Recombinant DNA technology and click chemistry: a powerful combination for generating a hybrid elastin-like-statherin hydrogel to control calcium phosphate mineralization

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MALDI-TOF spectra, NMR spectra, ATR-IR spectra, SEM micrographs, EDXS analysis are presented

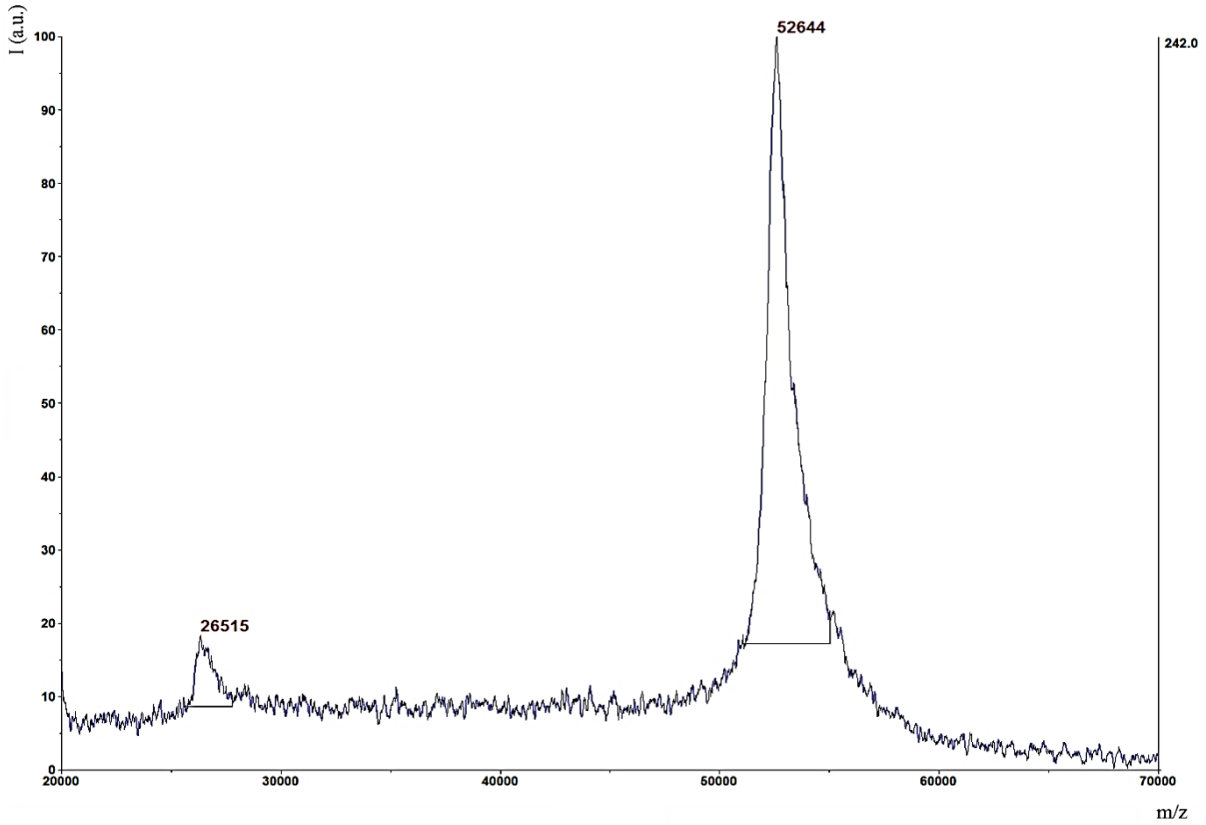

Figure S1: MALDI-TOF of the IK24 ELR modified with azide group.

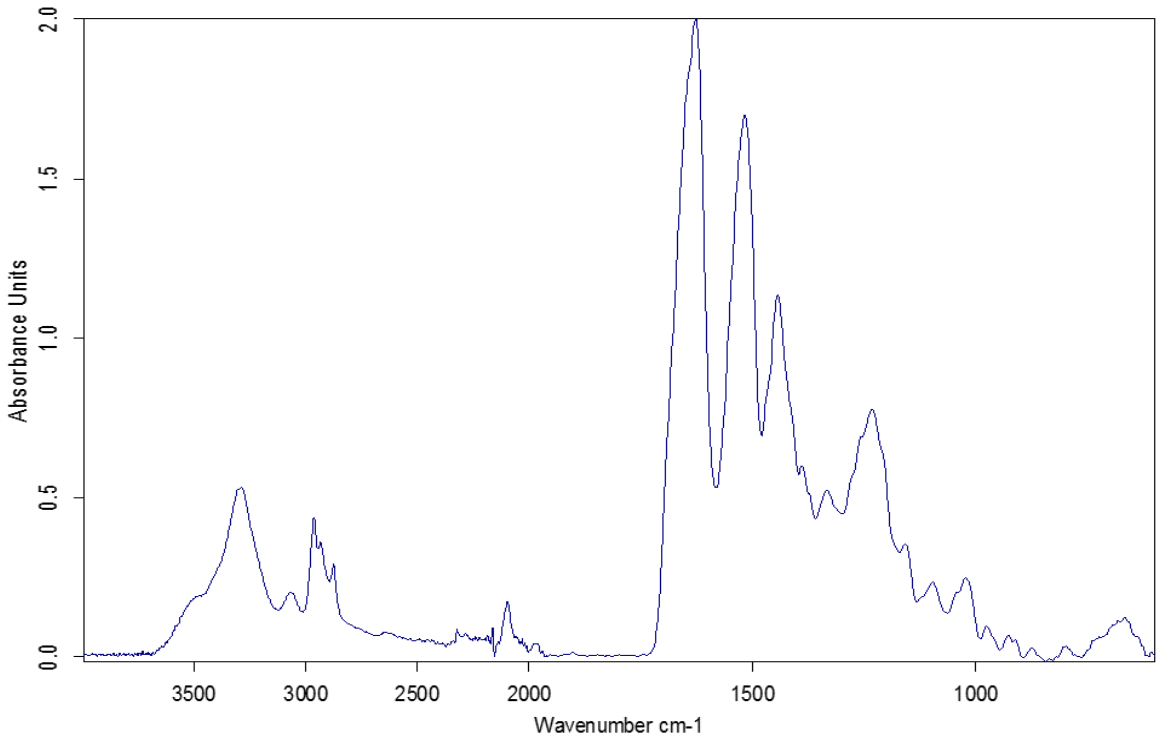

Figure S2: ATR of the IK24 ELR modified with the azide group.

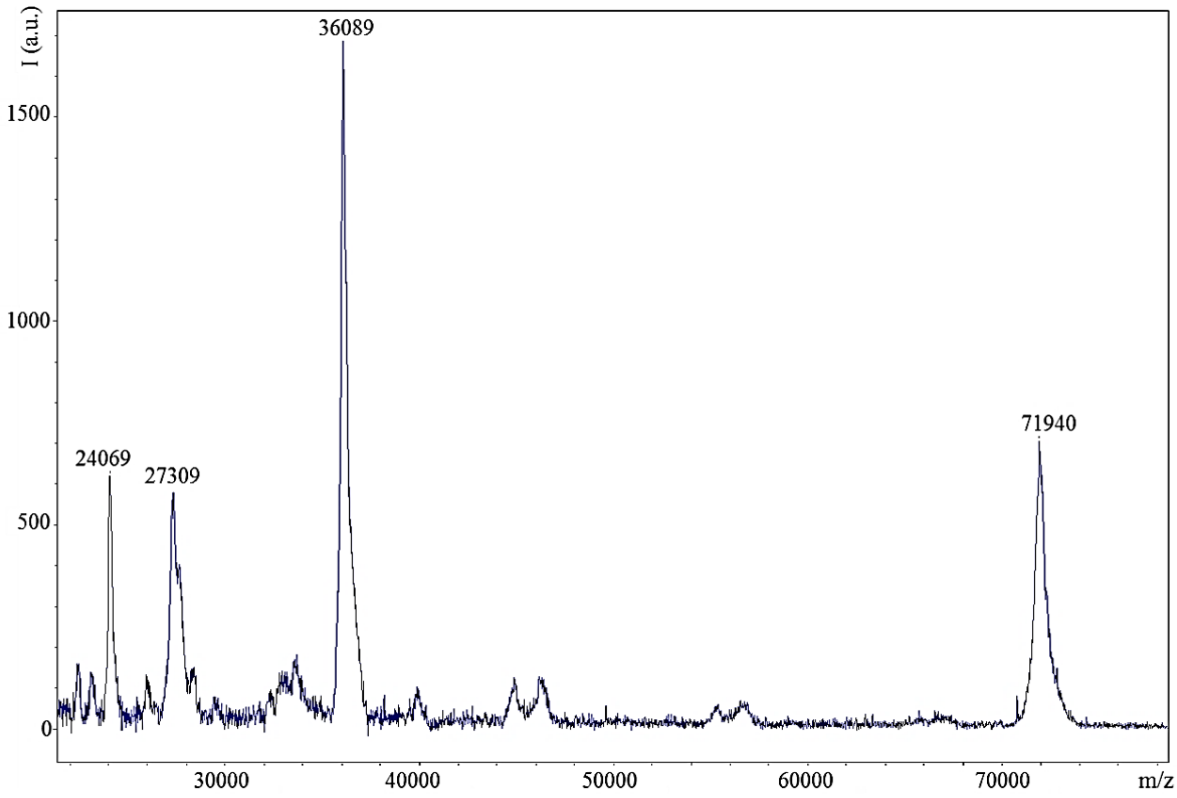

Figure S3: MALDI-TOF of the H3AH3 ELR modified with azide group.

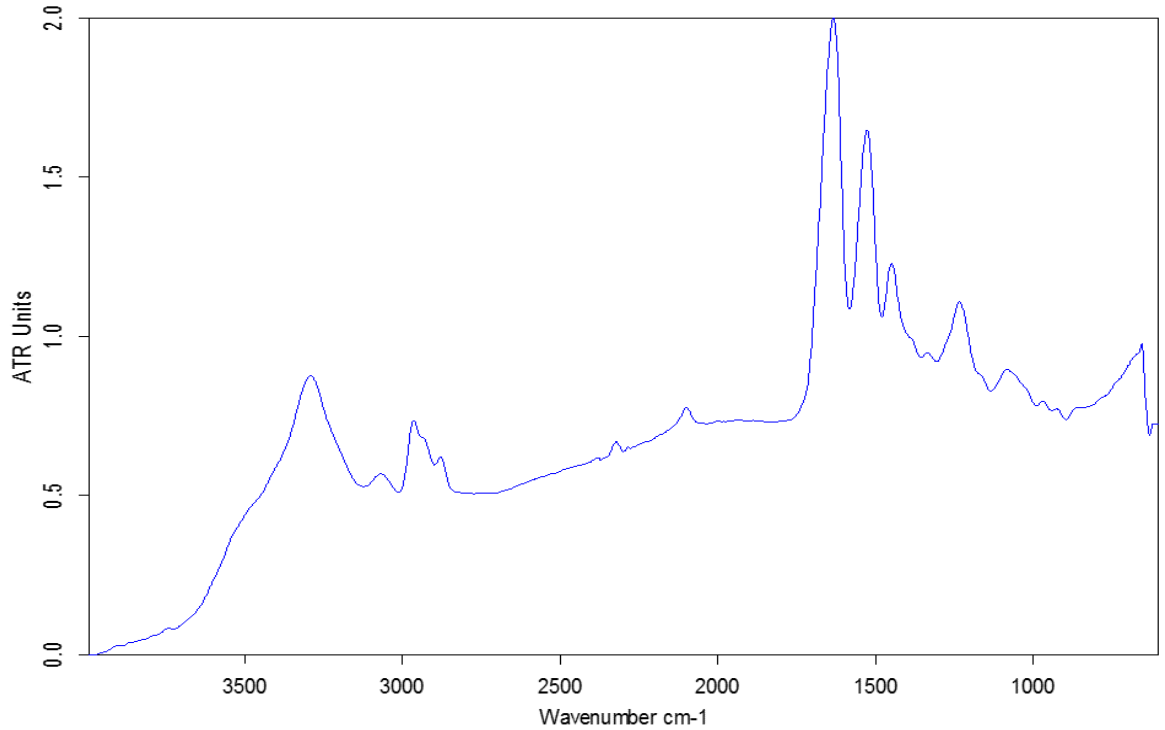

Figure S4: ATR of the H3AH3 ELR modified with azide group.

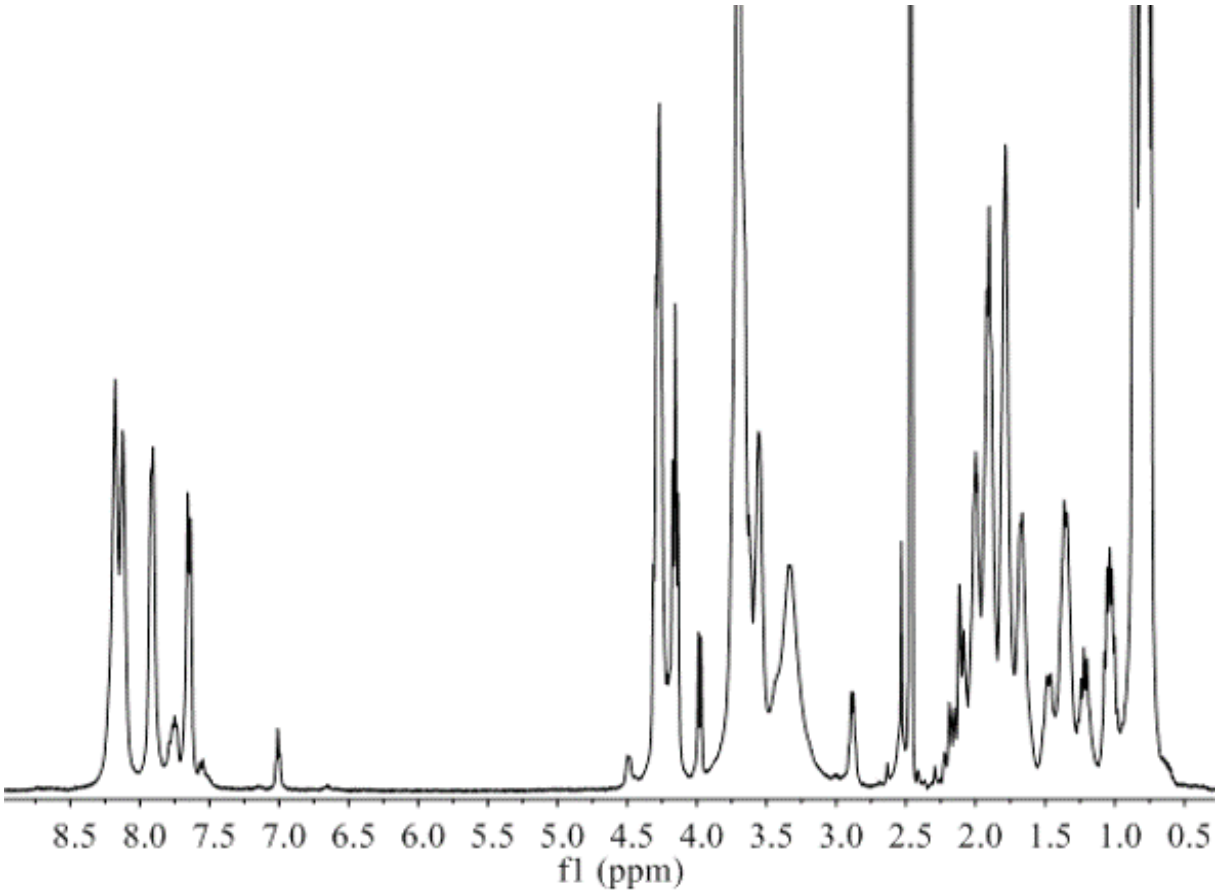

Figure S5: ^{1}H NMR in DMSO-d_6 of the IK24 ELR modified with cyclooctyne group.

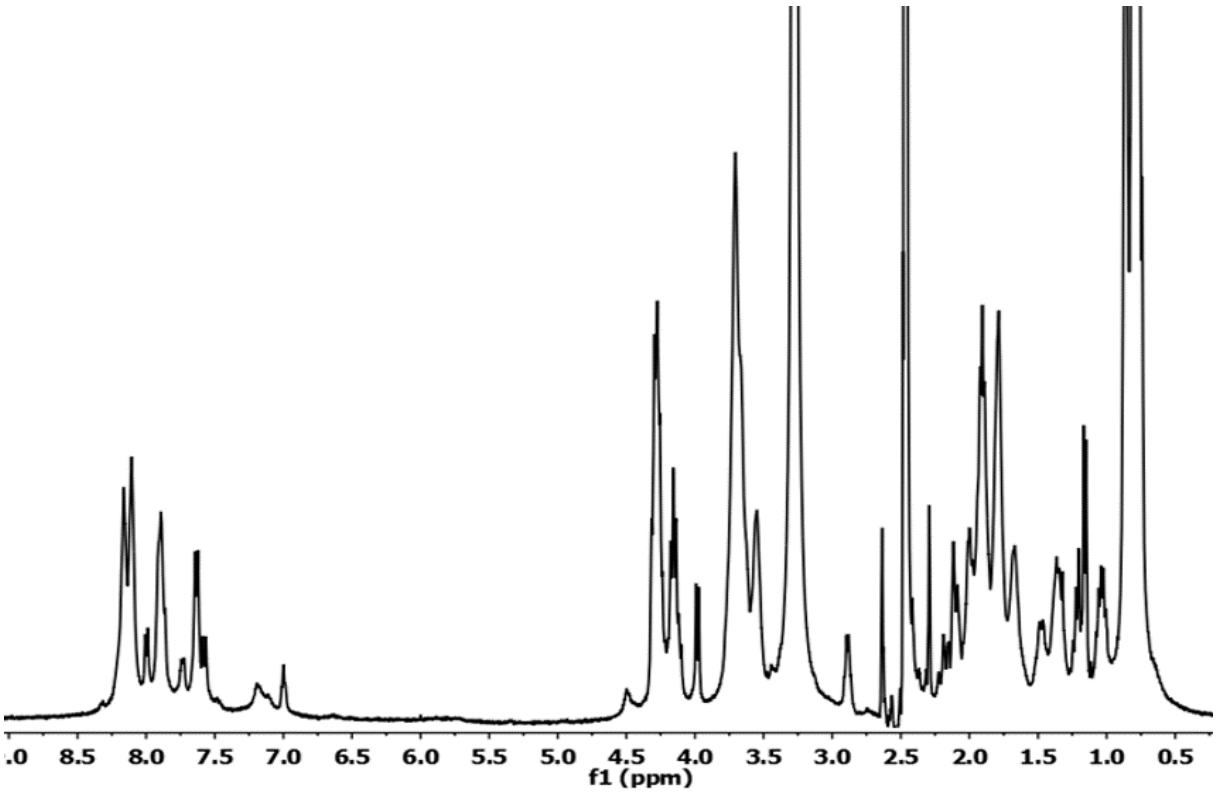

Figure S6: ^{1}H NMR in DMSO-d_6 of the H3AH3 ELR modified with cyclooctyne group.

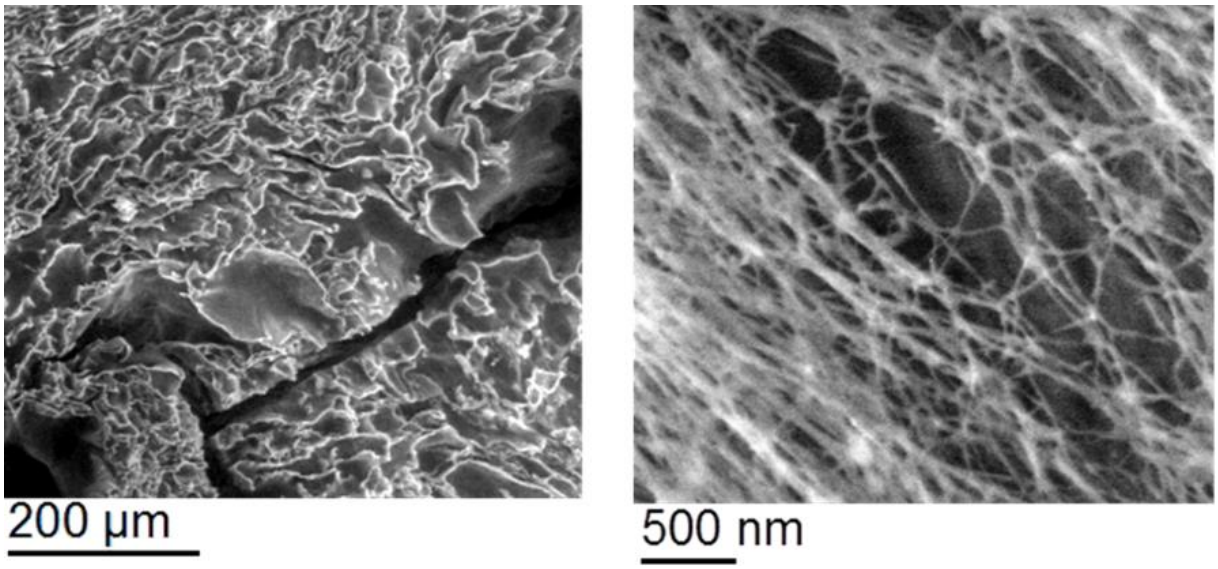

Figure S7: IK24 ELR hydrogel morphology observed by SEM.

Table S1: Elemental composition of the hydrogels after mineralization from EDXS. n.d. = not detected (detection limit of the instrument is 0.5%).

Element	**IK24**			**H3AH3**		
	4 days	8 days	14 days	4 days	8 days	14 days
C *K*	33.59	20.72	26.77	27.08	39.17	32.04
N *K*	06.70	n.d.	n.d.	07.00	n.d.	01.90
O *K*	35.16	50.13	35.51	47.42	37.52	46.54
P *K*	09.30	11.63	12.82	08.15	8.70	06.40
K *K*	04.40	04.37	n.d.	01.21	3.95	n.d.
Cl *K*	n.d.	n.d.	5.41	n.d.	n.d.	01.72
Ca *K*	10.84	13.15	19.48	09.12	10.65	11.40

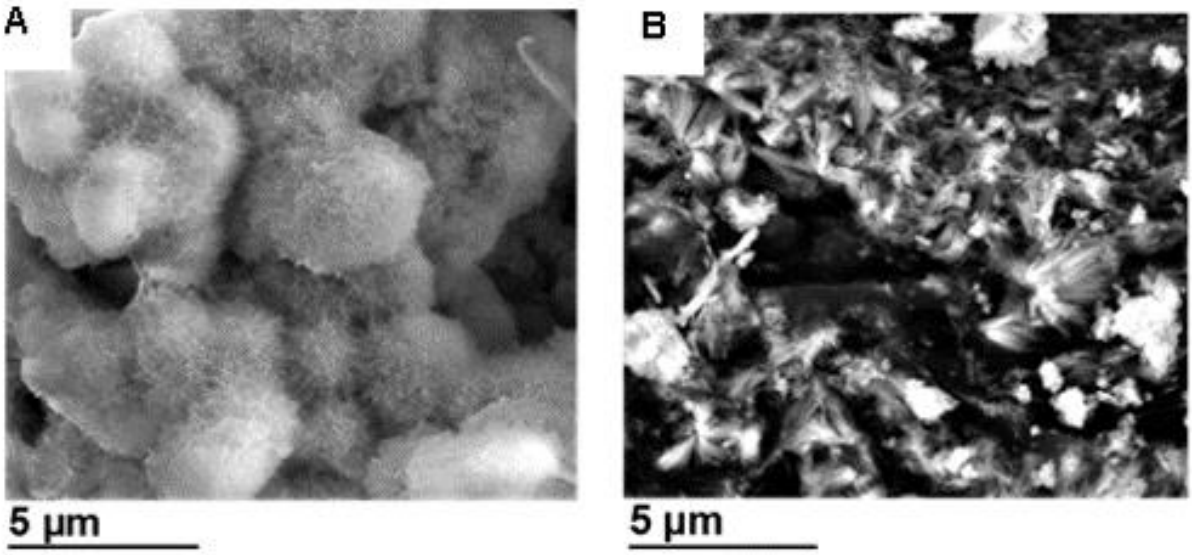

Figure S8: SEM of (A) Spherical- and (B) plate- like HA formed by the H3AH3 hydrogel after incubation for 14 days.