

**Tables S1 and S2:** Analytical results for all amino acids measured in the collagen samples of this study. Isotopic values are an average of triplicate measurements, the  $\pm$  values are the standard deviation of the triplicate measurements.

**Table S1:** Carbon isotope results for all Franchti samples

S-SFU #	2705	2706	2707	2708	2709	2710	2711	2713	2714	2715	2716
species	human	human	human	human	human	dog	dog	canid	pig	sheep/goat	sheep/goat
Bulk $\delta^{13}\text{C}$ (‰)	-19.6	-18.6	-19.3	-18.8	-20.0	-19.0	-19.0	-19.4	-19.8	-19.9	-18.2
alanine	-20.7 $\pm$ 0.1	-20.3 $\pm$ 0.1	-19.0 $\pm$ 0.0	-19.8 $\pm$ 0.0	-18.4 $\pm$ 0.0	-20.1 $\pm$ 0.1	-21.9 $\pm$ 0.0	-20.3 $\pm$ 0.2	-20.9 $\pm$ 0.1	-22.9 $\pm$ 0.1	-21.3 $\pm$ 0.1
valine	-27.1 $\pm$ 0.2	-25.7 $\pm$ 0.2	-25.9 $\pm$ 0.1	-25.3 $\pm$ 0.3	-26.4 $\pm$ 0.3	-25.1 $\pm$ 0.1	-24.6 $\pm$ 0.1	-24.5 $\pm$ 0.1	-25.7 $\pm$ 0.2	-27.4 $\pm$ 0.1	-24.9 $\pm$ 0.3
glycine	-12.5 $\pm$ 0.1	-12.4 $\pm$ 0.0	-10.1 $\pm$ 0.0	-10.4 $\pm$ 0.2	-10.5 $\pm$ 0.0	-10.1 $\pm$ 0.1	-10.4 $\pm$ 0.0	-9.8 $\pm$ 0.1	-9.3 $\pm$ 0.1	-10.7 $\pm$ 0.0	-9.1 $\pm$ 0.1
leucine	-29.3 $\pm$ 0.1	-28.4 $\pm$ 0.1	-29.0 $\pm$ 0.2	-29.2 $\pm$ 0.1	-30.5 $\pm$ 0.1	-29.6 $\pm$ 0.2	-29.6 $\pm$ 0.1	-29.5 $\pm$ 0.3	-30.5 $\pm$ 0.3	-31.1 $\pm$ 0.0	-28.6 $\pm$ 0.1
norleucine	-29.2 $\pm$ 0.1	-29.2 $\pm$ 0.0	-28.8 $\pm$ 0.0	-28.9 $\pm$ 0.1	-28.7 $\pm$ 0.1	-28.8 $\pm$ 0.0	-29.2 $\pm$ 0.0	-28.8 $\pm$ 0.1	-28.4 $\pm$ 0.0	-28.9 $\pm$ 0.1	-28.7 $\pm$ 0.0
proline	-19.7 $\pm$ 0.1	-17.5 $\pm$ 0.0	-18.6 $\pm$ 0.0	-18.5 $\pm$ 0.1	-19.6 $\pm$ 0.0	-18.3 $\pm$ 0.2	-18.6 $\pm$ 0.1	-18.7 $\pm$ 0.2	-19.3 $\pm$ 0.1	-19.6 $\pm$ 0.1	-17.6 $\pm$ 0.0
threonine	-9.3 $\pm$ 0.2	-6.9 $\pm$ 0.2	-8.7 $\pm$ 0.2	-8.2 $\pm$ 0.3	-8.8 $\pm$ 0.2	-8.7 $\pm$ 0.3	-5.7 $\pm$ 0.3	-7.7 $\pm$ 0.2	-9.1 $\pm$ 0.3	-13.0 $\pm$ 0.2	-10.8 $\pm$ 0.1
aspartic acid	-19.2 $\pm$ 0.1	-18.2 $\pm$ 0.2	-17.5 $\pm$ 0.1	-18.7 $\pm$ 0.1	-18.6 $\pm$ 0.0	-18.7 $\pm$ 0.1	-19.4 $\pm$ 0.0	-18.7 $\pm$ 0.1	-18.1 $\pm$ 0.1	-18.6 $\pm$ 0.3	-15.8 $\pm$ 0.2
serine	-10.1 $\pm$ 0.2	-10.0 $\pm$ 0.1	-8.3 $\pm$ 0.0	-7.9 $\pm$ 0.1	-9.5 $\pm$ 0.1	-9.4 $\pm$ 0.2	-9.1 $\pm$ 0.1	-9.8 $\pm$ 0.2	-9.3 $\pm$ 0.1	-8.8 $\pm$ 0.2	-6.1 $\pm$ 0.3
glutamic acid	-18.8 $\pm$ 0.0	-16.9 $\pm$ 0.1	-16.5 $\pm$ 0.1	-17.2 $\pm$ 0.2	-16.7 $\pm$ 0.0	-18.4 $\pm$ 0.2	-18.5 $\pm$ 0.1	-18.6 $\pm$ 0.2	-17.4 $\pm$ 0.1	-18.0 $\pm$ 0.1	-15.6 $\pm$ 0.1
phenylalanine	-26.0 $\pm$ 0.1	-26.1 $\pm$ 0.2	-25.7 $\pm$ 0.6	-25.6 $\pm$ 0.3	-26.1 $\pm$ 0.4	-25.9 $\pm$ 0.4	-25.5 $\pm$ 0.3	-24.7 $\pm$ 0.4	-25.7 $\pm$ 0.4	-25.6 $\pm$ 0.3	-23.9 $\pm$ 0.2
hydroxyproline	-19.4 $\pm$ 0.0	-17.7 $\pm$ 0.0	-18.5 $\pm$ 0.0	-18.7 $\pm$ 0.2	-19.8 $\pm$ 0.1	-18.7 $\pm$ 0.2	-18.9 $\pm$ 0.1	-18.9 $\pm$ 0.2	-19.3 $\pm$ 0.0	-19.6 $\pm$ 0.1	-17.1 $\pm$ 0.1
lysine	-24.3 $\pm$ 0.1	-24.3 $\pm$ 0.4	-24.7 $\pm$ 0.7	-19.1 $\pm$ 0.5	-20.0 $\pm$ 0.1	-21.2 $\pm$ 0.7	-21.6 $\pm$ 0.4	-21.3 $\pm$ 0.1	-19.9 $\pm$ 0.4	-20.9 $\pm$ 0.4	-18.9 $\pm$ 0.4

**Table S2:** Nitrogen isotope results for all Franchti samples

S-SFU #	2705	2706	2707	2708	2709	2710	2711	2713	2714	2715	2716
species	human	human	human	human	human	dog	dog	canid	pig	sheep/goat	sheep/goat
Bulk $\delta^{15}\text{N}$ (‰)	7.3	10.2	10.0	8.7	6.9	7.6	7.9	7.9	7.2	4.9	7.1
alanine	8.4 $\pm$ 0.5	10.7 $\pm$ 0.9	11.1 $\pm$ 0.3	10.9 $\pm$ 0.0	8.2 $\pm$ 0.2	12.0 $\pm$ 0.9	11.6 $\pm$ 0.0	11.1 $\pm$ 0.0	11.7 $\pm$ 0.3	8.9 $\pm$ 0.1	10.1 $\pm$ 0.3
glycine	5.0 $\pm$ 0.6	6.7 $\pm$ 1.2	7.9 $\pm$ 0.2	8.0 $\pm$ 0.2	5.0 $\pm$ 0.2	5.2 $\pm$ 0.2	5.1 $\pm$ 0.3	4.8 $\pm$ 0.2	7.5 $\pm$ 0.1	5.5 $\pm$ 0.5	7.0 $\pm$ 0.0
valine	9.2 $\pm$ 0.6	10.9	11.9 $\pm$ 0.4	12.9 $\pm$ 0.1	10.9 $\pm$ 0.4	13.2 $\pm$ 0.0	13.4 $\pm$ 0.1	12.4 $\pm$ 0.6	14.1 $\pm$ 1.1	11.3 $\pm$ 1.0	12.6 $\pm$ 0.2
leucine	8.5 $\pm$ 0.3	10.6	11.1 $\pm$ 0.3	11.5 $\pm$ 0.1	8.7 $\pm$ 0.1	11.2 $\pm$ 0.4	11.0 $\pm$ 0.7	14.4 $\pm$ 5.8	9.8 $\pm$ 1.7	8.0 $\pm$ 1.6	9.5 $\pm$ 0.2
norleucine	-1.3 $\pm$ 0.4	-1.9 $\pm$ 1.6	-1.8 $\pm$ 0.0	-0.4 $\pm$ 0.0	-1.5 $\pm$ 0.1	-0.5 $\pm$ 0.4	0.1 $\pm$ 0.2	-0.8 $\pm$ 0.1	1.6 $\pm$ 0.1	1.2 $\pm$ 0.1	0.1 $\pm$ 0.2
threonine	-11.1 $\pm$ 1.0	-17.5	-11.7 $\pm$ 1.5	-12.0 $\pm$ 0.1	-9.3 $\pm$ 1.2	-15.5 $\pm$ 0.3	-15.1 $\pm$ 0.2	-18.2 $\pm$ 1.0	-10.7 $\pm$ 3.6	-6.6 $\pm$ 0.1	-4.0 $\pm$ 0.6
serine	7.7 $\pm$ 1.5	6.7	9.5 $\pm$ 0.3	10.7 $\pm$ 0.0	8.5 $\pm$ 0.8	6.8 $\pm$ 1.1	7.0 $\pm$ 0.1	7.2 $\pm$ 0.7	10.5 $\pm$ 0.2	4.0 $\pm$ 0.7	5.4 $\pm$ 0.9
proline	11.8 $\pm$ 0.5	13.6 $\pm$ 1.2	14.3 $\pm$ 0.3	14.5 $\pm$ 0.0	12.4 $\pm$ 0.2	15.7 $\pm$ 0.4	16.3 $\pm$ 0.1	14.1 $\pm$ 0.0	13.4 $\pm$ 0.1	9.4 $\pm$ 0.2	10.6 $\pm$ 0.0
aspartic acid	9.3 $\pm$ 0.5	11.2	11.5 $\pm$ 0.6	12.3 $\pm$ 0.8	9.9 $\pm$ 0.6	11.7 $\pm$ 0.8	12.2 $\pm$ 1.1	10.6 $\pm$ 0.5	12.4 $\pm$ 0.3	10.1 $\pm$ 0.3	11.8 $\pm$ 0.4
glutamic acid	10.7 $\pm$ 0.8	12.7 $\pm$ 1.4	12.8 $\pm$ 0.3	12.9 $\pm$ 0.3	10.6 $\pm$ 0.4	12.9 $\pm$ 0.6	13.2 $\pm$ 0.1	12.2 $\pm$ 0.5	14.5 $\pm$ 0.2	11.3 $\pm$ 0.2	12.3 $\pm$ 0.3
hydroxyproline	11.1 $\pm$ 0.8	13.7 $\pm$ 1.8	13.7 $\pm$ 0.4	14.5 $\pm$ 0.5	12.5 $\pm$ 0.6	15.9 $\pm$ 1.0	16.1 $\pm$ 0.6	14.9 $\pm$ 0.2	13.3 $\pm$ 0.2	10.2 $\pm$ 0.5	9.9 $\pm$ 0.6
phenylalanine	-4.3 $\pm$ 1.9	-0.6	-2.2 $\pm$ 2.4	2.6 $\pm$ 1.2	4.8 $\pm$ 1.9	1.5 $\pm$ 0.3	5.8 $\pm$ 0.0	2.2 $\pm$ 3.5	6.9 $\pm$ 1.6	0.4 $\pm$ 2.2	3.7
lysine	3.2 $\pm$ 0.5	0.9	3.9 $\pm$ 0.5	2.5 $\pm$ 0.4	3.3 $\pm$ 0.5	3.5 $\pm$ 0.5	4.0 $\pm$ 0.3	1.9 $\pm$ 0.6	5.2 $\pm$ 1.4	3.7 $\pm$ 1.1	5.6 $\pm$ 0.4

**Tables S3 and S4:** Analytical results for QC collagen standards in comparison with longterm average values. Isotopic values are an average of triplicate measurements, the  $\pm$  values are the standard deviation of the triplicate measurements.

**Table S3:** Carbon isotope results for collagen QC standards (SRM-1, SRM-2, and SRM-3) from the two analytical sessions.

	SRM-1 (seal) $\delta^{13}\text{C}$ (‰)						SRM-2 (deer) $\delta^{13}\text{C}$ (‰)						SRM-3 (fish) $\delta^{13}\text{C}$ (‰)					
	29-Jun-21		05-Jul-21		longterm avg		29-Jun-21		05-Jul-21		longterm avg		29-Jun-21		05-Jul-21		longterm avg	
					(n=23)						(n=22)						(n=21)	
Ala	-17.0	$\pm$	0.0	-15.6	$\pm$	0.0	-16.5	$\pm$	1.3	-28.2	$\pm$	0.1	-28.0	$\pm$	0.1	-28.5	$\pm$	1.8
Gly	-20.9	$\pm$	0.2	-19.0	$\pm$	0.1	-19.8	$\pm$	1.8	-30.6	$\pm$	0.1	-29.6	$\pm$	0.3	-30.3	$\pm$	1.6
Val	-4.8	$\pm$	0.1	-2.6	$\pm$	0.1	-6.0	$\pm$	2.4	-18.2	$\pm$	0.0	-17.5	$\pm$	0.1	-19.6	$\pm$	2.2
Leu	-24.1	$\pm$	0.1	-23.8	$\pm$	0.0	-24.7	$\pm$	2.3	-33.8	$\pm$	0.1	-34.1	$\pm$	0.3	-35.2	$\pm$	1.7
Nle	-29.5	$\pm$	0.1	-28.7	$\pm$	0.1	-29.7	$\pm$	0.8	-29.1	$\pm$	0.1	-29.2	$\pm$	0.1	-29.5	$\pm$	0.7
Thr	-14.6	$\pm$	0.0	-13.7	$\pm$	0.0	-14.6	$\pm$	0.9	-23.5	$\pm$	0.0	-23.4	$\pm$	0.1	-23.6	$\pm$	1.1
Ser	-6.0	$\pm$	0.3	-4.2	$\pm$	0.3	-5.4	$\pm$	2.0	-17.8	$\pm$	0.1	-16.5	$\pm$	0.2	-16.6	$\pm$	2.4
Pro	-14.5	$\pm$	0.0	-13.5	$\pm$	0.2	-14.8	$\pm$	2.0	-23.2	$\pm$	0.0	-23.7	$\pm$	0.2	-23.4	$\pm$	1.5
Asx	-4.7	$\pm$	0.1	-3.8	$\pm$	0.1	-5.7	$\pm$	2.0	-12.7	$\pm$	0.2	-13.5	$\pm$	0.1	-14.1	$\pm$	2.2
Glx	-14.2	$\pm$	0.1	-13.2	$\pm$	0.0	-15.1	$\pm$	1.8	-22.3	$\pm$	0.1	-22.1	$\pm$	0.1	-22.7	$\pm$	1.4
Hyp	-24.1	$\pm$	0.3	-23.2	$\pm$	0.3	-24.0	$\pm$	2.0	-29.1	$\pm$	0.2	-29.3	$\pm$	0.1	-29.4	$\pm$	1.6
Phe	-14.4	$\pm$	0.1	-13.8	$\pm$	0.0	-14.9	$\pm$	1.8	-23.2	$\pm$	0.1	-23.3	$\pm$	0.1	-23.5	$\pm$	1.5
Lys	-18.0	$\pm$	0.2	-13.5	$\pm$	0.3	-15.2	$\pm$	2.9	-25.5	$\pm$	0.3	-22.6	$\pm$	0.5	-22.0	$\pm$	3.1
	-22.1	$\pm$	0.6	-15.2	$\pm$	0.2	-14.5	$\pm$	2.9									

**Table S4:** Nitrogen isotope results for collagen QC samples (SRM-1, SRM-2, and SRM-3) from the two analytical sessions.

	SRM-1 (seal) $\delta^{15}\text{N}$ (‰)						SRM-2 (deer) $\delta^{15}\text{N}$ (‰)						SRM-3 (fish) $\delta^{15}\text{N}$ (‰)					
	05-Oct-21		25-Oct-21		longterm avg		05-Oct-21		25-Oct-21		longterm avg		05-Oct-21		25-Oct-21		longterm avg	
					(n=22)						(n=19)						(n=19)	
Ala	25.1	$\pm$	0.1	24.6	$\pm$	0.2	25.5	$\pm$	1.5	1.5	$\pm$	1.3	2.1	$\pm$	0.3	2.5	$\pm$	0.8
Gly	12.3	$\pm$	0.2	11.4	$\pm$	0.1	12.2	$\pm$	1.1	-2.0	$\pm$	0.5	-1.8	$\pm$	0.0	-2.0	$\pm$	0.9
Val	24.0	$\pm$	0.4	23.9	$\pm$	0.5	25.0	$\pm$	1.7	4.4	$\pm$	0.3	6.0	$\pm$	0.6	7.0	$\pm$	1.3
Leu	26.2	$\pm$	0.3	26.9	$\pm$	0.5	27.1	$\pm$	1.5	-0.1	$\pm$	1.1	1.9	$\pm$	0.3	1.9	$\pm$	1.0
Nle	-0.4	$\pm$	0.2	-1.4	$\pm$	0.3	-1.1	$\pm$	1.0	-2.4	$\pm$	0.1	-2.1	$\pm$	0.3	-1.8	$\pm$	1.0
Thr	-23.8	$\pm$	0.0	-26.4	$\pm$	0.7	-22.8	$\pm$	4.3	-9.3		*	-12.9	$\pm$	1.4	-12.9	$\pm$	2.6
Ser	18.8	$\pm$	0.2	19.2	$\pm$	0.5	15.4	$\pm$	4.2	-3.2	$\pm$	1.4	-2.3	$\pm$	0.8	-3.9	$\pm$	3.1
Pro	26.5	$\pm$	0.2	25.1	$\pm$	0.7	26.6	$\pm$	1.6	3.3	$\pm$	0.2	3.7	$\pm$	0.3	4.5	$\pm$	0.8
Asx	22.7	$\pm$	0.0	22.5	$\pm$	1.9	22.9	$\pm$	1.4	3.2	$\pm$	2.0	2.9	$\pm$	0.3	3.8	$\pm$	0.8
Glx	26.6	$\pm$	0.4	26.4	$\pm$	0.9	27.5	$\pm$	1.7	7.6		*	3.9	$\pm$	0.3	4.7	$\pm$	1.0
Hyp	26.7	$\pm$	0.6	25.3	$\pm$	0.1	26.5	$\pm$	1.8	2.7	$\pm$	0.0	3.4	$\pm$	0.2	4.1	$\pm$	1.0
Phe	2.8	$\pm$	1.8	4.9	$\pm$	4.7	8.4	$\pm$	4.0	0.8		*	2.2	$\pm$	2.5	2.7	$\pm$	2.4
Lys	9.8	$\pm$	0.5	9.0	$\pm$	0.7	8.4	$\pm$	1.1	-2.8	$\pm$	0.3	-3.5	$\pm$	0.9	-3.4	$\pm$	1.3
	6.3	$\pm$	1.4	4.1	$\pm$	0.6	4.0	$\pm$	1.1									

\*standard deviation not available, samples were measured in duplicate not the normal triplicate

**Tables S5 and S6:** Analytical results for the QCmix standard in comparison with longterm average values. Isotopic values are an average of triplicate measurements, the  $\pm$  values are the standard deviation of the triplicate measurements.

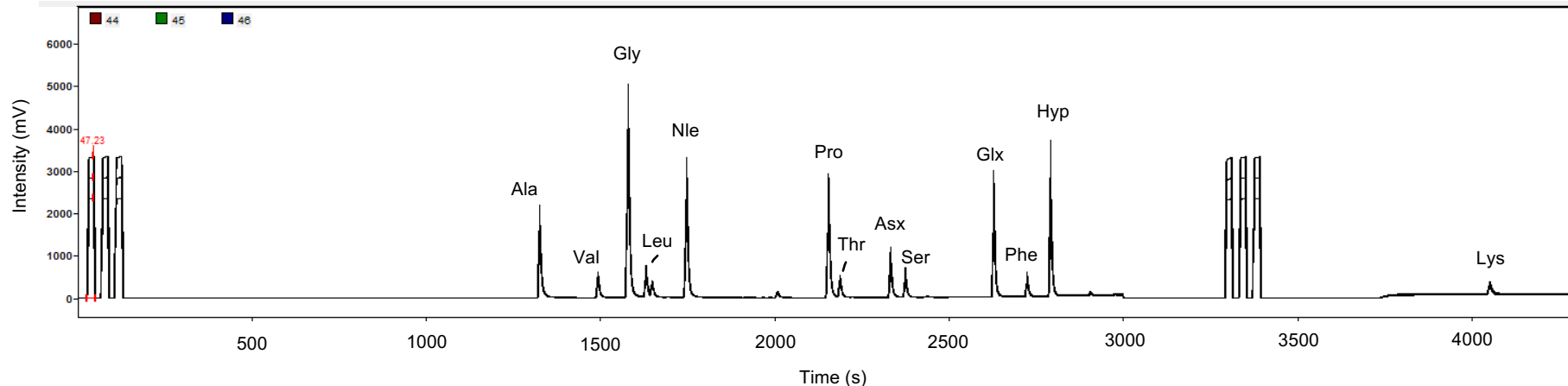
**Table S5:** Carbon isotope results for QCmix from both analytical sessions.

	QCmix $\delta^{13}\text{C}$ (‰)									
	29-Jun-21			05-Jul-21			longterm avg (n=31)			Expected values
Gly	-8.8	$\pm$	0.5	-7.8	$\pm$	0.1	-9.3	$\pm$	1.3	-9.3
Val	-18.2	$\pm$	2.1	-16.4	$\pm$	0.0	-21.2	$\pm$	2.8	-20.3
Nle	-29.0	$\pm$	0.5	-28.7	$\pm$	0.1	-29.8	$\pm$	0.8	-29.6
Pro	-10.3	$\pm$	1.1	-10.4	$\pm$	0.1	-11.3	$\pm$	1.0	-11.4
Glx	-25.6	$\pm$	0.8	-25.2	$\pm$	0.0	-26.9	$\pm$	2.3	-26.4

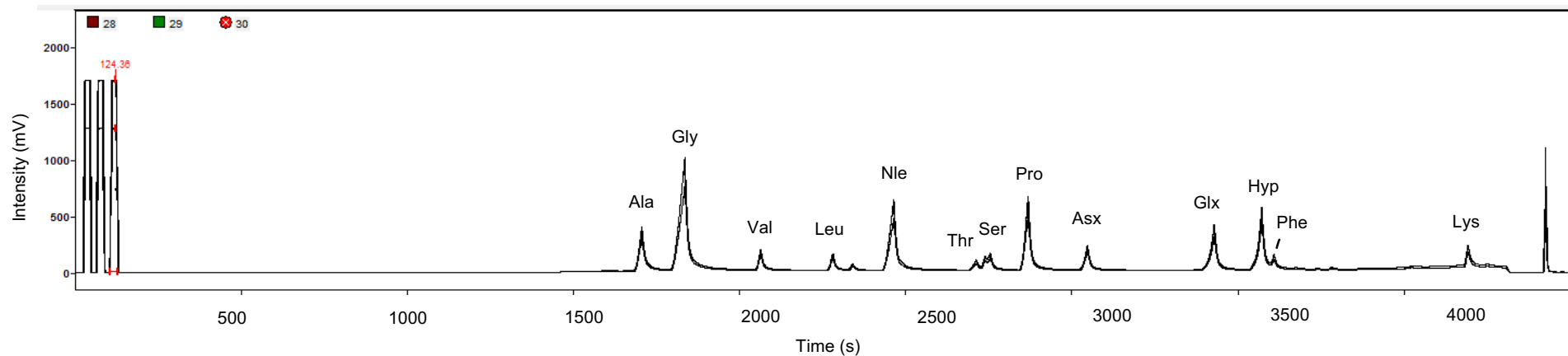
**Table S6:** Nitrogen isotope results for QCmix from both analytical sessions.

	QCmix $\delta^{15}\text{N}$ (‰)												
	05-Oct-21			05-Oct-21			25-Oct-21			25-Oct-21			longterm avg (n=40)
Gly	22.0	$\pm$	0.3	23.3	$\pm$	0.4	20.7	$\pm$	0.1	21.3	$\pm$	0.3	21.4 $\pm$ 1.4
Val	28.9	$\pm$	0.3	28.7	$\pm$	1.6	28.7	$\pm$	0.4	28.4	$\pm$	1.0	27.9 $\pm$ 1.6
Nle	0.0	$\pm$	0.6	0.4	$\pm$	0.1	-1.2	$\pm$	0.4	-1.0	$\pm$	0.2	-1.5 $\pm$ 0.7
Pro	2.1	$\pm$	0.3	1.5	$\pm$	0.1	-0.2	$\pm$	0.1	0.8	$\pm$	0.5	0.5 $\pm$ 0.7
Glx	-3.3	$\pm$	0.3	-2.3	$\pm$	0.1	-4.1	$\pm$	1.0	-3.8	$\pm$	0.2	-4.2 $\pm$ 1.1

Supplementary Figures:



**Figure S1:** Typical CO<sub>2</sub> gas chromatogram of NAIP ester derivatized amino acids from bone collagen (S-SFU 2716). Ala = alanine, Val = valine, Gly = glycine, Leu = leucine, Nle = norleucine, Pro = proline, Thr = threonine, Asx = aspartic acid, Ser = serine, Glx = glutamic acid, Phe = phenylalanine, Hyp = hydroxyproline, Lys = lysine.



Supplementary Figure S2: Typical N<sub>2</sub> gas chromatogram of NAIP ester derivatized amino acids from bone collagen (S-SFU 2707). Ala = alanine, Gly = glycine, Val = valine, Leu = leucine, Nle = norleucine, Thr = threonine, Ser = serine, Pro = proline, Asx = aspartic acid, Glx = glutamic acid, Hyp = hydroxyproline, Phe = phenylalanine, Lys = lysine.

**Tables S7:** Samples originally analyzed for  $\delta^{13}\text{C}$  and  $\delta^{15}\text{N}$  at MP-EVA (M. Richards, 2007)

S-EVA	Submitter N	Species	Element	Age	Context	Site	Country	Start mass	Mass into n	% Collagen (>30kDa)	d13C	d15N	%C	%N	C:N
4108	F R A-1	Tuna	vertebrae	Meso	Trench G1	Franchti Cave	Greece	333.4	too less, keep in the Eppendorf tube						
4109	F R A-2	Tuna	vertebrae	Meso	Trench G1	Franchti Cave	Greece	407.9	too less, keep in the glass tube						
4110	F R A-3	Tuna	vertebrae	Meso	Trench G1	Franchti Cave	Greece	396	0.8	0.2020202					
4111	F R A-4	Bass		Meso	Trench G1	Franchti Cave	Greece	280.2	too less, keep in the glass tube						
4112	F R A-5	Fallow deer	metapodial	Meso	Trench G1	Franchti Cave	Greece	311	too less, keep in the Eppendorf tube						
4113	F R A-6	dog	mandible	Meso	Trench G1	Franchti Cave	Greece	282.8	2	0.707213579	-18.969	7.6355	42.6914798	15.0328876	3.31316562
4114	F R A-7	feline	humerus	Meso	Trench G1	Franchti Cave	Greece	320.2	1	0.312304809	-19.4705	7.4245	42.92865	14.5242283	3.44879997
4115	F R A-8	cervid	acetabulum	Meso	Trench G1	Franchti Cave	Greece	274.5	too less, keep in the glass tube						
4116	F R A-9	equus	humerus	Meso	Trench G1	Franchti Cave	Greece	341.2	0.3	0.087924971					
4117	F R A-10	cervid	long bone fr	Meso	Trench G1	Franchti Cave	Greece	428.2	0.7	0.163475012					
4118	F R A-11	cervid	long bone fr	Meso	Trench G1	Franchti Cave	Greece	361.2	0.7	0.19379845	-21.4395	5.394	29.4642	10.0344451	3.42403941
4119	F R A-12	cervid	metapodial	Meso	Trench G1	Franchti Cave	Greece	297.2	1.1	0.370121131	-20.404	3.83	11.4099964	3.8686254	3.44092806
4120	F R A-13	equus	phalanx	Meso	Trench G1	Franchti Cave	Greece	394.7	too less, keep in the glass tube						
4121	F R A-14	dog	maxilla	Meso	Trench G1	Franchti Cave	Greece	324.3	0.1	0.030835646					
4122	F R A-15	cervid	long bone fr	Meso	Trench G1	Franchti Cave	Greece	379.8	0.6	0.157977883					
4123	F R A-16	cervid	long bone fr	Meso	Trench G1	Franchti Cave	Greece	320.7	1	0.311817898					
4124	F R A-17	cervid	long bone fr	Meso	Trench G1	Franchti Cave	Greece	300.4	too less, keep in the glass tube						
4125	F R A-18	deer	radius	Palaeo	Tray H/H-1	Franchti Cave	Greece	368.5	1.4	0.379918589	-20.564	6.408	14.9150934	4.723653	3.68378906
4126	F R A-19	cervid	humerus	Palaeo	Tray H/H-1	Franchti Cave	Greece	300.9	0.9	0.299102692					
4127	F R A-20	cervid	metapodial	Palaeo	Tray H/H-1	Franchti Cave	Greece	337.4	too less, keep in the Eppendorf tube						
4128	F R A-21	dog	mandible	Meso	Tray G-1	Franchti Cave	Greece	311.8	2.4	0.769724182	-19.026	7.8685	43.305626	14.6079307	3.4585794
4129	F R A-22	pig	mandible	Meso	Tray G-1	Franchti Cave	Greece	332.4	0.5	0.150421179	-20.084	5.817	42.1158787	14.0980037	3.48525862
4130	F R A-23	red deer	mandible	Meso	Tray G-1	Franchti Cave	Greece	396.1	1.8	0.454430699	-21.874	5.365	13.3040225	4.41885685	3.51130741
4131	F R A-24	cervid	metapodial	Meso	Tray G-1	Franchti Cave	Greece	364.6	too less, keep in the Eppendorf tube						
4132	F R A-25	cervid	1st phalanx	Meso	Tray G-1	Franchti Cave	Greece	294.9	0.9	0.305188199	-21.071	6.517	18.1127111	6.1988341	3.4089467
4133	F R A-26	pig	radius	Meso	Tray G-1	Franchti Cave	Greece	319.8	0.6	0.187617261					
4134	F R A-27	Tuna	vertebrae	Meso	Tray G-1	Franchti Cave	Greece	341.1	too less, keep in Eppendorf-Tube		-14.143	8.699	40.9979954	13.4939612	3.54506307
4135	F R A-28	sheep	metapodial	Neo	Box B	Franchti Cave	Greece	315.8	1.2	0.379987334	-19.8125	5.886	42.0054039	14.4385178	3.39533259
4136	F R A-29	cattle	radius	Neo	Box B	Franchti Cave	Greece	310.9	too less, keep in Eppendorf-Tube						
4137	F R A-30	red deer	metatarsal	Neo	Box B	Franchti Cave	Greece	426.1	1	0.234686693	-21.393	4.19	13.5471978	4.3029148	3.67310623
4138	F R A-31	canid	ulna	Neo	Box B	Franchti Cave	Greece	291.2	6.5	2.232142857	-19.2085	7.537	41.0091851	14.340803	3.33684497
4139	F R A-32	sheep/goat	radius	Neo	Box B	Franchti Cave	Greece	312.7	1.3	0.41573393	-20.703	4.768	18.6524371	6.2088689	3.50485342
4140	F R A-33	pig	mandible	Neo	Box B	Franchti Cave	Greece	364.7	4.2	1.151631478	-19.814	7.215	33.5152984	11.7168427	3.33493176
4141	F R A-34	sheep/goat	mandible	Neo	Box H 37	Franchti Cave	Greece	340.7	7.3	2.14264749	-19.745	4.618	42.8059121	15.2371845	3.27926906
4142	F R A-35	sheep/goat	long bone fr	Neo	Box H 37	Franchti Cave	Greece	344.9	8.5	2.464482459	-18.053	6.8285	43.2632225	15.2740506	3.306005
4143	F R A-36	Tuna	vertebrae	Neo	Box H 37	Franchti Cave	Greece	355.3	1	0.281452294	-15.354	7.8435	17.2177421	5.2665277	3.80832565
4144	F R A-100	Human	rib and long	Meso	Fr1	Franchti Cave	Greece	399.2	1.1	0.275551102	-22.091	8.1425	17.59395	4.1717232	4.9186987
4145	F R A-101	Human	rib and long	Meso	Fr2	Franchti Cave	Greece	298.6	4.2	1.406563965	-19.4005	7.0355	43.0446897	15.2845333	3.28699665
4146	F R A-102	Human	long bone fr	Meso	Fr5	Franchti Cave	Greece	354.2	0.9	0.254093732	-20.918	7.047	12.2507479	3.9071192	3.65807584
4147	F R A-103	Human	long bone fr	Meso	Fr2, Fr3 or F	Franchti Cave	Greece	330.3	too less, keep in glass tube						
4148	F R A-104	Human	ribs	Meso	Fr6	Franchti Cave	Greece	322	4.9	1.52173913	-18.386	10.016	43.0497098	15.7054697	3.19790873
4149	F R A-105	Human		Meso	Fr410	Franchti Cave	Greece	419.8	0.8	0.190566937	-21.233	6.386	20.1815325	6.98258045	3.37238385
4150	F R A-106	Human	long bone fr	E M Neo	Fr11	Franchti Cave	Greece	325.2	5.1	1.568265683	-19.1915	9.717	43.5805039	14.1241823	3.59980141
4151	F R A-107	Human	long bone fr	E M Neo	Fr62	Franchti Cave	Greece	335.2	1.2	0.357995227	-22.8465	7.5875	9.32814532	2.1423188	5.07260931
4152	F R A-108	Human	long bone fr	E M Neo	Fr63	Franchti Cave	Greece	315.5	too less, keep in the Eppendorf tube						
4153	F R A-109	Human	hand bones	E M Neo	Fr78	Franchti Cave	Greece	427.3	3	0.702082846	-18.9235	8.047	37.1886318	12.7844716	3.39474881
4154	F R A-110	Human	mandible	E M Neo	Fr37	Franchti Cave	Greece	379.6	3	0.790305585	-18.7695	8.7215	40.3386726	13.7157931	3.43332653
4155	F R A-111	Human	rib	E M Neo	Fr12	Franchti Cave	Greece	305.5	2.2	0.720130933	-19.9885	6.896	43.8325275	14.132519	3.62165439
4156	F R A-112	Human	cranial and l	E M Neo	Fr244	Franchti Cave	Greece	376.9	3.9	1.03475723					