Supplementary Table 6 Analytical results of zircon Hf isotopes for the representative plutons

Spot	Age(Ma)	$^{176}Yb/^{177}Hf$	$^{176}Lu/^{177}Hf$	$^{176}Hf/^{177}Hf$	±2σ	$(^{176}Hf/^{177}Hf)_i$	$\varepsilon_{Hf}(0)$	$\varepsilon_{Hf}(T)$	T_{DM} (Ma)	T_{DM2} (Ma)	$f_{Lu/Hf}$
Qingduxiang granodiorite (55Ma)											
QDX-0-1	**55**	0.088473	0.00211	0.282737	0.000022	0.282735	-1.2	-0.1	752	1131	-0.94
QDX-0-2	55	0.037417	0.000913	0.282714	0.000019	0.282714	-2	-0.9	760	1179	-0.97
QDX-0-3	55	0.052823	0.001296	0.282739	0.000022	0.282737	-1.2	0	733	1125	-0.96
QDX-0-4	55	0.078941	0.00201	0.282755	0.000024	0.282753	-0.6	0.5	724	1091	-0.94
QDX-0-5	55	0.046901	0.001119	0.282737	0.00002	0.282736	-1.2	-0.1	731	1128	-0.97
QDX-0-6	55	0.03046	0.00077	0.282753	0.000023	0.282752	-0.7	0.5	703	1092	-0.98
QDX-0-7	55	0.081845	0.001886	0.282699	0.00002	0.282697	-2.6	-1.5	803	1217	-0.94
QDX-0-8	55	0.046363	0.00113	0.282742	0.000022	0.282741	-1.1	0.1	725	1118	-0.97
QDX-0-9	55	0.038915	0.000969	0.282733	0.000022	0.282732	-1.4	-0.2	735	1138	-0.97
QDX-0-10	55	0.057037	0.001501	0.282732	0.000026	0.28273	-1.4	-0.3	747	1142	-0.95
QDX-0-11	55	0.052919	0.00123	0.282746	0.000021	0.282744	-0.9	0.2	722	1110	-0.96
QDX-0-12	55	0.049029	0.001244	0.282706	0.000023	0.282705	-2.3	-1.2	778	1199	-0.96
QDX-0-13	55	0.043934	0.001247	0.282722	0.000023	0.28272	-1.8	-0.6	757	1164	-0.96
QDX-0-14	55	0.04182	0.001042	0.282742	0.00002	0.282741	-1.1	0.1	724	1118	-0.97
QDX-0-15	55	0.043829	0.001037	0.282698	0.000022	0.282697	-2.6	-1.4	785	1216	-0.97
QDX-0-16	55	0.072822	0.001738	0.282737	0.000024	0.282736	-1.2	-0.1	744	1129	-0.95
Longge'er gabbro (54Ma)											
LGR-0-1	54	0.103989	0.003093	0.282794	0.003098	0.282791	0.8	1.9	687	1005	-0.91
LGR-0-2	54	0.058777	0.001476	0.282707	0.000272	0.282706	-2.3	-1.2	782	1197	-0.96
LGR-0-3	54	0.044109	0.001153	0.282774	0.002121	0.282773	0.1	1.2	680	1046	-0.97
LGR-0-4	54	0.077842	0.00208	0.282727	0.001485	0.282725	-1.6	-0.5	765	1154	-0.94
LGR-0-5	54	0.047998	0.001214	0.282745	0.000823	0.282744	-0.9	0.2	722	1111	-0.96
LGR-0-6	54	0.049694	0.001262	0.282733	0.001592	0.282732	-1.4	-0.2	740	1138	-0.96
LGR-0-7	54	0.070743	0.001891	0.282716	0.002974	0.282715	-2	-0.8	777	1177	-0.94
LGR-0-8	54	0.078619	0.001973	0.282793	0.001592	0.282791	0.7	1.9	668	1006	-0.94
LGR-0-9	54	0.073263	0.00196	0.28278	0.001497	0.282778	0.3	1.4	686	1035	-0.94
LGR-0-10	54	0.074648	0.001905	0.282791	0.001846	0.282789	0.7	1.8	670	1010	-0.94

LGR-0-11	54	0.065657	0.001711	0.282717	0.002465	0.282715	-2	-0.8	773	1177	-0.95

Notes: $\varepsilon_{Hf}(0) = (((^{176}Hf/^{177}Hf)_S/(^{176}Hf/^{177}Hf)_{CHUR} - 1) \times 10{,}000$, $\varepsilon_{Hf}(t) = (((^{176}Hf/^{177}Hf)_S - (^{176}Lu/^{177}Hf)_S \times (e^{\lambda t} - 1))/((^{176}Hf/^{177}Hf)_{CHUR,0} - (^{176}Lu/^{177}Hf)_{CHUR} \times (e^{\lambda t} - 1)) - 1) \times 10{,}000$, $T_{DM1}(Hf) = 1/\lambda \times \log[1 + ((^{176}Hf/^{177}Hf)_S - (^{176}Hf/^{177}Hf)_{DM})/((^{176}Lu/^{177}Hf)_S - (^{176}Lu/^{177}Hf)_{DM})]$, $T_{DM2}(Hf) = T_{DM1}(Hf) - (T_{DM1}(Hf) - t)(f_{CC} - f_S)/(f_{CC} - f_{DM})$, $f_{Lu/Hf} = (^{176}Lu/^{177}Hf)_S/(^{176}Lu/^{177}Hf)_{CHUR} - 1$, $(^{176}Lu/^{177}Hf)_{CHUR} = 0.0332$, $(^{176}Hf/^{177}Hf)_{CHUR,0} = 0.282772$ (Blichert-Toft and Albarède 1997), $(^{176}Lu/^{177}Hf)_{DM} = 0.0384$, $(^{176}Hf/^{177}Hf)_{DM} = 0.28325$ (Griffin *et al*. 2000), $f_{CC} = [(^{176}Lu/^{177}Hf)_{mean\ crust}/(^{176}Lu/^{177}Hf)_{CHUR}] - 1$, $f_{DM} = [(^{176}Lu/^{177}Hf)_{DM}/(^{176}Lu/^{177}Hf)_{CHUR}] - 1$, $\lambda = 1.867 \times 10^{-11}$ year^{-1} (Söderlund *et al*. 2004), t = crystallization age of zircon. $(^{176}Hf/^{177}Hf)_S$ and $(^{176}Lu/^{177}Hf)_S$ are the measured values of samples; f_{CC}, f_S, and f_{DM} are the $f_{Lu/Hf}$ of crust, sample, and depleted mantle, respectively. The 2σ represents two standard deviation.

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