

	number of amino acid residues	deduced molecular mass (kDa)	percentage of acidic amino acid residues (mol %)
wild type	411	40.9	58.4
ΔDAΔD	27	2.5	11.1
ΔD	57	5.2	28.1
D1	111	10.8	45.9
D2	392	39.0	61.2

Table S1.

		number of crystals (/mm ²)	covered area (%)	related figure
control (no protein)	calcite	24.2	0.13	Fig. 2C
	aragonite	71.1	14.48	
△DA△D (10µg/ml)	calcite	216.2	1.75	Fig. 5A
	aragonite	55.5	7.14	
△D (10µg/ml)	calcite	113.8	0.84	Fig. 5B
	aragonite	93.8	10.95	
D1 (10µg/ml)	calcite	3133.3	14.74	Fig. 4F
	aragonite	0.0	0.00	
D1 (2µg/ml)	calcite	2200.0	1.50	Fig. 4I
	aragonite	166.6	3.78	

Table S2.

Legends of Supplementary materials

Table S1.

Profiles of wild type and recombinant Aspein proteins. Percentage of acidic amino acid (mol %) reflects mainly the number of aspartic acid, because wild type and Aspein-D2 have three glutamic acid residues, and other recombinant Aspein proteins have only two glutamic acid residues.

Table S2.

Quantitative account of calcite and aragonite crystals formed from the solution with or without recombinant Aspein proteins. The number of crystals and covered areas were measured and calculated from the SEM images. The covered area shows the percentage of the area occupied by the crystals on a SEM image.