

Materials List for:

Structure Solution of the Fluorescent Protein Cerulean Using MeshAndCollect

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URL: <https://www.jove.com/video/58594>

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Materials

Name	Company	Catalog Number	Comments
Beamline	ESRF ID 23-1		
Concentrators: Amicon Ultra-4 Ultracel -30K	Merck Millipore	UFC803024	
Crystallization plates XDXm with sealant	Hampton Research	HR3-306	
EDTA- free protease inhibitors	Roche	4,693,159,001	
Escherichia coli BL21 (DE3)	Life Technologies Thermo Fisher Scientific	C600003	
glycerol	VWR Chemicals Prolabo	14388.29T	
HEPES	Euromedex	10-110-C	
His-trap HP	GE healthcare	17-5247-01	
imidazole	Sigma-Aldrich	56750-500G	
MgCl ₂	Sigma-Aldrich	13452-1KG	
MicroMeshes 700/25	MiTeGen	SKU: M3-L18SP-25L	
NaCl	Fisher Chemical	S/3160/60	
PEG8000	Sigma-Aldrich	P5413-500G	
Sonicator vibra cell 75/15	SONICS		
Superdex 75 10/300 -GL	GE healthcare	17-5174-01	
Tris base	Euromedex	26-128-3094-B	
Trypsin	Sigma-Aldrich	T9201-1G	
Unipuck	Molecular Dimensions	MD7-601	
Name	Company	Catalog Number	Comments
Programs			
ISPyB	ESRF	Solange Delagenière, Patrice Brechereau, Ludovic Launer, Alun W. Ashton, Ricardo Leal, Stéphanie Veyrier, José Gabadinho, Elspeth J. Gordon, Samuel D. Jones, Karl Erik Levik, Seán M. McSweeney, Stéphanie Monaco, Max Nanao, Darren Spruce, Olof Svensson, Martin A. Walsh, Gordon A. Leonard; ISPyB: an information management system for synchrotron macromolecular crystallography, Bioinformatics,	local development

		Volume 27, Issue 22, 15 November 2011, Pages 3186–3192, https://doi.org/10.1093/bioinformatics/btr535	
aimless	MRC Laboratory of Molecular Biology	Evans, P.R., Murshudov, G.N. How good are my data and what is the resolution? <i>Acta Crystallographica Section D Biological Crystallography</i> . 69 (7), 1204–1214, doi: 10.1107/S0907444913000061 (2013).	
ccCluster	ESRF	Santoni, G., Zander, U., Mueller-Dieckmann, C., Leonard, G., Popov, A. Hierarchical clustering for multiple-crystal macromolecular crystallography experiments: the <i>ccCluster</i> program. <i>Journal of Applied Crystallography</i> . 50 (6), 1844–1851, doi: 10.1107/S1600576717015229 (2017).	local development
DOZOR	ESRF	Bourenkov and Popov, unpublished	local development
MeshAndCollect workflow	ESRF	Zander, U. <i>et al.</i> <i>MeshAndCollect</i> : an automated multi-crystal data-collection workflow for synchrotron macromolecular crystallography beamlines. <i>Acta Crystallographica Section D Biological Crystallography</i> . 71 (11), 2328–2343, doi: 10.1107/S1399004715017927 (2015).	local development
MXCuBE2	ESRF	Gabadiño, J. <i>et al.</i> <i>MxCuBE</i> : a synchrotron beamline control environment customized for macromolecular crystallography experiments. <i>Journal of Synchrotron Radiation</i> . 17 (5), 700–707, doi: 10.1107/S0909049510020005 (2010). De Santis, D., Leonard, G. <i>Notiziario Neutroni e Luce di Sincrotrone, Consiglio Nazionale delle Ricerche</i> . (19), 24–226 (2014).	local development
XDS	Max-Planck-Institut für Medizinische Forschung	Kabsch, W. <i>XDS</i> . <i>Acta Crystallographica Section D Biological Crystallography</i> . 66 (2), 125–132, doi: 10.1107/S0907444909047337 (2010)	