

Supplementary Table 3. Structural formulae of biotite used for thermobarometry.

Sample	nar	Si	Aliv	Alvi	Fe2+	Ca	Na	K	Mg
JAB15D		2.7369	1.2631	0.3671	1.2687	0.0024	0.0162	0.8876	1.0555
JAB18A		2.7476	1.2524	0.4486	1.1944	0.0008	0.0321	0.887	0.1376
JAB21B		2.7196	1.2804	0.4294	1.4284	0	0.0325	0.8666	0.8493
JAB146A1		2.8401	1.1599	0.3811	1.1962	0.0016	0.0176	0.8335	1.1845
JAB152A3		2.807	1.193	0.3574	1.4064	0.0025	0.0193	0.7912	1.0011
JAB156A1		2.7306	1.2694	0.3706	1.3691	0.0008	0.0162	0.8851	0.9653
JAB159A		2.7979	1.2021	0.3677	1.1358	0.0016	0.0189	0.8246	1.2753
JAB160A		2.8063	1.1937	0.3858	1.0974	0	0.0205	0.814	1.326
JAB161A		2.7438	1.2562	0.3502	1.3957	0	0.0208	0.9045	1.0252
JAB162A		2.7277	1.2723	0.3688	1.2738	0.0008	0.0469	0.8525	1.1383
JAB164A		2.7472	1.2528	0.3323	1.4336	0	0.0148	0.8929	0.9616
JAB235A1		2.7731	1.2269	0.3502	1.373	0.0025	0.0119	0.8589	1.0541
JAB240D1		2.746	1.254	0.4288	1.1646	0.0024	0.0203	0.7703	1.2252
JAB242A		2.7447	1.2553	0.3963	1.2167	0.0008	0.0249	0.8418	1.1516
JAB245A		2.7537	1.2463	0.4149	1.1573	0	0.019	0.8606	1.1866
JAB253A		2.7393	1.2607	0.4165	1.4286	0.0025	0.0252	0.8409	0.9212
JAB255A		2.7308	1.2692	0.3542	1.2748	0.0008	0.0073	0.8399	1.1962
JAB257A		2.765	1.235	0.364	1.2688	0	0.0206	0.8378	1.1497
JAB258D		2.7231	1.2769	0.3903	1.2799	0.0016	0.0394	0.8629	1.0298
JAB261B1		2.7089	1.2911	0.3706	1.3197	0.0008	0.0384	0.8391	1.059
JAB262A1		2.7214	1.2786	0.3684	1.2874	0.0016	0.0353	0.8729	1.0202
JAB264A2		2.7247	1.2753	0.3825	1.2998	0	0.0352	0.8281	1.0559
JAB268A		2.7259	1.2741	0.3294	1.4262	0	0.0089	0.9034	0.9443
JAB269B		2.7186	1.2814	0.384	1.438	0	0.0193	0.8813	0.9423
JAB277D1		2.7277	1.2723	0.4303	1.4319	0.0025	0.0547	0.8514	0.9336

Mn	Ti	F
0.0174	0.1346	0.0313
0.0108	0.0674	0.0309
0.0142	0.1243	0.012
0	0.0812	0.0763
0.0078	0.0903	0.1137
0.009	0.1293	0.0505
0	0.0842	0.0927
0.0032	0.0873	0.1502
0.0032	0.1001	0.0314
0.0019	0.0967	0.0502
0.0065	0.1326	0.0145
0.0039	0.0969	0.0509
0.0032	0.0848	0.0472
0.0045	0.109	0.0167
0.0013	0.1031	0.019
0.0078	0.0857	0.0822
0.0019	0.0821	0.0839
0.0032	0.0917	0.0743
0.0019	0.1365	0.031
0.0013	0.1254	0.0385
0.0019	0.1468	0.0552
0	0.1305	0.0311
0.0136	0.1435	0.0314
0.0052	0.1132	0.0048
0.009	0.0792	0.0048