Supplementary Table 3 Whole-rock Sr, Nd and Pb isotopic compositions of the representative plutons

Pluton	**Qingduxiang granodiorite**			**Longge'er gabbro**		
Sample	QDX-05-02	QDX-05-03	QDX-05-04	LGR-03-02	LGR-03-03	LGR-03-04
Age (Ma)	55	55	55	54	54	54
Rb (ppm)	192	205	202	28.3	28.2	29.7
Sr (ppm)	280	271	271	601	606	596
$^{87}Rb/^{86}Sr$	1.9853	2.1866	2.1563	0.1363	0.1345	0.1443
$^{87}Sr/^{86}Sr$	0.708031	0.708175	0.70814	0.708435	0.708457	0.7084
±2σ	0.000009	0.000009	0.000011	0.000009	0.000014	0.000009
$^{87}Sr/^{86}Sr_i$	0.706494	0.706482	0.706471	0.708331	0.708355	0.70829
Sm (ppm)	5.58	5.83	5.59	7.94	7.72	8.36
Nd (ppm)	27.9	31.3	29.5	46.6	43.9	48.9
$^{147}Sm/^{144}Nd$	0.1210	0.1124	0.1143	0.1031	0.1064	0.1033
$^{143}Nd/^{144}Nd$	0.512402	0.512448	0.512447	0.512424	0.512355	0.512336
±2σ	0.000012	0.000008	0.000010	0.000011	0.000010	0.000012
$\varepsilon_{Nd}(t)$	-4.1	-3.1	-3.2	-3.5	-4.9	-5.3
T_{DM} (Ma)	1232	1059	1080	1003	1131	1126
$^{208}Pb/^{204}Pb$	38.958	39.010	38.963	39.050	39.036	39.035
±2σ	0.004	0.005	0.003	0.005	0.003	0.003
$^{207}Pb/^{204}Pb$	15.622	15.621	15.623	15.669	15.666	15.663
±2σ	0.002	0.002	0.001	0.002	0.001	0.002
$^{206}Pb/^{204}Pb$	18.714	18.710	18.703	18.675	18.672	18.673
±2σ	0.002	0.002	0.002	0.003	0.001	0.001
$^{208}Pb/^{204}Pb_i$	38.958	39.010	38.963	39.050	39.036	39.035
$^{207}Pb/^{204}Pb_i$	15.669	15.666	15.663	15.622	15.621	15.623
$^{206}Pb/^{204}Pb_i$	18.675	18.672	18.673	18.714	18.710	18.703

Notes: $^{87}Sr/^{86}Sr_i = {}^{87}Sr/^{86}Sr - {}^{87}Rb/^{86}Sr \times (e^{\lambda t} - 1)$, where λ is the decay constant and where $\lambda_{Rb\text{-}Sr} = 0.0142\ Ga^{-1}$. $(^{143}Nd/^{144}Nd)_t = {}^{143}Nd/^{144}Nd - (^{147}Sm/^{144}Nd) \times (e^{\lambda t} - 1)$, where λ is the decay constant and where $\lambda_{Sm-Nd} = 0.00654\ Ga^{-1}$. $\varepsilon_{Nd}(t) = [(^{143}Nd/^{144}Nd)_{Sample}(t)/(^{143}Nd/^{144}Nd)_{CHUR}(t) - 1] \times 104$; $(^{143}Nd/^{144}Nd)_{CHUR}(t) = 0.512638 - 0.1967 \times (e^{\lambda t} - 1)$, where t is the age of the sample. $T_{DM} = 1/\lambda_{Sm-Nd} \times \ln\{1 + [((^{143}Nd/^{144}Nd)_{Sample} - 0.51315)/((^{147}Sm/^{144}Nd)_{Sample} - 0.2137)]\}$, where T_{DM} is the depleted mantle model age. $f_{Sm/Nd} = [(^{147}Sm/^{144}Nd)/0.1967] - 1$, where $f_{Sm/Nd}$ is the fractionation factor of the sample. All the modern Sm/Nd values in CHUR (chondritic uniform reservoir) and DM

(depleted mantle) are as suggested by Goldstein *et al* (1984) and Peucat *et al* (1988). $^{206}Pb/^{204}Pb_i$, $^{207}Pb/^{204}Pb_i$ and $^{208}Pb/^{204}Pb_i$ values are calculated by the measured whole rock U, Th and Pb contents and Pb isotopic ratios. 2σ represents the standard deviation.

Goldstein, S.L., O'Nions, R.K., and Hamilton, P.J., 1984, A Sm-Nd isotopic study of atmospheric dusts and particulates from major river systems: Earth and Planetary Science Letters, v. 70, p. 221-236. https://doi.org/10.1016/0012-821X(84)90007-4

Peucat, J.J., Jegouzo, P., Vidal, P., and Bernard-Griffiths, J., 1988, Continental crust formation seen through the Sr and Nd isotope systematics of S-type granites in the Hercynian belt of western France: Earth and Planetary Science Letters, v. 88, p. 60-68. https://doi.org/10.1016/0012-821X(88)90046-5