

DATA S2. Supporting information

Table 1 The total number of detections(TD), the derived total number of muscle fibres (TF) [each fibre was detected as two detections], as well as the total number of positive detections (TDP) and total positive fibres (TFP) per individual muscle in each animal of *Georychus capensis*.

Muscle	GC1				GC2				GC3				GC4				GC5				GC6			
	TD	TF	TDP	TFP	TD	TF	TDP	TFP	TD	TF	TDP	TFP	TD	TF	TDP	TFP	TD	TF	TDP	TFP	TD	TF	TDP	TFP
<i>Rectus femoris</i>	41601	20800	9662	4831	41570	20785	6230	3115	7566	3783	1207	603	14611	7305	1301	650	25874	12937	2690	1345	25109	12554	4527	2263
<i>Vastus medialis</i>	24585	12292	1716	880	4452	2226	471	235	15646	7823	317	158	14581	7290	1294	647	3774	1887	382	191	9048	4524	2414	1207
<i>Vastus lateralis</i>	16709	8354	2761	1097	4865	2432	776	388	10868	5434	2339	1119	7660	3830	4561	2280	7546	3773	822	411	18693	9346	10417	5208
<i>Gluteus superficialis</i>	12287	6143	1477	738	8509	4254	1286	643	16723	8361	2088	1044	5195	2597	16	8	9422	4711	803	401	16004	8002	1045	522
<i>Gluteus medius</i>	12234	6117	2811	1405	9160	4580	3140	1570	23543	11771	10835	5417	26647	13323	8540	4270	8169	4084	1583	791	39962	19981	7629	3814
<i>Piriformis</i>	20828	10414	2816	1408	11857	5928	2168	1084	16002	8001	4129	2064	12802	6401	3708	1854	5450	2725	2128	1064	21257	10628	7598	3799
<i>Semitendinosus</i>	9420	4710	928	464	36289	18144	3203	1601	7075	3537	826	413	3401	1700	634	317	2064	1032	204	102	7968	3984	1134	567
<i>Biceps femoris cranial head</i>	3131	1565	2	1	34141	17070	283	141	17923	8961	805	402	9164	4582	598	299	4881	2440	77	38	11373	5686	326	163
<i>Semimembranosus</i>	23969	11984	8393	4196	19738	9869	11515	5757	23749	11874	7833	3916	13965	6982	3909	1954	30614	15307	14084	7042	25829	12914	10681	5340
<i>Gluteofemoralis</i>	37651	18825	153	76	6564	3282	464	232	8230	4115	235	117	6921	3460	432	216	7407	3703	800	400	10647	5323	849	424
<i>Gracilis anticus</i>	7117	3558	945	472	11892	5946	3694	1847	10129	5064	461	230	14155	7077	1279	639	10397	5198	1879	939	7953	3976	936	468
<i>Pectineus</i>	3383	1691	1415	707	6353	3176	1147	573	10782	5391	5635	2817	12356	6178	11391	5695	8409	4204	2782	1391	19229	9614	10318	5159
<i>Iliacus</i>	8083	4041	769	384	10176	5088	225	112	14193	7096	1445	722	11003	5501	1373	686	6977	3488	322	161	2132	1066	334	167
<i>Tibialis cranialis</i>	10792	5396	265	132	9433	4716	866	433	6175	3087	1385	692	7072	3536	290	145	8791	4395	1271	635	5546	2773	646	323
<i>Extensor digitorum longus</i>	129	64	4	2	968	484	211	105	5023	2511	656	328	3925	1962	140	70	5003	2501	784	392	1155	577	429	214
<i>Extensor hallucis longus</i>	1941	970	115	57	2459	1229	449	224	4685	2342	740	370	1630	815	101	50	3729	1864	362	181	815	407	116	58
<i>Gastrocnemius medial head</i>	14452	7226	4465	2232	5756	2878	855	427	18784	9392	4459	2229	15319	7659	1974	987	13325	6662	248	124	13526	6763	1787	893
<i>Gastrocnemius lateral head</i>	13899	6949	2966	1483	16036	8018	7430	3715	14352	7176	4194	2097	15990	7995	4894	2447	19316	9658	4598	2299	16900	8450	4796	2398
<i>Plantaris</i>	914	457	73	36	2824	1412	1090	545	21445	10722	7409	3704	7739	3869	2376	1188	6920	3460	2986	1493	10362	5181	5165	2582
<i>Soleus</i>	1376	688	227	113	2875	1437	155	77	3456	1728	1943	971	1780	890	1409	704	3015	1507	2069	1034	4850	2425	2762	1381

Table 2 The total number of detections(TD), the derived total number of muscle fibres (TF) [each fibre was detected as two detections], as well as the total number of positive detections (TDP) and total positive fibres (TFP) per individual muscle in each animal of *Bathyergus suillus*..

Muscle	BS1				BS2				BS3				BS4				BS5			
	TD	TF	TDP	TFP	TD	TF	TDP	TFP	TD	TF	TDP	TFP	TD	TF	TDP	TFP	TD	TF	TDP	TFP
<i>Rectus femoris</i>	24429	12214	1023	511	69583	34791	3646	1823	89378	44689	23091	14545	119230	59615	41498	20749	68022	34011	14593	7296
<i>Vastus medialis</i>	7470	3735	4239	2119	53409	26704	11592	5796	15758	7879	1720	860	38502	19251	20571	10285	31263	15613	19251	9625
<i>Vastus lateralis</i>	34369	17184	10830	5415	72125	3848	36062	1924	39624	19812	12688	6344					31660	15830	20194	10097
<i>Gluteus superficialis</i>	62358	31179	12856	6428	1877	938	123	61	56937	28468	19425	9712	49014	24507	12725	6362	29507	14753	13842	6921
<i>Gluteus medius</i>	58613	29306	11196	5598	17313	8656	4225	2112	47513	23756	20028	10014	108906	54453	70550	35275	53983	26991	35231	17615
<i>Piriformis</i>	23235	11617	8176	4088	29245	14622	6330	3165	38876	19438	22230	11115	52701	26350	5323	2661	31678	15839	22100	11050
<i>Semitendinosus</i>	44530	22265	15387	7693	2051	1025	840	420	26652	13326	10204	5102	20586	10293	8716	4358	49214	24607	16048	8024
<i>Biceps femoris cranial head</i>	8651	1028	2192	1096	4044	2022	50	25	26754	13287	985	492	13179	6589	24	12	15356	7678	2376	1188
<i>Semimembranosus</i>	36154	18077	13564	6782	11488	5744	3371	1685	42402	21201	17416	8708	69920	34960	49306	24653	46362	23181	31716	15858
<i>Gluteofemoralis</i>	2057	1028	470	235	9820	4910	2421	1210	14895	7447	3211	1605	18970	9485	1668	834	28980	14490	4976	2488
<i>Gracilis anticus</i>	39782	19891	14954	7477	20111	10055	4023	2011	38541	19270	19146	9573	85449	42724	45798	22899	181642	90821	17360	8680
<i>Pectineus</i>					7782	3891	3315	1657	33202	16601	28872	14436	16597	8298	4048	2024	35604	17802	26626	13313
<i>Iliacus</i>					12902	6451	920	460	32032	16016	3890	1945	47157	23578	21223	10611	20688	10344	2353	1176
<i>Tibialis cranialis</i>	6593	3296	2089	1044	14952	7476	4685	2342	30768	15384	8390	4195	19220	9610	8457	4228	12536	6268	1666	833
<i>Extensor digitorum longus</i>	4869	2334	548	274	13764	6882	5203	2601	6896	3448	1894	947	7231	3615	2847	1423	4545	2272	402	210
<i>Extensor hallucis longus</i>	6276	3138	2023	1011	5246	2623	1887	943	9404	4702	2803	1401	12692	6346	9399	4699	10524	5262	5648	2824
<i>Gastrocnemius medial head</i>	36193	18096	16363	8181	15143	7571	6048	3024									35428	17714	23696	11848
<i>Gastrocnemius lateral head</i>	43390	21695	14835	7417	23112	11556	5693	2846									22495	11247	13164	6582
<i>Plantaris</i>	8490	4245	3240	1620	8972	4486	5443	2721									19569	9784	12785	6392

Table 3 The total number of detections(TD), the derived total number of muscle fibres (TF) [each fibre was detected as two detections], as well as the total number of positive detections (TDP) and total positive fibres (TFP) per individual muscle in each animal of *Cryptomys hottentotus natalensis*.

Muscle	CHN1				CHN2				CHN3				CHN4				CHN5				CHN6			
	TD	TF	TDP	TFP	TD	TF	TDP	TFP	TD	TF	TDP	TFP	TD	TF	TDP	TFP	TD	TF	TDP	TFP	TD	TF	TDP	TFP
<i>Rectus femoris</i>	26268	13134	3715	1857	15948	7974	3667	1833	17065	8532	2111	1055	12372	6186	2757	1378	28051	14025	1546	773	51292	25646	10944	5472
<i>Vastus medialis</i>	758	379	16	8	4189	2094	1834	917	6275	3137	624	312	7320	3615	2440	1220	10913	5456	3071	1535	14840	7420	8962	4481
<i>Vastus lateralis</i>	15099	7549	2769	1384	3076	1538	202	101	14669	7334	4644	2322	18946	9473	7933	3966	14281	7140	2773	1386	10318	5069	1863	931
<i>Gluteus superficialis</i>	18559	9279	11309	5654	9348	4674	1119	559	6490	3245	719	359	6269	3134	1556	778	12062	6031	1464	732	19214	9607	3992	1996
<i>Gluteus medius</i>	8874	4437	4637	2318	19435	9717	9607	4803	13135	6567	3324	1662	8452	4226	3551	1775	17791	8895	6947	3473	28500	14250	8014	4007
<i>Piriformis</i>	5254	2627	2238	1119	3977	1988	77	38	43164	21582	11509	5754	14527	7263	7201	3600	27677	13838	5990	2995	9919	4959	1708	854
<i>Semitendinosus</i>	5907	2953	483	241	797	368	80	40	11496	5748	1374	687	2207	1103	320	160	11667	5833	4262	2131	16020	8010	2814	1407
<i>Biceps femoris cranial head</i>	7349	3674	30	15	3491	1745	63	31	11838	5919	57	28	6591	3295	40	20	13738	6869	10083	5041	9925	4962	181	90
<i>Semimembranosus</i>	14787	7393	4624	2312	27353	13676	12794	6397	10242	5121	3769	1884	10955	5477	4636	2318	16968	8484	9488	4744	23841	11920	11965	5982
<i>Gluteofemoralis</i>	1328	664	2	1	1534	767	1	0.5	2103	1051	18	9	3598	1799	152	76	5060	2530	287	143	10597	5298	69	34
<i>Gracilis anticus</i>	760	380	119	59					6421	3210	182	91					4709	2354	1160	580	4682	2341	340	170
<i>Gracilis posticus</i>	945	472	20	10	4569	2284	920	460	727	363	182	91	4642	2321	220	110	3572	1786	4	2				
<i>Pectineus</i>	2927	1463	2162	1081	2280	1140	307	153	4416	2208	2967	1483	14375	7187	10982	5491	5353	2676	2570	1285	9708	4854	6028	3014
<i>Iliacus</i>	770	385	383	191	9341	4670	1284	642	13654	6827	4235	2117					4846	2423	797	398	7457	3728	990	495
<i>Tibialis cranialis</i>	9691	4845	2076	1038	10012	5006	950	475	6662	3331	438	219	7511	3755	961	480	12423	6211	1892	946	15563	7781	860	430
<i>Extensor digitorum longus</i>	3519	1759	947	473	979	489	335	167	1034	517	19	9	3454	1727	607	303	3278	1639	284	142	5969	2984	596	298
<i>Extensor hallucis longus</i>	1854	927	346	173					2227	1113	749	374	340	170	197	98	1511	755	549	274	3895	1947	480	240
<i>Gastrocnemius medial head</i>	12826	6413	4858	2429	5201	2600	2364	182	7285	3642	440	220	10325	5162	2620	1310	12917	6458	2862	1431	22149	11074	4176	2088
<i>Gastrocnemius lateral head</i>					15123	7561	6353	3176	19454	9727	4739	2369	10284	5142	3399	1699	10454	5227	2676	1338	9731	4865	2297	1148
<i>Plantaris</i>	7643	3821	2469	1234	11783	5891	3709	1854	6394	3197	1098	549	3403	1701	967	483	6157	3078	1147	573	7710	3855	839	419
<i>Soleus</i>	183	91	126	63	674	337	79	39	314	157	14	7	3657	1828	2758	1379	4194	2097	3033	1516	686	343	489	244