

Materials

Name	Company	Catalog Number	Comments
0.1-1.5mL Eppendorf tubes	Fisher Scientific	14-282-300	Any vial or tube will do.
Autogrid clips	Thermo-Fisher	1036173	Clipped grids are not required for MicroED. They are required for Thermo-Fisher TEMs equipped with an autoloader system.
Autogrid C-rings	Thermo-Fisher	1036171	
Carbamazapine	Sigma	C4024-1G	Any amount will suffice for these experiments
CMOS based detector	Thermo-Fisher	CetaD 16M	We used a CetaD 16M, but any detector with rolling shutter mode or sufficiently fast readout is acceptable.
Delphi software	Thermo-Fisher	N/A	Software on Thermo-Fisher TEM systems that allows for manual rotation of the sample stage
EPU-D software	Thermo-Fisher	N/A	Commercial software for the acquisition of MicroED data
Glass cover slides	Hampton	HR3-231	
Glow discharger	Pelco	easiGlow	
High Precision Tweezers	EMS	78325-AC	Any high precision tweezer will do
Liquid nitrogen vessel	Spear Lab	FD-800	A standard foam vessel for handling specimens under liquid nitrogen - 800mL
SerialEM software	UC Boulder	N/A	Free software distributed by D. Mastronarde. Department of Molecular, Cellular, and Developmental Biology
TEM grids	Quantifoil/EMS	Q310CMA	Multi-A 300 mesh grids were used here, but any thin carbon grids will work. For these small molecules, we suggest starting with continuous carbon.
transmission electron microscope (TEM)	Thermo-Fisher	Talos Arctica	
Whatman circular filter paper	Millipore-Sigma	WHA1001090	90mm or larger