

Supporting Information

for

Self-assembly and adhesive properties of *Pollicipes pollicipes* barnacle cement protein cp19k: influence of pH and ionic strength

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Beilstein J. Nanotechnol. 2025, 16, 1863-1872. doi:10.3762/bjnano.16.129

Additional figures

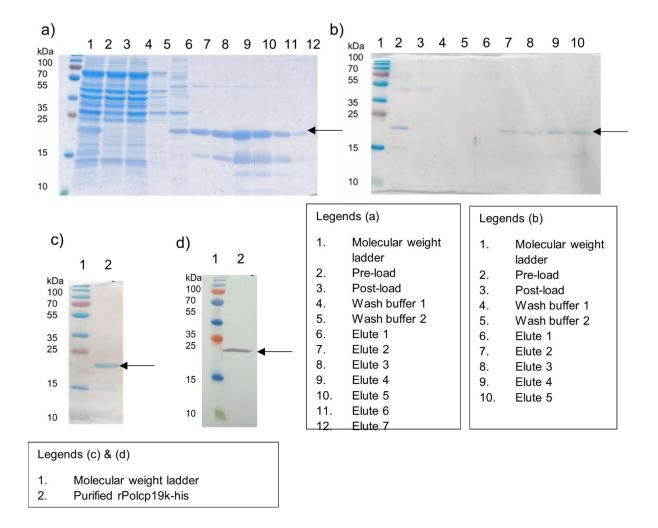


Figure S1: Expression and purification of rPolcp19k-his. SDS-PAGE analysis of a) IMAC and b) IEC purification of rPolcp19k-his. c), d): SDS-PAGE and Western blot analyses, respectively, of purified protein. Arrows indicate proteins of the expected size of pPolcp19k-his.

Protein samples were analysed under denaturing conditions in 15% SDS-PAGE.

Gels were stained with InstantBlue® Coomassie Protein Stain (Abcam) or proteins were transferred to an Amersham Protran™ 0.2 µm nitrocellulose blotting membrane (GE Healthcare, Fischer scientific) for immunodetection of rPpolcp19k-his using a monoclonal anti-polyhistidine peroxidase-conjugated antibody (Sigma Aldrich, Ireland) diluted 1:1000 in Tris-buffered saline (25 mM Tris, pH 7.4, 150 mM NaCl).

Colour was developed using Tetramethylbenzidine (TMB).

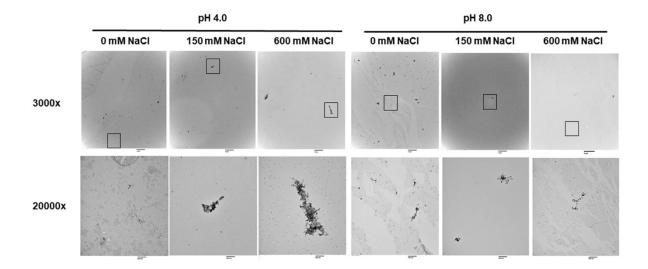


Figure S2: TEM images of rPolcp19k-his protein samples after incubation for 3 days under the indicated pH and salt conditions. Squares in 3000x magnification images represent areas shown at 20000x magnification in the corresponding panels below. Scale bar represents 4 μ m (3000x magnification images) or 600 nm (20000x magnification images).

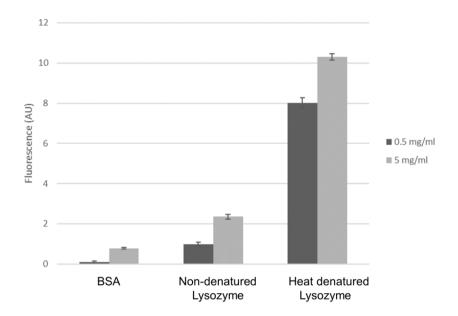


Figure S3: ThT assay controls: BSA and non-denatured lysozyme (negative control) and heat-denatured lysozyme were assayed at 5 mg/ml and 0.5 mg/ml. Results are presented in arbitrary units (AU) of fluorescence, as mean \pm standard deviation; n = 3.