

Electronic Supplementary Information

Rapid separation of Sr from carbonates for accurate $^{87}\text{Sr}/^{86}\text{Sr}$ isotope analysis by TIMS

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Table S1 The ratios of Ca/Sr and Mg/Sr in precipitation components under different Ba addition amounts

Ba addition (mg)	Ca/Sr	Mg/Sr
0	0.00	0.00
0.2	58.02	30.18
0.5	36.11	17.08
1.0	64.14	30.37
2.0	43.23	19.84
3.0	45.07	20.50

Table S2 The ratios of Ca/Sr, Ba/Sr and Mg/Sr in Sr fraction after AG50W×12 cation resin chromatography from seven carbonate reference materials

RMs	Ca/Sr	Ba/Sr	Mg/Sr
CoQ-1	0.05	0.00	0.00
GBW03105	4.81	0.00	0.01
GBW03105a	4.15	0.00	0.04
GBW07127	1.48	0.00	0.04
USTC-Coral	0.13	0.00	0.00
TJ-Calcite	0.65	0.00	0.00
JDo-1	1.55	0.00	0.06