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Supplemental Material

Table S1. Zircon LA-ICP-MS U-Pb data of the early Jurassic mafic rocks from the Kaqiong microblock.

Table S2. Zircon LA-ICP-MS REE (ppm) data of the early Jurassic mafic rocks from the Kaqiong microblock.

Table S3. Whole-rock major (%) and trace (ppm) element data of the early Jurassic mafic rocks from the Kaqiong microblock.

Table S4. Zircon LA-MC-ICP-MS Lu-Hf data of the early Jurassic mafic rocks from the Kaqiong microblock.

Table S5. Whole-rock Sr-Nd isotopic data of the early Jurassic mafic rocks from the Kaqiong microblock.

TABLE S1. ZIRCON LA-ICP-MS U-PB DATA OF THE EARLY JURASSIC MAFIC ROCKS FROM THE KAOJONG MICROBLOCK

Analysis	Th	U	Th/U	Isotopic ratios						Apparent ages (Ma)						
	(ppm)	(ppm)		²⁰⁷ Pb/ ²⁰⁶ Pb	1σ	²⁰⁷ Pb/ ²³⁵ U	1σ	²⁰⁶ Pb/ ²³⁸ U	1σ	²⁰⁷ Pb/ ²⁰⁶ Pb	1σ	²⁰⁷ Pb/ ²³⁵ U	1σ	²⁰⁶ Pb/ ²³⁸ U	1σ	
Metagabbro 15T45																
15T45-01	134	478	0.28	0.05383	0.00448	0.22808	0.01837	0.03073	0.00065	364	191	209	15	195	4	
15T45-02	148	219	0.67	0.05195	0.0031	0.21629	0.01262	0.03057	0.00042	283	109	199	11	194	3	
15T45-03	252	417	0.61	0.05489	0.00262	0.23098	0.01096	0.0307	0.00031	408	88	211	9	195	2	
15T45-04	507	566	0.90	0.05127	0.00182	0.21756	0.00745	0.03082	0.00026	253	63	200	6	196	2	
15T45-05	93.1	118	0.79	0.05805	0.00405	0.24706	0.01682	0.03162	0.00047	532	124	224	14	201	3	
15T45-06	108	263	0.41	0.05291	0.00243	0.22252	0.00995	0.0308	0.00034	325	82	204	8	196	2	
15T45-07	68.5	114	0.60	0.05321	0.00628	0.23361	0.02732	0.03184	0.00051	338	270	213	22	202	3	
15T45-08	129	234	0.55	0.31772	0.00493	32.56367	0.53185	0.73887	0.00555	3559	16	3567	16	3566	21	
15T45-09	105	304	0.35	0.05086	0.00236	0.21588	0.00971	0.03094	0.00032	235	85	198	8	196	2	
15T45-10	191	294	0.65	0.05244	0.00257	0.22244	0.01061	0.0311	0.00036	305	88	204	9	197	2	
15T45-11	306	1041	0.29	0.05205	0.00131	0.2226	0.0057	0.0308	0.00023	288	45	204	5	196	1	
15T45-12	105	165	0.64	0.05017	0.00433	0.21958	0.01866	0.03174	0.00046	203	197	202	16	201	3	
15T45-13	233	464	0.50	0.05125	0.00202	0.22021	0.00868	0.03116	0.00034	252	70	202	7	198	2	
15T45-14	181	463	0.39	0.04598	0.00166	0.19777	0.00701	0.03115	0.00028	-3	56	183	6	198	2	
Metagabbro 15T41																
15T41-01	5.55	13.9	0.40	0.1740	0.0058	11.7193	0.3770	0.4920	0.0068	2598	56	2582	30	2579	30	
15T41-02	183	362	0.50	0.0729	0.0016	1.7933	0.0384	0.1775	0.0012	1011	44	1043	14	1053	7	
15T41-03	285	306	0.93	0.0531	0.0026	0.2188	0.0103	0.0302	0.0004	332	111	201	9	192	2	
15T41-04	159	435	0.37	0.1685	0.0026	12.9013	0.2192	0.5521	0.0048	2543	26	2672	16	2834	20	
15T41-05	85.1	215	0.40	0.0717	0.0017	1.7171	0.0392	0.1735	0.0013	976	53	1015	15	1031	7	
15T41-06	14.2	549	0.03	0.0505	0.0029	0.2081	0.0119	0.0300	0.0005	217	131	192	10	190	3	
15T41-07	75.0	359	0.21	0.0740	0.0016	1.9820	0.0421	0.1937	0.0013	1043	43	1109	14	1141	7	
15T41-08	131	325	0.40	0.0754	0.0015	2.0346	0.0418	0.1951	0.0013	1080	41	1127	14	1149	7	
15T41-09	104	271	0.38	0.0916	0.0016	3.3544	0.0611	0.2646	0.0017	1458	29	1494	14	1513	9	
15T41-10	214	644	0.33	0.0755	0.0013	2.0276	0.0351	0.1940	0.0012	1081	29	1125	12	1143	6	
15T41-11	81.7	173	0.47	0.1620	0.0029	11.9582	0.2118	0.5336	0.0034	2476	30	2601	17	2757	14	
15T41-12	82.1	530	0.15	0.0797	0.0019	2.0545	0.0531	0.1856	0.0017	1191	46	1134	18	1098	9	
15T41-13	65.6	185	0.36	0.0736	0.0020	1.5643	0.0424	0.1542	0.0013	1031	56	956	17	925	7	
15T41-14	329	466	0.71	0.0538	0.0019	0.2232	0.0079	0.0301	0.0003	361	80	205	7	191	2	
15T41-15	355	695	0.51	0.1534	0.0024	10.3906	0.1819	0.4883	0.0046	2384	26	2470	16	2563	20	
15T41-16	153	537	0.29	0.0569	0.0017	0.4695	0.0143	0.0597	0.0005	487	67	391	10	374	3	
Metagabbro 13T32																
13T32-01	523	1689	0.31	0.06805	0.00138	1.24179	0.02613	0.1314	0.00123	870	28	820	12	796	7	
13T32-02	14.3	1558	0.01	0.05068	0.00147	0.198	0.00574	0.02826	0.00033	226	45	183	5	180	2	
13T32-03	10.0	1089	0.01	0.05231	0.00177	0.20347	0.00678	0.02811	0.00025	299	60	188	6	179	2	
13T32-04	12.4	1366	0.01	0.04949	0.00153	0.19239	0.00588	0.02799	0.00024	171	55	179	5	178	1	
13T32-05	21.8	2127	0.01	0.04748	0.00136	0.1864	0.00576	0.02831	0.00044	73	44	174	5	180	3	
13T32-06	18.3	1940	0.01	0.04956	0.00149	0.19637	0.00599	0.02844	0.00032	174	50	182	5	181	2	
13T32-07	4.37	413	0.01	0.05378	0.00284	0.20823	0.01072	0.02812	0.00035	362	94	192	9	179	2	
13T32-08	8.42	982	0.01	0.05321	0.00178	0.21039	0.00671	0.02868	0.00029	338	78	194	6	182	2	
13T32-09	11.2	761	0.01	0.05133	0.0021	0.20341	0.00807	0.02874	0.00028	256	96	188	7	183	2	
13T32-10	10.9	1484	0.01	0.05107	0.00161	0.19932	0.00601	0.02831	0.00025	244	74	185	5	180	2	
13T32-11	13.0	1289	0.01	0.05114	0.00196	0.20199	0.00751	0.02865	0.00028	247	91	187	6	182	2	
13T32-12	302	440	0.69	0.05229	0.00445	0.3319	0.0269	0.04603	0.0012	298	195	291	21	290	7	
13T32-13	132	177	0.74	0.09587	0.00268	3.5078	0.09454	0.26364	0.00276	1545	35	1529	21	1508	14	
13T32-14	104	78.3	1.32	0.05056	0.00686	0.4522	0.06072	0.06486	0.00127	221	290	379	42	405	8	
13T32-15	4.94	328	0.02	0.0519	0.00842	0.20052	0.03237	0.02802	0.00044	281	329	186	27	178	3	
13T32-16	20.5	2069	0.01	0.04819	0.00141	0.189	0.00628	0.02823	0.0005	109	46	176	5	179	3	
13T32-17	15.9	1941	0.01	0.04856	0.00139	0.19274	0.00616	0.02851	0.00044	126	47	179	5	181	3	
13T32-18	28.8	661	0.04	0.05047	0.00285	0.19238	0.01067	0.02765	0.00028	217	130	179	9	176	2	
Hornblende gabbro 15T15																
15T15-01	262	4271	0.06	0.04927	0.001	0.18666	0.00356	0.02747	0.00019	161	49	174	3	175	1	
15T15-02	323	5359	0.06	0.04916	0.00081	0.1897	0.00329	0.02787	0.0002	155	27	176	3	177	1	
15T15-03	16.8	220	0.08	0.0595	0.00359	0.22623	0.01324	0.02795	0.00033	585	107	207	11	178	2	
15T15-04	37.4	315	0.12	0.05833	0.0033	0.22159	0.01296	0.02768	0.00033	542	108	203	11	176	2	
15T15-05	1033	9803	0.11	0.04829	0.00075	0.18443	0.00305	0.02759	0.00019	113	26	172	3	175	1	
15T15-06	487	7354	0.07	0.04881	0.00074	0.18761	0.00301	0.02777	0.00018	139	25	175	3	177	1	
15T15-07	754	8134	0.09	0.04785	0.0007	0.18628	0.00285	0.02814	0.00019	92	23	173	2	179	1	
15T15-08	69.2	432	0.16	0.06234	0.00215	0.23912	0.008	0.02793	0.00025	686	56	218	7	178	2	
15T15-09	174	704	0.25	0.07302	0.00124	1.68135	0.02969	0.16638	0.00124	1015	24	1001	11	992	7	
15T15-10	51.7	134	0.39	0.0616	0.00302	0.5848	0.02814	0.06886	0.00066	660	108	468	18	429	4	
15T15-11	602	722	0.83	0.06573	0.00111	1.20216	0.02248	0.13274	0.00102	798	26	802	10	803	6	
15T15-12	325	595	0.55	0.06101	0.00134	0.70422	0.0165	0.08394	0.00063	640	37	541	10	520	4	
15T15-13	23.4	214	0.11	0.05528	0.00331	0.21325	0.01287	0.02816	0.00035	423	113	196	11	179	2	
15T15-14	128	89.9	1.42	0.09668	0.00216	3.37395	0.07656	0.25384	0.00247	1561	28	1498	18	1458	13	
15T15-15	166	441	0.38	0.16753	0.0027	11.29092	0.20006	0.4874	0.00429	2533	18	2547	17	2559	19	
Hornblende gabbro 15T17																
15T17-01	21.5	223	0.10	0.05052	0.00354	0.19353	0.01335	0.02778	0.00034	219	160	180	11	177		

15T17-10	39.8	460	0.09	0.0568	0.00389	0.21548	0.01462	0.02751	0.00026	484	156	198	12	175	2
15T17-11	48.6	531	0.09	0.0506	0.00247	0.1933	0.00855	0.02795	0.00027	223	85	179	7	178	2
15T17-12	95.0	121	0.78	0.06266	0.00425	0.25886	0.0178	0.0303	0.00048	697	120	234	14	192	3
15T17-13	8.47	92.0	0.09	0.04818	0.00664	0.1862	0.02651	0.03058	0.00056	108	256	173	23	194	4
15T17-14	28.3	321	0.09	0.06073	0.00274	0.23423	0.01029	0.02822	0.00027	630	78	214	8	179	2

Hornblende gabbro 15T12-3

16T12-3-01	7.4	146	0.05	0.05158	0.00355	0.19693	0.0132	0.02769	0.00043	267	159	183	11	176	3
16T12-3-02	4.0	87	0.05	0.04605	0.00403	0.17392	0.01498	0.02739	0.00044		191	163	13	174	3
16T12-3-03	1140	1269	0.90	0.05569	0.00111	0.622	0.01332	0.08058	0.00076	440	31	491	8	500	5
16T12-3-04	106	1186	0.09	0.05395	0.00107	0.47682	0.01001	0.06379	0.00057	369	31	396	7	399	3
16T12-3-05	85	175	0.48	0.16452	0.00284	10.25128	0.1977	0.45043	0.005	2503	18	2458	18	2397	22
16T12-3-06	598	1143	0.52	0.09106	0.00257	3.02007	0.07763	0.24054	0.00278	1448	55	1413	20	1389	14
16T12-3-07	2.48	75	0.03	0.05665	0.00681	0.21654	0.02698	0.02812	0.00066	478	237	199	23	179	4
16T12-3-08	14.4	182	0.08	0.04994	0.00339	0.18809	0.01247	0.02732	0.00041	192	155	175	11	174	3
16T12-3-09	4.4	108	0.04	0.05983	0.00555	0.21767	0.01903	0.02753	0.00047	597	162	200	16	175	3
16T12-3-10	0.44	118	0.00	0.04605	0.00349	0.17437	0.01294	0.02747	0.00042		168	163	11	175	3
16T12-3-11	53	399	0.13	0.06652	0.00175	1.12692	0.02762	0.12287	0.00116	823	56	766	13	747	7
16T12-3-12	144	644	0.22	0.07283	0.00136	1.36587	0.02693	0.13521	0.00104	1009	27	874	12	818	6
16T12-3-13	543	523	1.04	0.05715	0.00145	0.50751	0.01272	0.06433	0.00058	497	39	417	9	402	4
16T12-3-14	413	544	0.76	0.07104	0.00129	1.63053	0.03059	0.16556	0.00115	959	27	982	12	988	6

TABLE S2. ZIROCN LA-ICP-MS REE (PPM) DATA OF THE EARLY JURASSIC MAFIC ROCKS FROM THE KAOIONG MICROBLOCK

Analysis	La	Ce	Pr	Nd	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu	Eu/Eu*	Ce/Ce*	(Dy/Yb) _N
Metagabbro 15T45																	
15T45-01	0.13	5.30	0.12	1.69	4.21	0.25	29.1	11.2	139	52.2	223	48.7	470	74.0	0.07	9.28	0.20
15T45-02	0.46	8.89	0.58	10.1	13.7	1.42	62.4	18.1	182	59.8	226	44.7	389	59.3	0.15	3.60	0.31
15T45-03	0.15	11.1	0.39	7.28	12.3	1.74	64.7	19.4	210	71.4	279	57.4	518	79.5	0.19	7.55	0.27
15T45-04	7.32	37.2	2.87	20.2	18.1	1.16	72.5	21.4	227	75.3	290	58.3	514	77.7	0.10	1.99	0.30
15T45-05	0.01	5.76	0.64	9.64	15.4	4.84	61.4	16.4	161	51.6	196	39.5	356	55.4	0.48	2.79	0.30
15T45-06	0.16	5.84		1.35	4.18	0.19	24.2	8.50	100	37.3	157	34.3	324	50.8	0.06	28.21	0.21
15T45-07	0.17	3.69	0.50	7.90	13.3	2.67	55.0	14.7	149	47.2	179	34.7	306	48.8	0.30	2.03	0.33
15T45-08		9.20	0.24	5.07	10.8	2.70	65.3	21.7	262	94.2	385	75.5	668	103	0.31	11.73	0.26
15T45-09	0.05	4.95	0.00	1.07	3.61	0.33	21.8	7.99	95.7	34.9	147	32.7	311	49.3	0.12	68.92	0.21
15T45-10	1.11	10.8	0.82	8.37	11.9	1.89	57.0	17.0	186	62.0	245	50.1	451	69.7	0.22	2.66	0.28
15T45-11		13.2	0.08	1.92	5.67	0.18	38.0	14.4	183	67.5	287	61.7	569	89.3	0.04	50.09	0.21
15T45-12	56.53	131	17.78	92.7	30.5	2.58	76.7	18.9	184	57.7	214	41.7	367	57.6	0.16	1.01	0.34
15T45-13	0.12	10.5	0.29	4.61	9.87	1.17	53.2	17.9	199	68.5	275	56.7	509	77.9	0.16	9.68	0.26
15T45-14	0.0000	8.16	0.10	1.55	3.97	0.30	29.1	10.4	121	44.7	186	39.9	379	58.7	0.09	26.58	0.21
Metagabbro 15T41																	
15T41-01		14.0	0.02	1.16	0.87	0.30	5.07	1.69	21.2	7.35	35.1	8.83	93.2	15.3	0.44	181.98	0.15
15T41-02	0.15	11.7	0.12	2.19	3.67	0.32	23.9	8.03	95.8	35.4	152	33.9	340	52.9	0.10	20.60	0.19
15T41-03	0.03	22.4	0.20	4.22	7.57	0.80	34.4	10.3	103	32.8	127	25.8	240	34.4	0.15	33.56	0.29
15T41-04	0.11	24.0	0.16	1.37	3.59	1.79	21.7	7.16	89.5	33.2	154	36.3	379	61.6	0.62	36.78	0.16
15T41-05	0.04	2.94	0.09	0.97	2.74	0.26	18.2	6.55	81.9	31.1	137	30.9	298	45.0	0.11	8.75	0.18
15T41-06		0.73	0.08	1.32	3.35	0.20	26.1	10.4	126	42.9	172	35.8	328	47.2	0.07	2.75	0.26
15T41-07		0.65	0.06	0.22		0.16	5.53	3.04	39.2	13.4	57.7	12.6	121	18.0		3.27	0.22
15T41-08	0.17	8.84	0.15	2.39	4.18	0.64	19.2	6.42	75.4	27.7	123	28.7	281	45.2	0.22	12.59	0.18
15T41-09	0.14	12.0	0.22	2.27	3.94	0.50	23.9	8.53	107	39.1	171	38.4	369	56.4	0.16	13.61	0.19
15T41-10	0.10	8.69	0.09	0.72	2.18	0.27	12.2	4.65	62.2	25.4	124	30.3	323	51.3	0.16	20.45	0.13
15T41-11	0.09	9.24	0.02	0.76	0.31	0.17	4.43	1.07	12.7	4.89	23.0	5.97	70.4	12.9	0.46	47.26	0.12
15T41-12	0.03	2.07	0.11	0.74	4.08	0.00	36.5	15.0	176	61.1	244	53.7	511	73.5	0.00	5.26	0.23
15T41-13	0.03	6.02		1.13	2.66	0.19	19.5	7.01	85.6	31.4	133	29.2	277	42.5	0.08	184.86	0.21
15T41-14	0.03	24.9		1.80	5.34	0.60	22.3	7.06	73.0	24.6	100	20.9	191	30.8	0.17	662.23	0.26
15T41-15	0.11	22.2	0.19	0.74	1.50	0.83	4.74	1.57	17.7	6.53	31.6	8.54	96.2	17.5	0.95	30.05	0.12
15T41-16	0.06	15.9	0.01	0.89	2.20	0.71	15.7	6.02	76.5	31.1	146	35.8	378	63.1	0.37	146.70	0.14
Metagabbro 13T32																	
13T32-01	2.04	10.3	0.55	4.31	7.88	0.28	47.0	18.6	247	99.1	462	98.6	906	177	0.04	2.33	0.18
13T32-02	0.13	0.88	0.01	0.19	0.92	0.94	8.13	2.21	17.7	5.16	16.5	2.91	21.3	3.81	1.05	4.04	0.56
13T32-03	0.15	0.83	0.06	0.0000	1.03	1.20	8.49	2.04	14.6	3.57	10.3	1.76	13.5	2.08	1.24	2.16	0.72
13T32-04	0.15	0.82	0.02	0.0000	1.22	0.74	6.05	1.48	12.7	3.63	11.4	1.69	12.5	2.20	0.83	3.08	0.68
13T32-05	0.0000	1.04		0.16	2.73	1.31	10.1	2.53	22.6	6.10	19.5	2.96	23.4	3.89	0.76		0.65
13T32-06	0.0000	0.82	0.02	0.26	1.02	0.82	8.45	2.08	19.4	5.42	17.5	3.12	23.4	4.16	0.86	14.90	0.55
13T32-07	0.0000	0.25		0.56	0.51	0.60	7.74	1.53	11.5	2.79	8.19	1.40	9.79	1.62	0.92		0.79
13T32-08	0.07	0.71	0.03	0.54	0.93	1.17	8.27	1.99	14.0	3.18	10.9	1.67	12.7	2.32	1.28	3.58	0.74
13T32-09	0.04	0.60		0.24	0.57	0.44	4.79	1.11	8.67	2.13	6.24	1.05	7.47	1.30	0.82	12.66	0.78
13T32-10		0.80		0.27	1.59	1.02	7.80	1.95	14.7	3.68	11.3	1.92	13.9	2.63	0.89		0.70
13T32-11	0.36	2.20	0.07	1.32	1.40	1.21	8.65	1.90	16.8	4.50	14.4	2.34	19.1	3.47	1.07	3.14	0.59
13T32-12	0.19	24.4	0.30	3.23	5.34	1.21	28.1	9.16	104	36.0	158	32.4	306	61.2	0.30	20.22	0.23
13T32-13	0.41	22.8	0.25	1.20	2.38	0.23	14.3	5.18	67.9	27.2	127	27.2	250	50.5	0.12	17.09	0.18
13T32-14	0.30	20.0	0.53	4.90	8.57	1.87	36.8	11.1	120	41.9	173	33.0	285	53.6	0.32	9.58	0.28
13T32-15	0.02	0.38		0.21	0.66	0.68	6.26	1.30	9.33	2.17	6.74	1.08	8.63	1.30	1.03	18.70	0.72
13T32-16	0.03	0.98		0.0000	1.76	1.14	9.07	2.46	21.1	5.72	19.8	3.20	26.4	4.55	0.87	25.45	0.53
13T32-17		0.96	0.09	0.50	0.57	0.62	4.90	1.58	13.1	4.12	14.2	2.28	20.4	3.82	1.14	3.21	0.43
13T32-18	0.01	2.14	0.06	0.82	2.31	1.23	11.2	2.17	14.9	3.51	10.9	1.49	12.0	2.11	0.74	9.92	0.83
Hornblende gabbro 15T15																	
15T15-01	1.32	5.43	0.49	3.59	1.62	0.77	8.62	3.12	43.9	20.5	110	27.8	308	78.0	0.63	1.65	0.10
15T15-02	0.55	4.57	0.33	1.73	1.31	0.86	8.61	3.44	51.2	24.3	138	34.5	388	97.5	0.78	2.59	0.09
15T15-03	0.03	1.79	0.00	0.35	0.14	0.24	4.39	1.88	29.0	15.8	95.7	25.7	299	81.0	0.93	47.51	0.06
15T15-04	0.58	4.44	0.35	2.39	1.38	0.74	6.94	2.49	36.9	18.4	107	27.9	320	83.6	0.73	2.37	0.08
15T15-05	0.04	6.67	0.03	0.48	1.33	1.01	13.0	5.46	80.7	37.2	198	48.4	515	124	0.74	46.09	0.10
15T15-06	0.13	4.32	0.00	0.90	1.25	1.00	10.8	4.73	71.4	34.7	196	49.8	550	136	0.83	24.95	0.09
15T15-07	0.03	6.08	0.04	0.55	1.92	1.22	15.0	5.95	86.3	39.8	214	52.0	558	134	0.70	33.75	0.10
15T15-08	0.04	3.41	0.06	0.13	0.42	0.74	7.48	3.27	50.3	25.9	148	38.3	434	111	1.28	14.81	0.08
15T15-09	0.36	7.50	0.60	6.36	6.50	1.20	23.2	7.81	95.7	37.3	176	38.2	358	73.6	0.30	3.11	0.18
15T15-10	0.05	3.88	0.07	0.49	3.14	0.44	25.2	9.74	128	51.0	235	49.4	453	91.4	0.15	13.17	0.19
15T15-11	0.15	8.23	0.47	7.36	12.0	0.13	59.8	20.0	231	85.6	373	73.8	638	123	0.01	4.84	0.24
15T15-12	2.66	27.0	0.76	4.97	3.78	0.21	19.4	6.94	85.7	33.5	160	35.4	332	68.1	0.08	4.58	0.17
15T15-13	0.07	2.00	0.03	0.23	0.61	0.29	4.40	1.75	29.3	14.8	85.6	22.3	259	68.1	0.55	10.50	0.08
15T15-14																	

15T17-11		4.19		0.44	1.30	0.96	10.7	5.34	83.1	41.8	237	61.9	703	176	0.79		0.08
15T17-12	1.72	8.78	0.88	7.57	9.82	1.75	45.1	12.9	134	45.5	179	33.3	283	54.9	0.25	1.74	0.32
15T17-13		25.6	0.28	4.14	7.70	0.61	32.7	9.77	98.2	32.1	129	24.3	211	39.2	0.12	28.68	0.31
15T17-14		2.17	0.02	0.12	0.22	0.43	4.95	2.46	39.7	20.6	121	32.4	375	97.8	1.26	36.32	0.07
<u>Hornblende gabbro 15T12-3</u>																	
16T12-3-01	0.0000	2.62	0.0000	0.53	2.07	1.54	17.9	8.2	125	61	329	85	920	201	0.77		0.09
16T12-3-02	0.22	1.82	0.07	1.20	0.89	1.30	15.4	6.2	94	47	252	65	714	159	1.08	3.71	0.09
16T12-3-03	2.46	62.45	1.65	9.4	6.8	1.38	34.5	12.9	174	75	400	101	1049	202	0.27	7.36	0.11
16T12-3-04	0.03	4.45	0.05	0.32	0.63	0.09	1.47	0.74	9.4	4.2	21.3	5.7	66	14.8	0.27	22.80	0.10
16T12-3-05	0.59	28.64	0.66	6.2	5.3	2.10	22.6	6.5	68	22.6	96	21.3	197	39	0.58	9.88	0.23
16T12-3-06	0.15	16.86	0.27	2.86	9.0	0.50	58	20.0	247	95	408	83	721	127	0.07	15.99	0.23
16T12-3-07		1.26	0.01	0.25	0.48	0.73	8.9	4.3	65	32.1	184	49	551	123	1.07	46.96	0.08
16T12-3-08	0.03	3.46	0.06	0.42	2.04	2.22	26.0	10.7	162	79	422	104	1103	255	0.93	15.63	0.10
16T12-3-09	0.10	1.82		0.26	0.67	1.04	12.4	6.3	100	51	288	76	851	198	1.10	13.53	0.08
16T12-3-10	0.04	0.14		0.22	0.07	0.43	3.25	2.32	57	39	272	83	994	228	2.76	2.78	0.04
16T12-3-11	0.09	1.13		1.18	3.18	0.06	25.7	10.6	138	55	237	50	454	81	0.02	9.31	0.20
16T12-3-12	0.53	12.55	1.86	14.9	8.0	2.20	18.8	6.1	76	27.2	125	28.6	276	52	0.55	1.88	0.18
16T12-3-13	0.08	7.99	0.08	1.77	2.14	1.13	13.6	4.8	61	22.0	104	23.7	239	48	0.64	21.78	0.17
16T12-3-14	0.09	10.71	0.33	4.1	7.3	0.74	42	13.3	159	58	248	52	462	83	0.13	9.15	0.23

TABLE S3. WHOLE-ROCK MAJOR (%) AND TRACE (PPM) ELEMENT DATA OF THE EARLY JURASSIC MAFIC ROCKS FROM THE KAIQIONG MICROBLOCK

Type	Metagabbro									Hornblende gabbro												
Sample	13T28	13T32	15T37	15T40	15T41	15T42	15T45	15T46	15T47	15T15	15T17	15T18	15T20	15T24	15T25	16T10	16T10-2	16T10-3	16T12	16T12-2	16T12-3	16T15
SiO ₂	49.67	49.78	49.06	49.21	48.77	49.01	49.60	48.58	49.06	46.49	47.12	43.50	44.24	49.27	48.82	48.29	47.19	46.80	48.26	45.77	48.49	47.27
TiO ₂	1.09	1.04	1.06	1.08	1.01	1.03	1.05	1.01	1.03	1.05	1.52	1.44	0.82	0.75	0.84	0.91	0.83	0.85	0.83	0.77	1.10	0.76
Al ₂ O ₃	15.73	15.46	15.94	15.62	15.78	15.83	15.94	15.38	15.96	14.16	12.66	13.05	13.14	13.33	13.26	14.57	15.99	15.16	14.23	13.72	13.40	13.56
Fe ₂ O ₃	13.41	13.30	14.07	14.33	13.14	13.39	13.70	13.66	13.20	12.65	15.16	15.72	9.79	10.99	12.02	11.48	9.73	10.97	11.22	10.74	12.23	11.90
MnO	0.19	0.19	0.19	0.19	0.18	0.17	0.18	0.19	0.19	0.18	0.20	0.23	0.10	0.14	0.16	0.18	0.18	0.19	0.18	0.17	0.19	0.18
MgO	6.36	6.40	6.49	6.68	5.97	6.20	6.16	6.42	5.96	6.95	7.28	9.42	13.61	8.96	8.54	8.58	7.64	7.84	8.39	10.68	6.94	11.56
CaO	9.07	9.53	9.67	9.43	9.22	9.06	9.30	8.99	8.88	13.28	9.77	10.52	12.67	11.82	10.47	11.71	11.79	14.24	12.88	14.43	14.37	11.66
Na ₂ O	2.11	1.85	1.81	1.76	2.09	2.07	1.93	1.91	1.62	2.31	2.86	2.21	1.44	1.52	2.91	2.34	3.03	1.96	1.48	1.39	1.75	1.35
K ₂ O	0.68	0.70	0.48	0.55	1.03	0.66	0.62	1.26	1.58	0.95	0.76	1.01	0.55	0.15	0.26	0.80	0.90	0.62	0.23	0.37	0.42	0.30
P ₂ O ₅	0.12	0.12	0.12	0.11	0.12	0.12	0.11	0.10	0.11	0.08	0.11	0.09	0.03	0.06	0.06	0.07	0.09	0.06	0.06	0.06	0.09	0.02
LOI	0.96	1.31	0.49	0.70	1.40	0.96	0.87	1.87	1.79	1.03	1.14	1.45	1.78	1.09	1.04	1.23	2.97	1.64	2.29	1.28	0.88	1.38
Mg#	49	49	48	48	48	48	47	49	48	53	49	55	74	62	59	60	61	59	60	67	53	66
Li	11.2	9.97	7.74	9.29	12.5	14.0	11.1	21.6	13.7	22.1	8.04	15.0	13.4	9.20	12.1	20.3	26.2	21.3	18.0	20.1	16.8	20.6
Be	0.60	0.62	0.66	0.63	0.82	0.69	0.61	0.79	0.89	0.58	0.87	1.64	0.39	0.22	0.25	0.24	0.24	0.16	0.20	0.21	0.30	0.18
Sc	30.5	29.7	27.7	29.4	26.7	28.7	27.1	25.2	26.7	43.5	47.8	47.0	25.5	35.9	39.8	46.2	38.4	47.5	41.5	40.5	41.6	46.0
V	293	288	300	300	277	288	292	298	289	347	440	411	363	292	317	305	218	286	291	287	334	299
Cr	175	171	173	181	166	185	169	179	165	142	80.1	142	411	322	309	113	90.3	121	327	242	335	540
Co	86.2	91.5	45.5	43.4	46.0	47.3	45.8	47.3	46.8	51.0	52.2	55.4	49.4	49.4	46.9	60.9	53.9	64.6	64.5	58.8	49.0	57.3
Ni	74.9	74.4	73.0	74.9	71.0	72.9	70.8	75.8	71.4	89.5	68.7	87.5	159	121	117	74.8	53.3	78.5	121	101	122	234
Cu	121	28.8	69.5	57.8	16.6	120	110	3.44	25.9	76.1	72.8	32.2	7.26	134	88.9	116	59.8	95.0	94.7	85.3	85.7	71.2
Zn	103	102	102	106	94.9	99.8	99.7	105	97.8	92.4	112	118	64.8	80.9	77.0	80.5	60.3	71.7	67.9	63.5	85.4	73.8
Ga	18.6	18.1	18.5	18.5	18.3	18.4	18.6	17.9	18.9	16.1	17.5	17.8	14.9	14.0	14.4	15.2	14.3	15.4	14.5	14.1	14.8	13.5
Rb	13.9	18.1	14.2	13.0	36.3	25.5	18.8	49.2	58.3	31.3	16.3	24.8	16.8	2.15	3.49	10.6	18.2	10.1	3.64	8.41	8.41	5.85
Sr	295	283	275	256	314	277	297	229	299	118	86.3	72.7	55.0	67.1	117	90.4	155	114	115	116	91.6	98.2
Y	22.9	21.2	20.4	21.8	22.4	21.5	22.4	19.0	23.3	30.0	41.2	39.0	21.8	19.8	23.6	23.2	20.0	22.6	21.1	21.4	28.0	19.4
Zr	59.2	50.3	43.4	52.7	44.6	44.9	45.9	43.7	45.1	40.3	47.8	44.2	37.9	27.0	33.1	41.6	41.4	39.2	38.0	35.6	48.2	34.5
Nb	5.28	4.61	4.41	4.76	4.70	4.54	4.66	4.12	4.81	1.56	2.83	3.43	1.68	1.52	1.34	0.88	1.01	0.80	1.59	1.32	1.53	0.95
Sn	0.83	0.89	0.78	0.75	0.90	0.86	0.77	0.83	1.02	0.85	1.23	1.69	2.90	0.46	0.45	0.47	0.49	0.44	0.40	0.63	0.61	1.37
Cs	0.32	0.66	0.38	0.24	0.83	0.60	0.47	1.07	1.25	0.90	0.35	0.28	0.27	0.092	0.13	0.42	1.05	0.57	0.15	0.28	0.16	0.57
Ba	105	83.8	66.4	83.4	126	58.5	83.6	260	205	22.3	14.9	56.5	77.2	11.7	11.0	15.2	47.9	23.7	41.8	85.6	38.4	40.7
La	7.56	7.03	6.59	6.80	7.49	7.37	7.19	6.55	7.85	2.90	2.98	3.05	1.56	1.77	2.48	1.47	2.02	1.52	2.33	2.44	1.96	1.35
Ce	17.8	16.4	15.7	16.3	17.5	16.9	16.5	15.6	17.7	7.11	8.80	8.31	3.99	4.69	5.32	4.66	5.59	4.47	5.20	5.64	6.18	3.60
Pr	2.50	2.30	2.14	2.31	2.44	2.37	2.30	2.17	2.53	1.25	1.58	1.51	0.68	0.76	0.98	0.86	0.95	0.81	0.91	0.90	1.08	0.66
Nd	11.3	10.6	10.4	10.9	11.6	11.2	11.0	10.1	11.8	6.89	9.16	8.65	4.06	4.37	5.41	4.86	5.00	4.76	4.69	4.53	5.94	3.76
Sm	3.17	2.83	2.90	3.13	3.14	3.09	3.03	2.73	3.21	2.68	3.42	3.29	1.69	1.72	1.92	1.96	1.89	2.03	1.81	1.85	2.43	1.70
Eu	1.03	1.01	0.95	0.96	0.99	1.01	1.01	0.93	1.05	0.96	1.20	1.23	0.46	0.62	0.72	0.79	0.78	0.79	0.70	0.74	0.90	0.61
Gd	3.39	3.07	3.32	3.48	3.55	3.45	3.44	3.10	3.60	3.88	5.12	4.84	2.71	2.45	2.80	2.86	2.59	3.03	2.51	2.72	3.61	2.28
Tb	0.58	0.52	0.53	0.60	0.60	0.58	0.58	0.51	0.61	0.71	0.96	0.91	0.53	0.45	0.54	0.56	0.51	0.55	0.52	0.52	0.69	0.47
Dy	3.52	3.57	3.55	3.84	3.80	3.73	3.86	3.40	3.96	5.05	6.89	6.40	3.79	3.35	3.82	3.64	3.44	3.78	3.47	3.56	4.55	3.20
Ho	0.76	0.74	0.76	0.79	0.82	0.77	0.78	0.69	0.82	1.11	1.50	1.41	0.86	0.73	0.86	0.86	0.74	0.82	0.74	0.75	1.00	0.68
Er	2.24	2.13	2.17	2.28	2.25	2.22	2.20	1.99	2.27	3.20	4.46	4.28	2.49	2.19	2.50	2.34	1.99	2.31	2.11	2.19	2.80	1.96
Tm	0.35	0.33	0.29	0.33	0.33	0.31	0.33	0.30	0.33	0.48	0.69	0.63	0.37	0.32	0.38	0.37	0.32	0.38	0.35	0.37	0.43	0.31
Yb	2.13	1.98	2.14	2.24	2.20	2.09	2.19	1.98	2.26	3.16	4.51	4.15	2.39	2.22	2.59	2.32	1.98	2.33	2.15	2.11	2.89	1.94
Lu	0.30	0.32	0.31	0.32	0.33	0.32	0.33	0.30	0.33	0.47	0.66	0.61	0.35	0.33	0.38	0.34	0.29	0.32	0.32	0.32	0.43	0.26
Hf	1.59	1.49	1.39	1.64	1.44	1.42	1.41	1.39	1.47	1.36	1.77	1.62	1.23	0.91	1.12	1.18	1.14	1.19	1.08	1.04	1.37	0.96
Ta	0.43	0.40	0.29	0.32	0.33	0.31	0.31	0.28	0.32	0.100	0.43	0.37	0.08	0.09	0.09	0.09	0.10	0.10	0.16	0.16	0.10	0.07
Tl	0.12	0.13	0.10	0.09	0.20	0.18	0.12	0.31	0.35	0.21	0.12	0.17	0.10	0.02	0.02	0.07	0.10	0.06	0.03	0.05	0.06	0.11
Pb	26.0	25.3	21.9	23.0	23.2	22.7	25.3	19.8	21.1	5.51	8.14	14.5	2.21	0.64	2.41	0.39	0.48	0.52	0.84	3.44	2.52	2.11
Th	1.19	1.18	1.03	1.08	1.21	1.11	1.12	1.08	1.20	0.45	0.27	0.44	0.15	0.17	0.14	0.06	0.14	0.062	0.24	0.39	0.13	0.09
U	0.33	0.29	0.31	0.31	0.32	0.32	0.33	0.30	0.36	0.71	0.38	2.68	1.76	0.12	0.15	0.04	0.084	0.10	0.12	0.25	0.11	0.06
(La/Yb) _N	2.54	2.54	2.21	2.18	2.45	2.53	2.36	2.37	2.49	0.66	0.47	0.53	0.47	0.57	0.69	0.45	0.73	0.47	0.78	0.83	0.49	0.50
Eu/Eu*	0.96	1.04	0.94	0.89	0.90	0.95	0.95	0.98	0.94	0.91	0.88	0.94	0.66	0.93	0.95	1.02	1.07	0.98	1.00	1.01	0.93	0.95

TABLE S4. ZIRCON LA-MC-ICP-MS LU-HF DATA OF THE EARLY JURASSIC MAFIC ROCKS FROM THE KAOJONG MICROBLOCK

Analysis	$^{176}\text{Hf}/^{177}\text{Hf}$	$\pm 1\sigma$	$^{176}\text{Lu}/^{177}\text{Hf}$	$\pm 1\sigma$	$^{176}\text{Yb}/^{177}\text{Hf}$	$\pm 1\sigma$	$\square_{\text{Hf}}(t)$	$\pm 1\sigma$	T_{DM1} (Ma)	$\pm 1\sigma$
Metaqabbro 15T45										
15T45-01	0.282586	0.000012	0.001220	0.000046	0.034766	0.001243	-2.4	0.4	949	33
15T45-02	0.282585	0.000010	0.000612	0.000010	0.016870	0.000227	-2.4	0.4	935	28
15T45-03	0.282556	0.000011	0.001449	0.000021	0.040515	0.000579	-3.5	0.4	998	32
15T45-04	0.282494	0.000013	0.001144	0.000042	0.032904	0.001152	-5.7	0.5	1077	37
15T45-05	0.282534	0.000011	0.001290	0.000018	0.036729	0.000486	-4.3	0.4	1024	32
15T45-06	0.282547	0.000011	0.001157	0.000035	0.033865	0.001068	-3.8	0.4	1002	30
15T45-07	0.282593	0.000013	0.001198	0.000036	0.032769	0.000884	-2.2	0.5	939	36
15T45-08	0.282557	0.000009	0.000927	0.000032	0.025917	0.001072	-3.4	0.3	982	26
Hornblende gabbro 15T15										
15T15-01	0.283142	0.000019	0.001113	0.000007	0.023411	0.000137	16.8	0.7	156	53
15T15-02	0.283083	0.000015	0.001656	0.000004	0.033502	0.000079	14.7	0.5	243	44
15T15-03	0.283109	0.000016	0.001287	0.000037	0.026911	0.000835	15.7	0.6	203	45
15T15-04	0.283107	0.000015	0.001697	0.000152	0.033226	0.002650	15.5	0.5	209	42
15T15-05	0.283079	0.000013	0.000890	0.000022	0.018555	0.000468	14.6	0.5	244	37
15T15-06	0.283097	0.000019	0.001743	0.000032	0.036535	0.000723	15.2	0.7	223	54
15T15-07	0.283050	0.000014	0.000543	0.000014	0.010008	0.000207	13.7	0.5	283	39
15T15-08	0.283065	0.000013	0.000525	0.000005	0.009968	0.000118	14.2	0.5	261	38
15T15-09	0.283049	0.000012	0.000487	0.000010	0.009367	0.000241	13.6	0.4	284	34
15T15-10	0.283066	0.000013	0.000422	0.000015	0.008537	0.000351	14.2	0.4	259	35
15T15-11	0.283065	0.000013	0.000737	0.000022	0.014615	0.000314	14.2	0.5	263	38
15T15-12	0.283073	0.000013	0.000576	0.000004	0.011256	0.000154	14.5	0.5	250	36
15T15-13	0.283067	0.000013	0.000507	0.000019	0.009829	0.000259	14.2	0.4	259	36
15T15-14	0.283041	0.000012	0.000740	0.000027	0.014810	0.000498	13.3	0.4	297	33
15T15-15	0.283059	0.000012	0.001073	0.000049	0.021212	0.000859	13.9	0.4	274	34
15T15-16	0.283058	0.000011	0.000532	0.000016	0.010107	0.000275	14.0	0.4	271	32
Hornblende gabbro 15T17										
15T17-01	0.282984	0.000016	0.001145	0.000013	0.023263	0.000221	11.2	0.6	381	46
15T17-02	0.282999	0.000023	0.003275	0.000098	0.070558	0.002074	11.5	0.8	382	69
15T17-03	0.283038	0.000012	0.001601	0.000054	0.033570	0.001193	13.1	0.4	308	34
15T17-04	0.283013	0.000013	0.001585	0.000006	0.032069	0.000149	12.2	0.5	344	38
15T17-05	0.282998	0.000013	0.001585	0.000015	0.033591	0.000298	11.7	0.5	365	38
15T17-06	0.283077	0.000030	0.002670	0.000015	0.055949	0.000413	14.3	1.1	259	91
15T17-07	0.283033	0.000016	0.001816	0.000017	0.036073	0.000337	12.9	0.6	317	47
15T17-08	0.283032	0.000016	0.002494	0.000032	0.055230	0.000676	12.8	0.6	325	47
15T17-09	0.282974	0.000016	0.002400	0.000024	0.051756	0.000456	10.7	0.6	410	49
15T17-10	0.283032	0.000012	0.000912	0.000029	0.018831	0.000766	13.0	0.4	311	35

TABLE S5. WHOLE-ROCK SR-ND ISOTOPIC DATA OF THE EARLY JURASSIC MAFIC ROCKS FROM THE KAOJONG MICROBLOCK

Sample	Type	$^{87}\text{Sr}/^{86}\text{Sr}$	2σ	$^{87}\text{Rb}/^{86}\text{Sr}$	I_{Sr}	$^{143}\text{Nd}/^{144}\text{Nd}$	2σ	$^{147}\text{Sm}/^{144}\text{Nd}$	$\epsilon_{\text{Nd}}(t)$
13T32	Metagabbro	0.711964	0.000007	0.186	0.711499	0.512561	0.000006	0.162	-0.7
15T37	Metagabbro	0.710908	0.000015	0.150	0.710533	0.512618	0.000005	0.168	+0.3
15T40	Metagabbro	0.710994	0.000025	0.147	0.710626	0.512597	0.000006	0.173	-0.3
15T41	Metagabbro	0.714569	0.000007	0.335	0.713730	0.512591	0.000005	0.164	-0.2
15T42	Metagabbro	0.712728	0.000008	0.268	0.712059	0.512589	0.000003	0.167	-0.3
15T45	Metagabbro	0.711936	0.000007	0.184	0.711476	0.512599	0.000003	0.166	-0.1
15T46	Metagabbro	0.717633	0.000008	0.624	0.716073	0.512578	0.000005	0.163	-0.4
15T47	Metagabbro	0.716822	0.000006	0.564	0.715410	0.512582	0.000011	0.165	-0.4
15T15	Hornblende gabbro	0.709510	0.000009	0.768	0.707588	0.512994	0.000004	0.235	+6.1
15T17	Hornblende gabbro	0.709017	0.000008	0.545	0.707654	0.513041	0.000004	0.238	+6.9
15T18	Hornblende gabbro	0.713713	0.000017	0.988	0.711242	0.513013	0.000006	0.230	+6.6
15T20	Hornblende gabbro	0.713009	0.000008	0.886	0.710793	0.513019	0.000003	0.252	+6.2
15T24	Hornblende gabbro	0.706919	0.000007	0.093	0.706687	0.513049	0.000003	0.238	+7.1
15T25	Hornblende gabbro	0.707899	0.000008	0.087	0.707682	0.513004	0.000005	0.214	+6.8