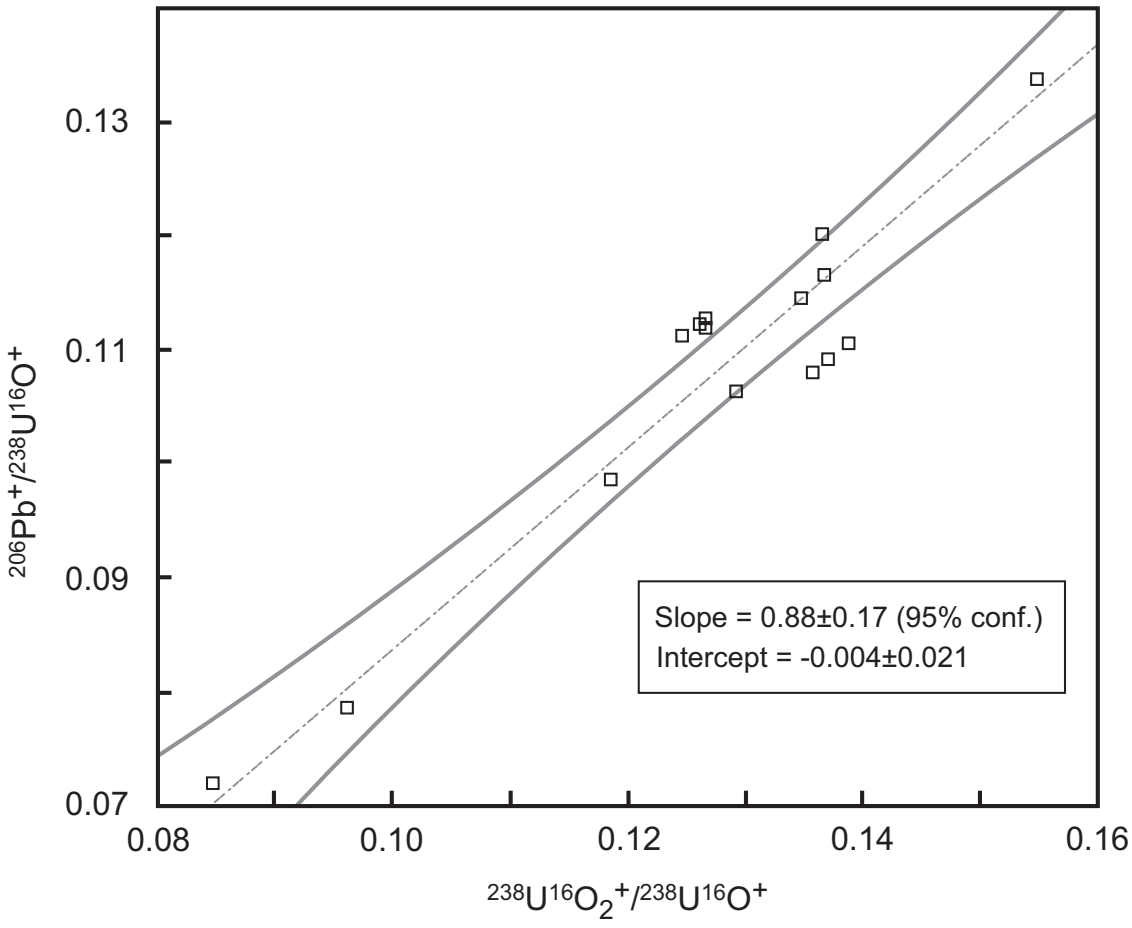

Figure S1. Calibration line of Pb/UO and UO_2/UO measured on QGNG zircon grains.

The slope is 0.88 ± 0.17 (2σ) and the intercept is –0.004±0.021.

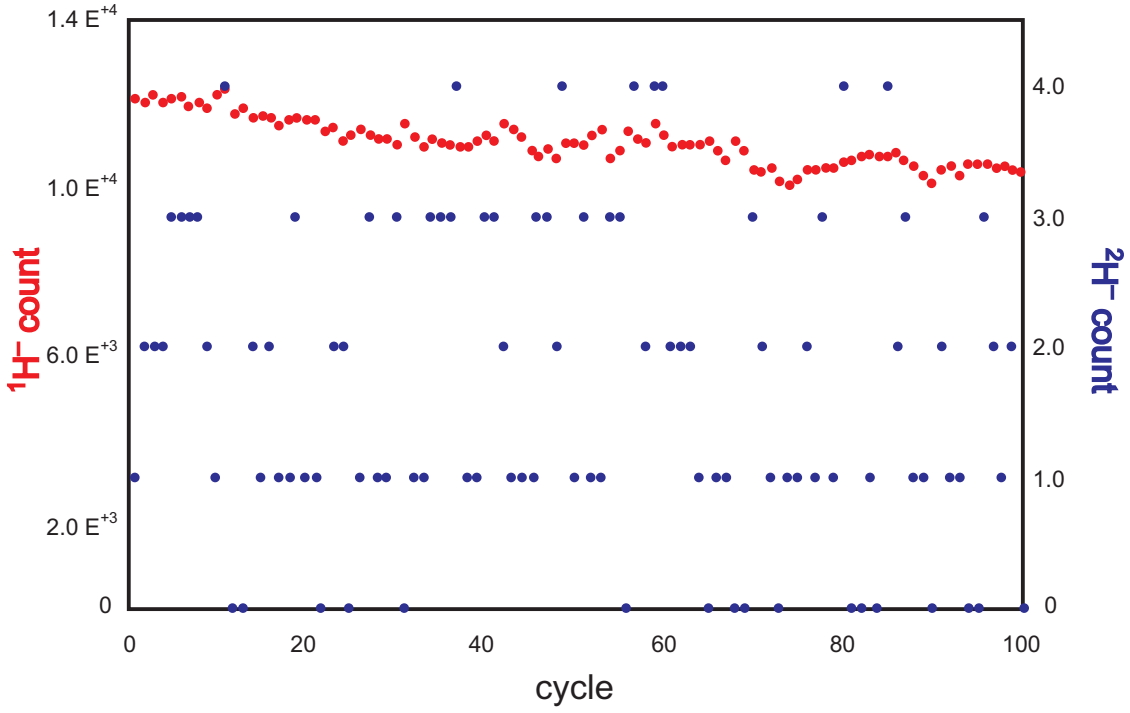

Figure S2. Representative cycle by cycle trend of $^{1}H^{-}$ and $^{2}H^{-}$ ion during the sample apatite inclusion (apt1 in Table1). One step of cycle consists of 30 seconds of analysis.

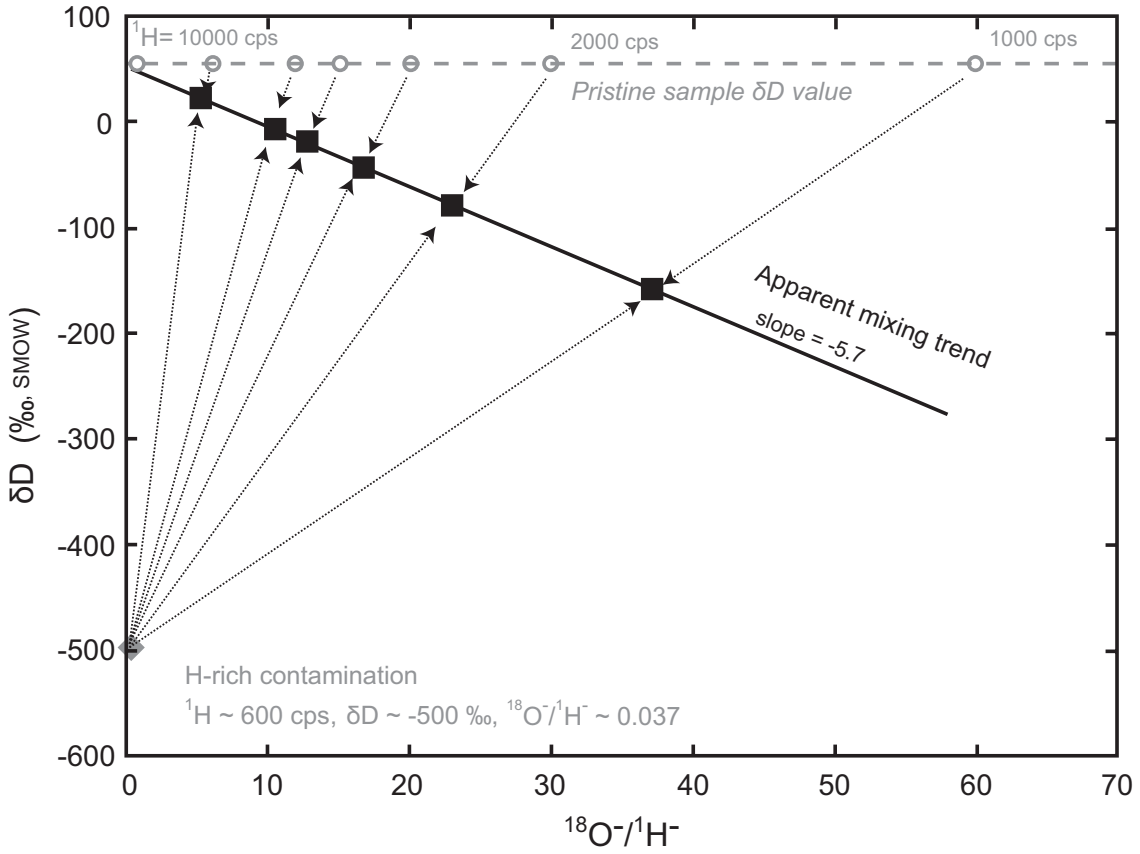

Figure S3. Calculated mixing trend of two end members defined as follows; the one has δD = +52.8 ± 59.8‰ with various hydrogen concentrations (gray circle), the other one has δD = –500 ‰ with ^{1}H = 600 cps (gray rhombus). Black squares and line indicate the mixing trend of those components with the slope of –5.14. δD of two end members are calculated based on the measured $^{2}H^{-}/^{1}H^{-}$ ratios of apatite inclusion and residual hydrogen in the analysis chamber of the NanoSIMS. Detailed data are summarized in Supplementary information (Table S4).

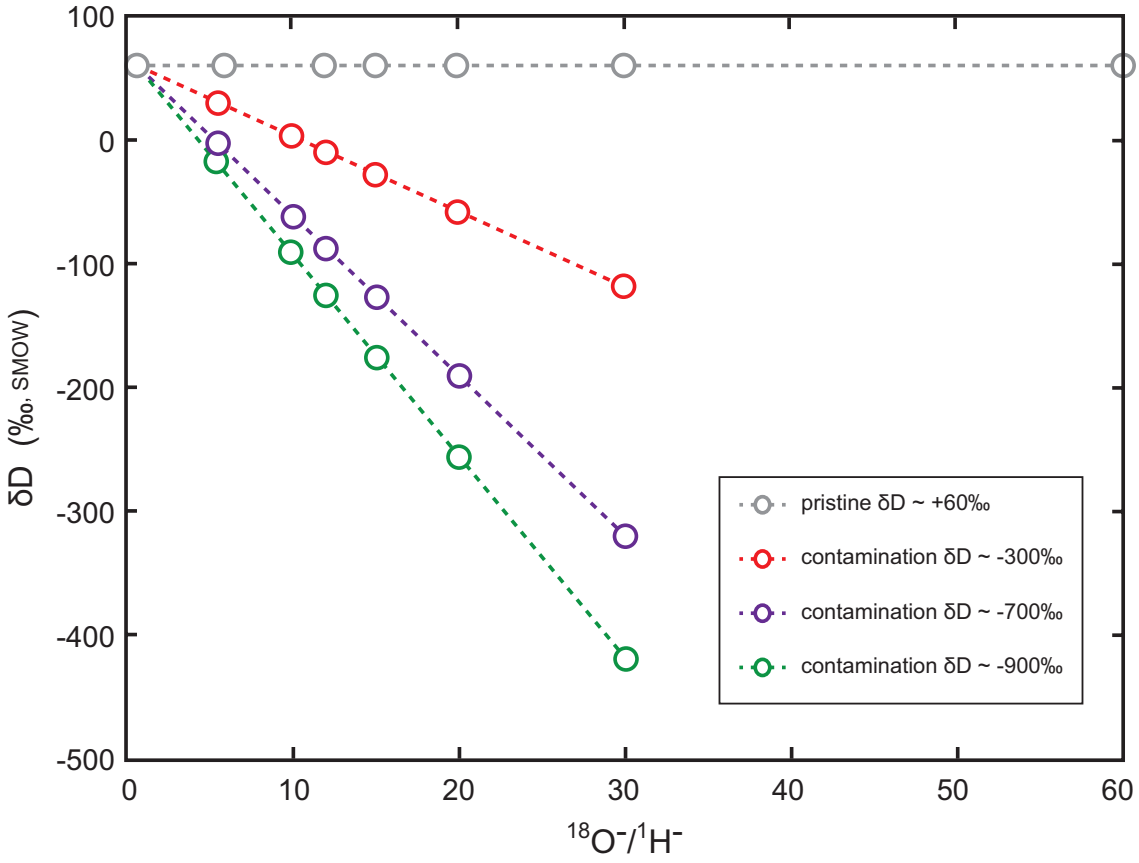

Figure S4. Calculated mixing trends assuming several δD and $^{1}H^{-}$ ion intensities as a contamination H-rich component. Gray color indicates the pristine δD values of +60‰ with some variation of $^{18}O^{-}/^{1}H^{-}$ ratios. Red, purple and green color indicate that the mixture δD values of pristine δD and three different contamination components which have δD = -300‰, -700‰ and -900‰, respectively. As this pristine δD value is the intercept of the mixing trend of these mixture values, it could be determined independently to δD value and $^{1}H^{-}$ ion intensity of contamination component.

Table S1 Results of standard zircon grains (QGNG) for calibration in U-Pb session.

sample	ID	file name	^{30}Si	$^{90}Zr_2O$	^{204}Pb	^{206}Pb	$^{238}U^{16}O$	$^{238}U^{16}O_2$	$^{204}Pb/^{206}Pb*$	err(abs)	$^{206}Pb/UO*$	err(abs)	UO_2/UO	err(abs)	UO/ZrO	err(abs)
QGNG	1.1	0124_4	7.46E+07	2.65E+06	2.20E+01	2.37E+05	2.08E+06	7.04E+05	2.215E-05	2.038E-05	1.143E-01	4.905E-04	3.389E-01	9.680E-04	7.846E-01	1.248E-05
	1.2	0124_5	7.93E+07	2.77E+06	2.10E+01	2.34E+05	2.08E+06	6.80E+05	2.004E-05	1.673E-05	1.123E-01	4.863E-04	3.268E-01	9.261E-04	7.530E-01	1.130E-05
	1.3	0124_6	7.91E+07	2.71E+06	1.90E+01	2.28E+05	2.03E+06	6.65E+05	9.607E-06	2.331E-05	1.126E-01	4.540E-04	3.278E-01	8.927E-04	7.503E-01	1.166E-05
	1.4	0124_7	7.83E+07	2.65E+06	2.40E+01	2.36E+05	2.13E+06	6.91E+05	3.242E-05	1.969E-05	1.111E-01	3.988E-04	3.248E-01	8.898E-04	8.045E-01	1.456E-05
	1.5	0124_8	7.92E+07	2.61E+06	2.20E+01	2.73E+05	2.44E+06	7.99E+05	1.932E-05	1.411E-05	1.121E-01	4.759E-04	3.281E-01	7.524E-04	9.344E-01	1.747E-05
	1.6	0124_9	8.51E+07	2.89E+06	2.90E+01	2.74E+05	2.35E+06	8.04E+05	4.775E-05	1.529E-05	1.164E-01	4.836E-04	3.417E-01	8.770E-04	8.151E-01	1.308E-05
	2.1	0131_6	1.36E+08	4.36E+06	3.20E+01	3.30E+05	3.37E+06	1.06E+06	4.165E-05	1.187E-05	9.859E-02	3.818E-04	3.161E-01	7.117E-04	7.729E-01	1.457E-05
	2.2	0131_7	9.70E+07	2.64E+06	2.70E+01	1.87E+05	2.40E+06	6.77E+05	5.342E-05	2.374E-05	7.855E-02	3.888E-04	2.826E-01	8.566E-04	9.060E-01	1.583E-05
	2.3	0131_8	1.20E+08	4.53E+06	3.70E+01	4.59E+05	3.45E+06	1.26E+06	4.682E-05	1.663E-05	1.336E-01	3.862E-04	3.655E-01	6.934E-04	7.644E-01	1.230E-05
	2.4	0131_9	9.54E+07	2.18E+06	2.40E+01	1.34E+05	1.87E+06	4.93E+05	5.479E-05	2.326E-05	7.201E-02	4.164E-04	2.639E-01	8.574E-04	8.574E-01	1.528E-05
	2.5	0131_10	1.20E+08	4.09E+06	3.20E+01	3.73E+05	3.12E+06	1.06E+06	4.074E-05	1.516E-05	1.201E-01	4.190E-04	3.412E-01	8.561E-04	7.643E-01	1.239E-05
	2.6	0131_14	1.52E+08	5.12E+06	8.60E+01	4.30E+05	4.07E+06	1.35E+06	1.673E-04	8.633E-05	1.064E-01	3.848E-04	3.312E-01	7.677E-04	7.939E-01	1.545E-05
	2.7	0131_18	1.55E+08	5.55E+06	5.40E+01	4.27E+05	3.98E+06	1.35E+06	9.271E-05	1.550E-05	1.079E-01	3.376E-04	3.403E-01	6.997E-04	7.185E-01	1.282E-05
	2.8	0131_19	1.57E+08	5.64E+06	4.70E+01	3.89E+05	3.59E+06	1.23E+06	7.997E-05	1.407E-05	1.091E-01	3.374E-04	3.422E-01	7.410E-04	6.365E-01	1.001E-05
	2.9	0131_20	1.51E+08	5.44E+06	4.10E+01	2.00E+05	1.82E+06	6.25E+05	1.222E-04	3.002E-05	1.107E-01	5.156E-04	3.445E-01	1.014E-03	3.340E-01	4.321E-06

Table S2 Summary of U-Pb analysis

sample	ID	file name	^{30}Si	$^{90}Zr_2O$	^{204}Pb	^{206}Pb	$^{238}U^{16}O$	$^{238}U^{16}O_2$	$^{204}Pb/^{206}Pb*$	err(abs)	Pb/UO	err(abs)	UO_2/UO	err(abs)	UO/ZrO	err(%)	$^{238}U/^{206}Pb*$	err (abs)	U-Pb age (Ma)	err
zircon1	1.1	0124_20	7.02E+07	2.54E+06	2.00E+01	2.28E+05	8.63E+05	2.93E+05	1.161E-05	1.631E-05	2.646E-01	1.463E-03	3.396E-01	1.466E-03	3.409E-01	8.244E-04	1.308	3.542E-02	3661	76
	1.2	0125_13	8.14E+07	2.92E+06	3.30E+01	3.79E+05	1.55E+06	5.10E+05	4.464E-05	1.736E-05	2.457E-01	8.775E-04	3.305E-01	1.040E-03	5.291E-01	1.404E-03	1.337	3.404E-02	3600	70
zircon2	2	0124_21	7.16E+07	2.54E+06	2.10E+01	3.72E+05	1.40E+06	4.80E+05	1.265E-05	1.338E-05	2.651E-01	1.022E-03	3.422E-01	1.302E-03	5.538E-01	1.264E-03	1.324	3.663E-02	3627	77
zircon3	3.1	0124_27	8.70E+07	3.16E+06	4.00E+01	2.69E+05	1.13E+06	3.78E+05	8.833E-05	1.971E-05	2.392E-01	1.096E-03	3.359E-01	1.352E-03	3.573E-01	1.101E-03	1.417	3.682E-02	3442	69
	3.2	0125_14	7.76E+07	2.83E+06	1.90E+01	2.94E+05	1.23E+06	3.88E+05	6.051E-06	1.211E-05	2.389E-01	9.481E-04	3.150E-01	1.187E-03	4.359E-01	1.445E-03	1.253	4.006E-02	3783	92
zircon4	4.1	0124_28	8.78E+07	3.15E+06	2.70E+01	2.37E+05	8.61E+05	3.02E+05	4.123E-05	1.837E-05	2.757E-01	1.242E-03	3.514E-01	1.504E-03	2.735E-01	6.661E-04	1.340	4.302E-02	3595	88
	4.2	0129_13	1.04E+08	3.12E+06	3.30E+01	4.64E+05	1.96E+06	6.89E+05	3.699E-05	1.073E-05	2.365E-01	7.890E-04	3.511E-01	8.491E-04	6.309E-01	1.410E-03	1.560	4.968E-02	3194	80
	4.3	0129_15	1.13E+08	3.31E+06	2.70E+01	3.72E+05	1.39E+06	4.88E+05	3.032E-05	1.377E-05	2.672E-01	9.672E-04	3.503E-01	1.135E-03	4.223E-01	8.722E-04	1.374	4.322E-02	3524	85
	4.4	0129_14	1.10E+08	3.27E+06	2.00E+01	2.66E+05	9.89E+05	3.48E+05	1.098E-05	1.435E-05	2.693E-01	1.122E-03	3.517E-01	1.372E-03	3.025E-01	7.272E-04	1.374	4.432E-02	3526	88
	4.5	0129_16	1.05E+08	3.08E+06	3.30E+01	7.47E+05	3.14E+06	1.07E+06	2.100E-05	6.609E-06	2.381E-01	9.687E-04	3.413E-01	7.032E-04	1.021E+00	1.887E-03	1.467	4.014E-02	3351	72
	4.6	0129_17	1.03E+08	2.95E+06	4.20E+01	1.22E+06	5.47E+06	1.88E+06	2.052E-05	4.906E-06	2.240E-01	5.300E-04	3.434E-01	5.869E-04	1.863E+00	3.754E-03	1.578	4.418E-02	3164	70
zircon5	5.1	0124_29	8.70E+07	3.07E+06	2.20E+01	2.92E+05	1.08E+06	3.73E+05	1.982E-05	1.261E-05	2.708E-01	1.233E-03	3.463E-01	1.287E-03	3.509E-01	1.323E-03	1.327	3.920E-02	3622	82
	5.2	0125_15	8.16E+07	3.02E+06	3.60E+01	3.03E+05	1.19E+06	3.96E+05	6.563E-05	2.889E-05	2.549E-01	1.122E-03	3.332E-01	1.048E-03	3.936E-01	1.882E-03	1.309	3.353E-02	3659	72
zircon6	6	0124_30	8.91E+07	3.20E+06	2.80E+01	9.59E+05	3.54E+06	1.25E+06	1.061E-05	6.056E-06	2.711E-01	7.255E-04	3.518E-01	7.212E-04	1.109E+00	2.560E-03	1.365	4.387E-02	3543	88
zircon7	7.1	0124_31	8.70E+07	3.13E+06	3.70E+01	8.45E+05	3.38E+06	1.16E+06	2.419E-05	4.619E-06	2.502E-01	6.633E-04	3.441E-01	7.468E-04	1.083E+00	2.256E-03	1.418	4.013E-02	3441	75
	7.2	0125_16	7.99E+07	3.10E+06	3.40E+01	3.94E+05	1.55E+06	5.13E+05	4.534E-05	1.625E-05	2.545E-01	9.628E-04	3.310E-01	1.156E-03	5.020E-01	1.022E-03	1.294	3.296E-02	3691	72
zircon8	8	0124_32	8.75E+07	3.13E+06	1.80E+01	5.03E+05	1.84E+06	6.47E+05	2.735E-06	7.170E-06	2.730E-01	9.177E-04	3.509E-01	9.289E-04	5.899E-01	1.114E-03	1.349	4.280E-02	3576	87
zircon9	9.1	0124_33	8.73E+07	3.12E+06	3.30E+01	5.33E+05	1.97E+06	6.81E+05	3.122E-05	9.397E-06	2.706E-01	8.452E-04	3.453E-01	9.535E-04	6.339E-01	1.212E-03	1.320	3.814E-02	3635	80
	9.2	0125_17	7.86E+07	2.75E+06	7.20E+01	5.15E+05	2.23E+06	7.37E+05	1.053E-04	1.494E-05	2.308E-01	7.999E-04	3.302E-01	8.356E-04	8.151E-01	1.828E-03	1.422	3.621E-02	3433	68
zircon10	10.1	0124_34	8.50E+07	3.10E+06	2.80E+01	2.73E+05	1.03E+06	3.50E+05	4.404E-05	1.900E-05	2.661E-01	1.224E-03	3.408E-01	1.410E-03	3.320E-01	1.461E-03	1.309	3.569E-02	3659	76
	10.2	0125_25	7.33E+07	2.70E+06	2.00E+01	2.97E+05	1.25E+06	4.15E+05	1.342E-05	1.222E-05	2.382E-01	1.004E-03	3.323E-01	1.213E-03	4.644E-01	1.196E-03	1.393	3.559E-02	3488	69
	10.3	0125_26	7.11E+07	2.49E+06	4.10E+01	3.68E+05	1.69E+06	5.42E+05	7.211E-05	3.585E-05	2.187E-01	8.578E-04	3.215E-01	1.057E-03	6.772E-01	1.427E-03	1.424	3.976E-02	3428	74
	10.4	0125_27	7.17E+07	2.54E+06	2.70E+01	3.44E+05	1.53E+06	5.09E+05	3.193E-05	1.403E-05	2.246E-01	7.158E-04	3.323E-01	1.078E-03	6.057E-01	1.316E-03	1.477	3.750E-02	3333	66
	10.5	0125_28	6.42E+07	1.99E+06	5.25E+02	3.00E+05	1.68E+06	5.84E+05	1.733E-03	6.855E-05	1.787E-01	7.171E-04	3.480E-01	1.080E-03	8.451E-01	2.042E-03	2.075	6.283E-02	2535	63
	10.6	0129_4	8.71E+07	2.45E+06	1.30E+01	2.31E+05	8.84E+05	2.96E+05	<0.000001	1.392E-05	2.611E-01	1.248E-03	3.345E-01	1.359E-03	3.612E-01	7.775E-04	1.286	3.320E-02	3707	73
	10.7	0129_5	8.75E+07	2.53E+06	2.90E+01	2.55E+05	9.61E+05	3.23E+05	4.716E-05	1.671E-05	2.657E-01	1.235E-03	3.361E-01	1.352E-03	3.816E-01	1.024E-03	1.277	3.326E-02	3728	74
	10.8	0129_6	9.07E+07	2.64E+06	2.40E+01	3.15E+05	1.18E+06	4.00E+05	2.486E-05	1.446E-05	2.668E-01	1.144E-03	3.383E-01	1.320E-03	4.495E-01	1.115E-03	1.288	3.409E-02	3705	75
	10.9	0129_7	9.03E+07	2.62E+06	2.40E+01	3.47E+05	1.30E+06	4.35E+05	2.396E-05	1.192E-05	2.674E-01	1.079E-03	3.356E-01	1.245E-03	4.957E-01	1.031E-03	1.265	3.270E-02	3755	74
	10.10	0129_8	8.08E+07	2.08E+06	1.70E+01	2.00E+05	8.71E+05	2.86E+05	<0.000001	1.825E-05	2.297E-01	1.006E-03	3.287E-01	1.305E-03	4.206E-01	1.100E-03	1.414	3.643E-02	3448	69
	10.11	0129_9	8.46E+07	2.24E+06	1.30E+01	2.08E+05	9.33E+05	3.00E+05	<0.000001	1.373E-05	2.233E-01	1.091E-03	3.214E-01	1.431E-03	4.180E-01	1.103E-03	1.393	3.915E-02	3487	76
	10.12	0129_10	9.38E+07	2.61E+06	3.10E+01	8.45E+05	3.27E+06	1.09E+06	1.849E-05	5.863E-06	2.586E-01	6.692E-04	3.337E-01	7.913E-04	1.254E+00	2.215E-03	1.294	3.288E-02	3692	71
	10.13	0129_19	9.41E+07	2.66E+06	1.30E+01	2.03E+05	8.00E+05	2.71E+05	<0.000001	1.775E-05	2.540E-01	1.339E-03	3.387E-01	1.510E-03	3.011E-01	7.308E-04	1.354	3.626E-02	3564	73
	10.14	0129_20	1.03E+08	2.98E+06	3.75E+02	8.00E+05	3.27E+06	1.18E+06	4.538E-04	2.006E-05	2.446E-01	6.876E-04	3.610E-01	7.504E-04	1.105E+00	1.947E-03	1.598	6.009E-02	3132	93
zircon11	11	0125_19	7.43E+07	2.79E+06	2.30E+01	2.15E+05	8.57E+05	2.91E+05	3.232E-05	2.273E-05	2.514E-01	1.264E-03	3.395E-01	1.503E-03	3.079E-01	7.287E-04	1.375	3.703E-02	3523	73
zircon12	12	0125_20	7.30E+07	2.73E+06	2.50E+01	3.75E+05	1.41E+06	4.85E+05	2.384E-05	1.158E-05	2.655E-01	1.070E-03	3.436E-01	1.192E-03	5.184E-01	1.352E-03	1.332	3.764E-02	3610	78
zircon13	13	0125_21	7.47E+07	2.78E+06	2.20E+01	3.88E+05	1.51E+06	5.07E+05	1.293E-05	8.361E-06	2.563E-01	9.457E-04	3.346E-01	1.197E-03	5.462E-01	1.280E-03	1.312	3.363E-02	3653	72
zircon14	14	0125_22	7.50E+07	2.77E+06	2.80E+01	6.10E+05	2.35E+06	7.78E+05	1.925E-05	7.987E-06	2.602E-01	9.169E-04	3.319E-01	8.934E-04	8.484E-01	1.955E-03	1.272	3.235E-02	3739	72
zircon15	15	0125_23	7.67E+07	2.91E+06	2.70E+01	2.30E+05	8.61E+05	2.96E+05	3.815E-05	2.230E-05	2.680E-01	2.062E-03	3.442E-01	1.433E-03	2.967E-01	8.604E-04	1.325	3.875E-02	3625	81
zircon16	16.1	0125_29	7.64E+07	3.00E+06	3.10E+01	5.43E+05	2.11E+06	7.13E+05	2.724E-05	9.813E-06	2.580E-01	8.093E-04	3.383E-01	1.027E-03	7.047E-01	1.394E-03	1.331	3.499E-02	3613	73
	16.2	0125_30	7.34E+07	2.80E+06	2.10E+01	5.57E+05	2.19E+06	7.18E+05	9.277E-06	6.839E-06	2.545E-01	6.742E-04	3.278E-01	9.220E-04	7.865E-01	1.385E-03	1.270	3.260E-02	3744	73
	16.3	0125_31	7.39E+07	2.80E+06	3.50E+01	4.54E+05	1.80E+06	5.82E+05	4.101E-05	1.774E-05	2.536E-01	1.010E-03	3.247E-01	1.136E-03	6.389E-01	2.374E-03	1.252	3.333E-02	3785	76
		mean	8.45E+07	2.82E+06	4.85E+01	4.28E+05	1.72E+06	5.84E+05												

Table S3 Summary of Pb-Pb analysis

sample	ID	file name	^{30}Si	$^{90}Zr_2{}^{16}O$	^{204}Pb	^{206}Pb	^{207}Pb	$^{204}Pb/^{206}Pb$*	err	$^{207}Pb/^{206}Pb$*	err	Age (Ma)	err
zircon1	1.1	0219_2	3.30E+07	1.98E+06	2.70E+01	1.21E+05	8.35E+04	1.101E-04	1.728E-05	3.432E-01	3.063E-03	3678	14
zircon2	2	0129_2	1.03E+08	3.49E+06	7.00E+01	3.32E+05	2.16E+05	1.060E-04	9.052E-06	3.256E-01	1.066E-03	3597	5
zircon3	3.1	0130_6	8.34E+07	2.65E+06	7.70E+01	1.71E+05	1.13E+05	2.222E-04	1.771E-05	3.312E-01	1.151E-03	3623	5
zircon4	4.1	0130_12	1.06E+08	3.30E+06	6.40E+01	3.91E+05	2.63E+05	8.189E-05	7.992E-06	3.369E-01	8.064E-04	3649	4
zircon5	5.1	0130_7	1.04E+08	3.48E+06	9.30E+01	4.50E+05	3.01E+05	1.033E-04	1.291E-05	3.352E-01	7.784E-04	3641	4
zircon6	6	0130_11	1.15E+08	3.86E+06	1.04E+02	4.64E+05	3.10E+05	1.118E-04	8.865E-06	3.361E-01	9.116E-04	3645	4
zircon7	7.1	0130_8	1.06E+08	3.84E+06	7.70E+01	2.96E+05	1.80E+05	1.307E-04	9.751E-06	3.045E-01	1.867E-03	3493	9
zircon8	8	0130_10	1.15E+08	3.79E+06	6.10E+01	4.02E+05	2.65E+05	7.558E-05	9.674E-06	3.308E-01	8.395E-04	3621	4
zircon9	9.1	0130_9	1.04E+08	3.33E+06	8.20E+01	3.14E+05	2.12E+05	1.296E-04	1.100E-05	3.384E-01	8.388E-04	3655	4
zircon10	10.1	0130_3	6.87E+07	2.01E+06	3.80E+01	1.20E+05	7.93E+04	1.584E-04	1.821E-05	3.300E-01	1.399E-03	3617	7
	10.3	0130_4	7.12E+07	2.02E+06	2.90E+01	1.58E+05	1.07E+05	9.199E-05	1.067E-05	3.404E-01	1.164E-03	3665	5
	10.5	0130_5	5.78E+07	1.15E+06	7.83E+02	1.41E+05	9.21E+04	2.785E-03	2.030E-04	3.002E-01	4.083E-03	3471	21
	10.9	0219_9	5.21E+07	4.06E+06	1.35E+02	4.34E+05	2.92E+05	1.245E-04	1.057E-05	3.356E-01	1.031E-03	3643	5
zircon11	11	0219_3	5.12E+07	4.07E+06	5.30E+01	2.04E+05	1.36E+05	1.292E-04	1.899E-05	3.309E-01	1.508E-03	3621	7
zircon12	12	0219_4	6.27E+07	4.74E+06	6.30E+01	4.55E+05	3.08E+05	6.195E-05	8.122E-06	3.400E-01	1.187E-03	3663	5
zircon13	13	0130_13	1.12E+08	3.67E+06	9.40E+01	3.89E+05	2.60E+05	1.209E-04	9.177E-06	3.339E-01	9.180E-04	3635	4
zircon14	14	0219_5	5.53E+07	4.19E+06	1.37E+02	7.01E+05	4.71E+05	7.837E-05	7.495E-06	3.369E-01	7.901E-04	3649	4
zircon15	15	0219_6	5.34E+07	3.62E+06	6.20E+01	3.54E+05	2.37E+05	8.708E-05	1.028E-05	3.351E-01	2.520E-03	3641	12
zircon16	16.2	0219_8	5.31E+07	3.37E+06	4.90E+01	5.02E+05	3.38E+05	3.905E-05	4.750E-06	3.382E-01	7.544E-04	3655	3
	16.3	0219_7	6.32E+07	5.14E+06	7.10E+01	4.69E+05	3.08E+05	4.925E-05	6.046E-06	3.291E-01	1.347E-03	3613	6
		mean	7.85E+07	3.39E+06	1.08E+02	3.43E+05	2.29E+05						

Table S4 Data for mixing trend calculation in figure S3.

	fs*	$^{18}O^{-}/H^{-}$	D/H	δD_{SMOW} (‰)
contamination end member	-	0.037	7.788E-05	-500
assumed sample value	-	5.18	1.579E-04	13.7
calculated values	0.63	37.5	1.279E-04	-179
	0.77	23.1	1.394E-04	-105
	0.83	16.7	1.446E-04	-72
	0.87	13.0	1.475E-04	-53
	0.89	10.7	1.493E-04	-41
	0.94	5.7	1.534E-04	-15
	0.99	0.6	1.574E-04	11

**fs is determined by the equations of fs = 1 / (1 + k (O/H)s). The factor k is applied as 0.011.*

Table S5 Data for mixing trend calculations in figure S4.

Data	mixing rate*	$^{18}O^{-}/H^{-}$	D/H	δD_{SMOW} (‰)
Pristine δD (Gray)	1	60	1.651E-04	60
	1	30	1.651E-04	60
	1	20	1.651E-04	60
	1	15	1.651E-04	60
	1	12	1.651E-04	60
	1	6.0	1.651E-04	60
	1	0.6	1.651E-04	60
Contamination δD (Red)	0.50	30	1.371E-04	-120
δD = -300‰	0.67	20	1.464E-04	-60
	0.75	15	1.511E-04	-30
	0.80	12	1.539E-04	-12
	0.83	10	1.558E-04	0
	0.91	5.5	1.600E-04	27
	0.99	0.6	1.646E-04	56
Contamination δD (Purple)	0.50	30	1.059E-04	-320
δD = -700‰	0.67	20	1.256E-04	-193
	0.75	15	1.355E-04	-130
	0.80	12	1.414E-04	-92
	0.83	10	1.454E-04	-67
	0.91	5.5	1.543E-04	-9
	0.99	0.6	1.639E-04	52
Contamination δD (Green)	0.50	30	9.034E-05	-420
δD = -900‰	0.67	20	1.153E-04	-260
	0.75	15	1.277E-04	-180
	0.80	12	1.352E-04	-132
	0.83	10	1.402E-04	-100
	0.91	5.5	1.515E-04	-27
	0.99	0.6	1.636E-04	50

**mixing rate indicates that how much the pristin δD value was contributed to.*