

ELECTRONIC SUPPORTING INFORMATION

**Tuning transport phenomena in agarose gels for the
control of protein nucleation density and crystal form**

Fiora Artusio¹, Albert Castellví², Roberto Pisano¹,

José A. Gavira^{3}*

¹ Department of Applied Science and Technology, Politecnico di Torino, 24 corso Duca degli Abruzzi, 10129 Torino, Italy; fiora.artusio@polito.it (F.A.); roberto.pisano@polito.it (R.P.)

² Molecular Biology Institute of Barcelona, Carrer Baldiri Reixac 4-8 (Science Park), 08028
Barcelona, Spain; actcri@ibmb.csic.es (A.C.)

³ Laboratorio de Estudios Cristalográficos, Instituto Andaluz de Ciencias de la Tierra (Consejo Superior de Investigaciones Científicas-Universidad de Granada), Avenida de las Palmeras 4,
18100 Armilla, Granada, Spain

*Correspondence to: jgavira@iact.ugr-CSIC.es (J.A.G.)

Table S1. The fitting parameters of the exponential law used to fit the experimental data of the nucleation density vs. agarose gel trend. A_N and B_N are the pre-exponential factors and the decay constants, respectively.

Protein	A_N	STD error	B_N	STD error
Proteinase K	1.244	0.083	0.503	0.055
HEWL	1.213	0.133	0.626	0.112
Insulin	1.220	0.080	0.572	0.061

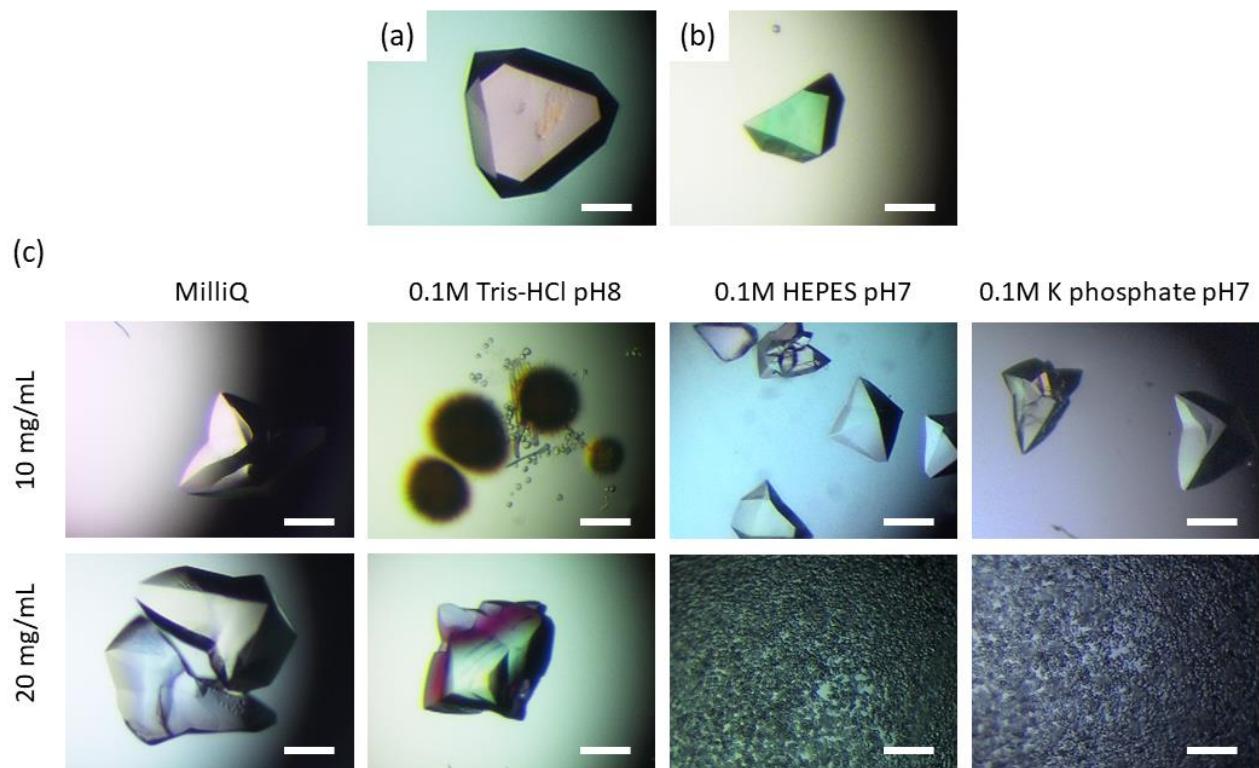


Figure S1. Proteinase K single crystals grown by HDVD crystallization method. (a) Proteinase K initial concentration was 15 mg/mL in 50 mM HEPES pH 7.0, and the precipitant solution consisted of 1 M NaNO₃ and 50 mM Na citrate pH 6.5. (b) Proteinase K initial concentration was 20 mg/mL in 50 mM HEPES pH 7.0, the precipitation cocktail was 1.2 M (NH₄)₂SO₄ in 0.1 M Tris-HCl pH 8.0. (c) Screening of proteinase K crystallization in presence of different buffers. Proteinase K concentration before mixing was 10 or 20 mg/mL. The protein to precipitant ratio was 1 for every condition. The scale bar correspond to 250 μ m.