0.02	96.98	92.43	46.05
Eye	4.7E+07	4.5E+07	6.79G	0.01	97.29	93.05	46.91
Gill	4.3E+07	4.1E+07	6.21G	0.01	97.30	93.03	46.46
Kidney	5.5E+07	5.3E+07	8.00G	0.01	97.39	93.24	46.14
Heart	5.2E+07	5E+07	7.54G	0.02	96.63	91.54	46.28
Gonads	4.9E+07	4.7E+07	7.04G	0.02	96.28	91.12	47.52
vibrissa	5.2E+07	5E+07	7.51G	0.02	97.12	92.70	47.42
Blood	4.3E+07	4.1E+07	6.22G	0.01	97.38	93.17	48.70
<b><i>Schizothorax davidi</i></b>							
Sample	Raw Reads	Clean Reads	Clean Bases	Error rate	Q20	Q30	GC content
Muscle	5E+07	4.9E+07	7.41G	0.02	97.04	92.19	48.37
Liver	4.6E+07	4.6E+07	6.90G	0.02	96.93	91.83	47.04
Spleen	4.9E+07	4.8E+07	7.27G	0.02	97.07	92.19	46.50
Skin	4.6E+07	4.5E+07	6.74G	0.02	97.30	92.89	50.54
Swim bladder	5.2E+07	5.1E+07	7.69G	0.02	96.98	92.02	46.49
Gut	5.1E+07	5.1E+07	7.63G	0.02	97.95	94.11	46.66
Eye	5E+07	4.9E+07	7.42G	0.02	97.34	92.93	47.03
Gill	5E+07	4.9E+07	7.4G	0.02	96.94	91.98	46.33
Kidney	4.8E+07	4.7E+07	7.07G	0.02	97.09	92.27	47.02
Heart	4.8E+07	4.7E+07	7.10G	0.02	97.03	92.09	46.93
Brain	5E+07	5E+07	7.43G	0.02	97.16	92.41	45.61
Gonads	4.9E+07	4.9E+07	7.29G	0.02	97.06	92.19	46.85
vibrissa	4.9E+07	4.8E+07	7.24G	0.02	95.41	88.06	47.14
Blood	4.6E+07	4.6E+07	6.83G	0.02	97.50	93.25	50.72
<b><i>Ptychobarbus kaznakovi</i></b>							
Sample	Raw Reads	Clean Reads	Clean Bases	Error rate	Q20	Q30	GC content
Muscle	5E+07	4.8E+07	7.18G	0.03	96.67	91.94	49.27
Liver	4.9E+07	4.7E+07	7.02G	0.03	96.56	91.81	47.60
Spleen	5.3E+07	5.1E+07	7.60G	0.03	96.74	92.16	47.24
Skin	4.9E+07	4.8E+07	7.14G	0.03	96.31	91.32	48.09
Gut	6.1E+07	5.8E+07	8.76G	0.03	96.57	91.78	47.09
Eye	4.9E+07	4.7E+07	7.06G	0.03	96.66	91.97	47.03
Gill	5.6E+07	5.4E+07	8.16G	0.03	96.46	91.63	46.41
Kidney	4.3E+07	3.8E+07	5.76G	0.03	95.91	90.58	46.70
Heart	4.4E+07	4.3E+07	6.42G	0.03	95.65	89.73	47.03
Brain	5.1E+07	4.9E+07	7.32G	0.03	96.53	91.73	46.23
Gonads	5.5E+07	5.3E+07	7.98G	0.03	97.15	92.79	46.50
vibrissa	4.9E+07	4.7E+07	7.10G	0.03	96.35	91.39	47.04

<b>Blood</b>	6.5E+07	6.2E+07	9.23G	0.03	95.39	89.66	49.05
<b><i>Gymnocypris namensis</i></b>							
<b>Sample</b>	<b>Raw Reads</b>	<b>Clean Reads</b>	<b>Clean Bases</b>	<b>Error rate</b>	<b>Q20</b>	<b>Q30</b>	<b>GC content</b>
<b>Muscle</b>	4.9E+07	4.7E+07	7.06G	0.03	96.44	91.46	49.20
<b>Liver</b>	6E+07	5.7E+07	8.56G	0.03	96.74	92.11	47.77
<b>Spleen</b>	5.7E+07	5.5E+07	8.30G	0.02	97.47	93.67	47.46
<b>Skin</b>	5E+07	4.7E+07	7.10G	0.03	96.53	91.71	48.01
<b>Swim bladder</b>	4.6E+07	4.4E+07	6.56G	0.03	96.85	92.28	47.22
<b>Gut</b>	4.3E+07	4.1E+07	6.20G	0.03	96.86	92.34	46.80
<b>Eye</b>	5.9E+07	5.6E+07	8.42G	0.03	96.59	91.84	47.14
<b>Gill</b>	5.4E+07	5.2E+07	7.84G	0.03	96.73	92.13	46.30
<b>Kidney</b>	5E+07	4.8E+07	7.16G	0.03	96.97	92.56	46.83
<b>Heart</b>	5.3E+07	5.1E+07	7.60G	0.03	96.51	91.68	47.87
<b>Brain</b>	5E+07	4.8E+07	7.16G	0.03	96.56	91.79	46.64
<b>Gonads</b>	5.9E+07	5.6E+07	8.46G	0.03	96.15	91.18	48.79
<b>Blood</b>	4.9E+07	4.7E+07	7.12G	0.03	96.57	91.74	48.39
<b><i>Gymnocypris przewalskii</i></b>							
<b>Sample</b>	<b>Raw Reads</b>	<b>Clean Reads</b>	<b>Clean Bases</b>	<b>Error rate</b>	<b>Q20</b>	<b>Q30</b>	<b>GC content</b>
<b>Muscle</b>	5.6E+07	5.5E+07	8.18G	0.03	96.84	92.04	46.01
<b>Liver</b>	5.3E+07	5.2E+07	7.78G	0.03	96.90	92.15	46.11
<b>Spleen</b>	4.5E+07	4.4E+07	6.56G	0.03	96.91	92.19	46.27
<b>Skin</b>	4.8E+07	4.7E+07	7.00G	0.03	96.73	91.89	46.60
<b>Swim bladder</b>	5.8E+07	5.7E+07	8.48G	0.03	96.52	91.47	46.86
<b>Gut</b>	5E+07	4.8E+07	7.26G	0.03	96.87	92.09	46.15
<b>Eye</b>	6.8E+07	6.6E+07	9.94G	0.03	96.91	92.27	46.33
<b>Gill</b>	5.4E+07	5.2E+07	7.82G	0.03	96.88	92.20	45.62
<b>Kidney</b>	5.9E+07	5.7E+07	8.54G	0.03	96.76	91.89	45.84
<b>Heart</b>	5.3E+07	5.1E+07	7.62G	0.03	95.72	89.80	45.84
<b>Brain</b>	5.9E+07	5.7E+07	8.58G	0.03	96.70	91.81	44.97
<b>Gonads</b>	4.7E+07	4.5E+07	6.78G	0.03	96.39	91.30	48.02
<b>Fat</b>	5.1E+07	4.9E+07	7.40G	0.03	97.03	92.26	50.29