

技術資料・データ等

構造生物学研究用各種ツール

蛋白質結晶マウント・測定用ツール

○ **ActiLoops**

技術資料・データ等

**ActiLoopsの結晶マウント時における
母液除去効果**

Observation of X-ray diffraction patterns produced by the loop plus a protein crystal

X-ray diffraction conditions

X-ray source: RIGAKU RAXIS7/FR-E

Temperature: 100K

Distance: 150mm

Exposure time: 5 minutes

$\Delta \phi$: 0.5°

Protein crystal and buffers

HEWL (0.2mm X 0.2mm x 0.15mm)

Reservoir solution: 50mM Na acetate pH4.4, 1M NaCl

Cryobuffer: 50mM Na acetate pH4.4, 1M NaCl, 22.5% ethylene glycol

Cryo-mount loops

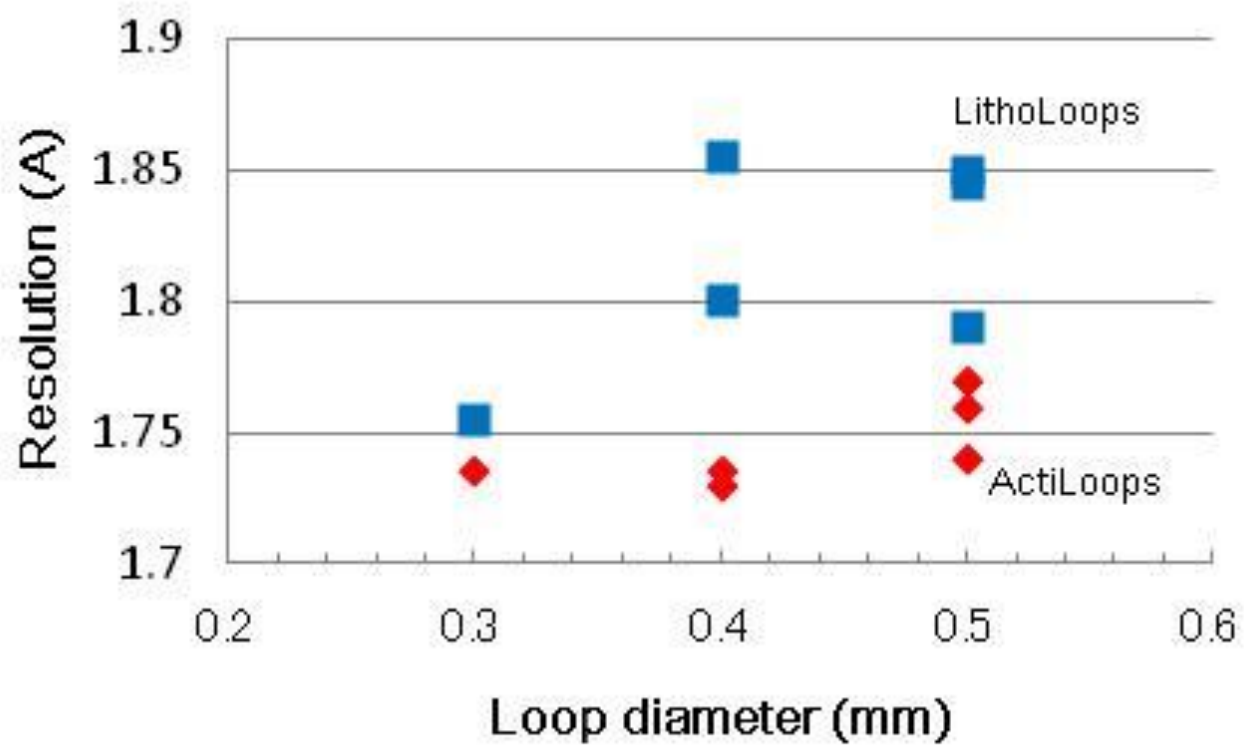
ActiLoops: loop diameter = 0.3mm, 0.4mm, 0.5mm

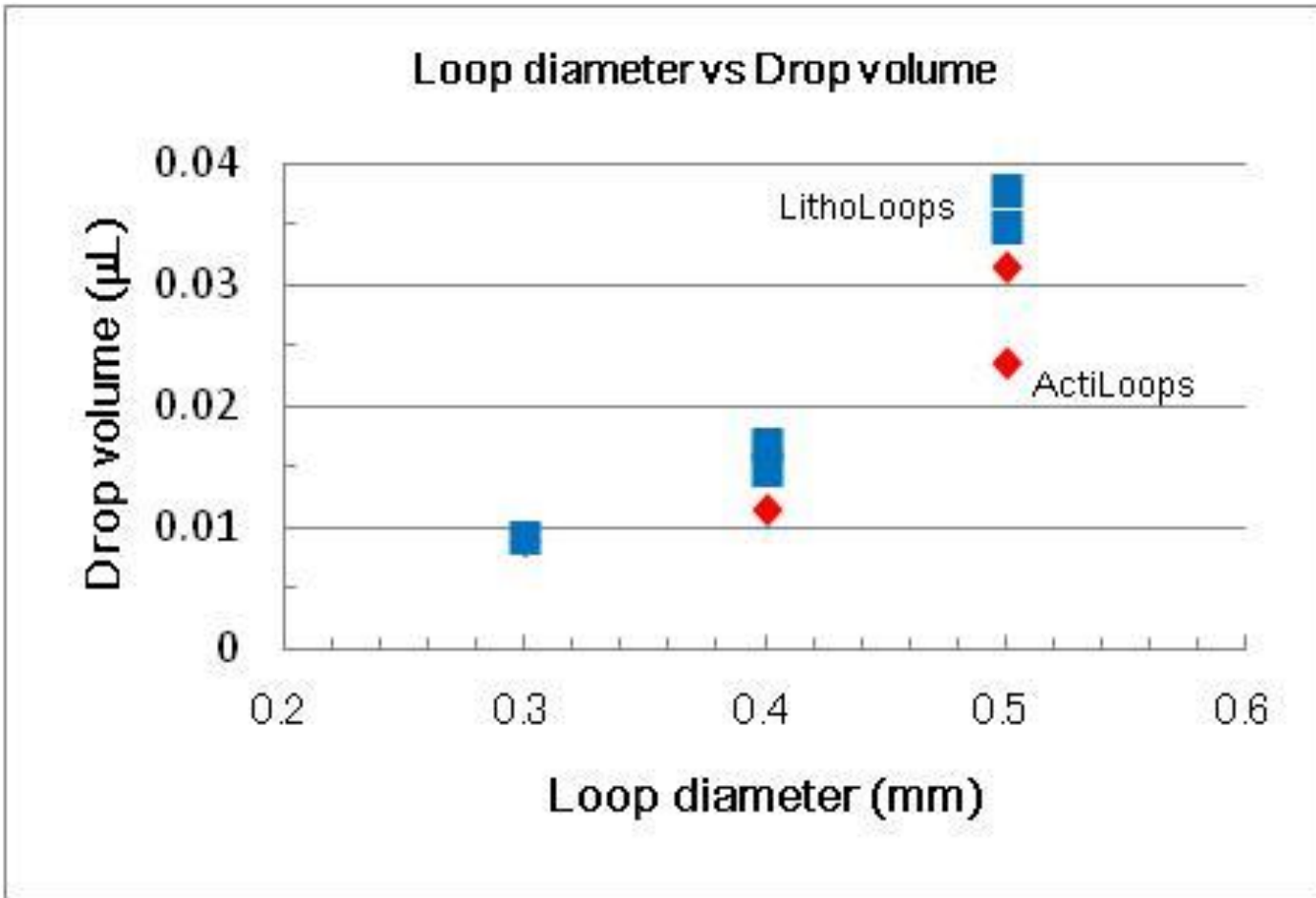
film thickness = 25 μm (bottom layer), 25 μm (top layer)

LithoLoops: loop diameter = 0.3mm, 0.4mm, 0.5mm

film thickness = 25 μm

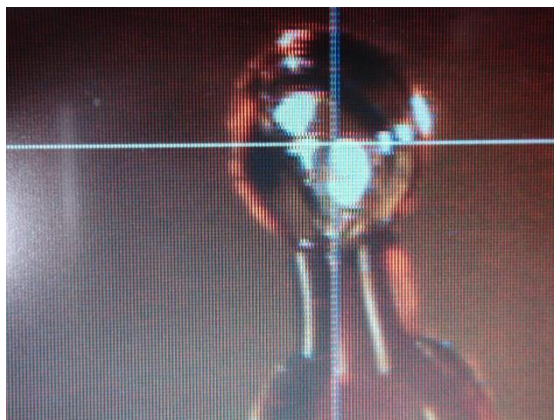
Loop diameter vs Resolution



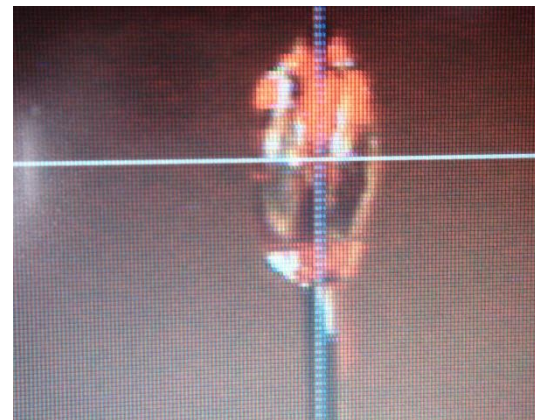


*Drop volume: total volume of looped-out solution plus crystal in a loop at cryo-cooling

ActiLoops
0.3mm

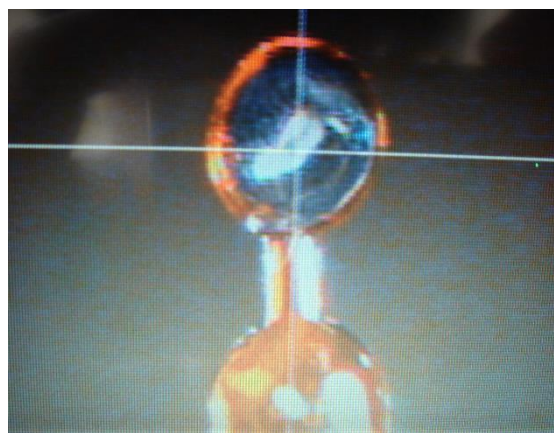


Front view



Side view

LithoLoops
0.3mm



Front view

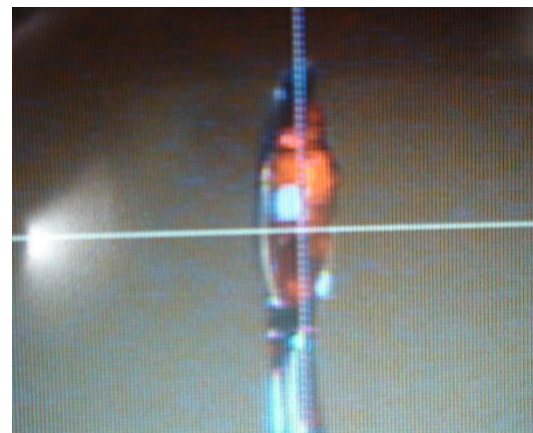


Side view

ActiLoops
0.4mm

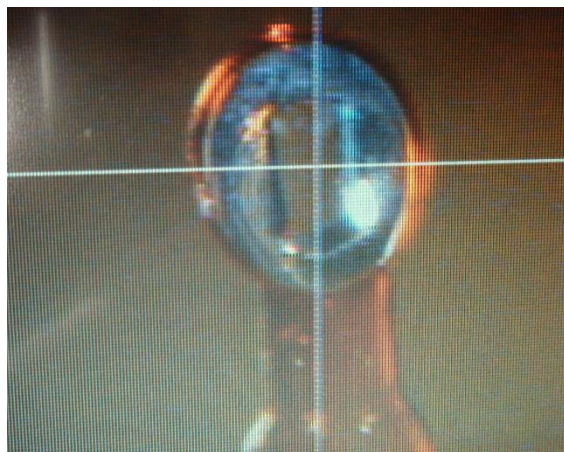


Front view

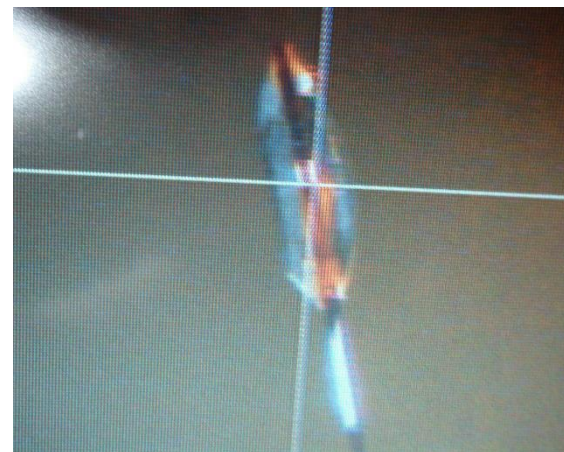


Side view

LithoLoops
0.4mm



Front view

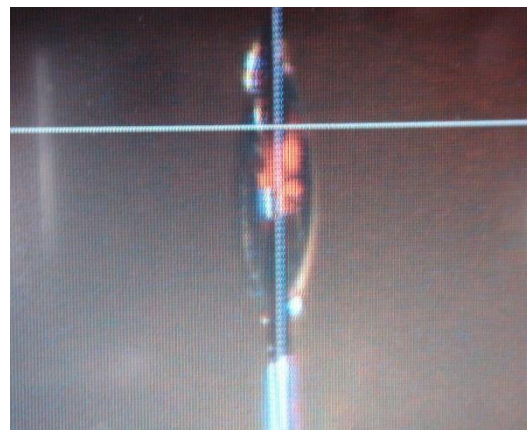


Side view

ActiLoops
0.5mm

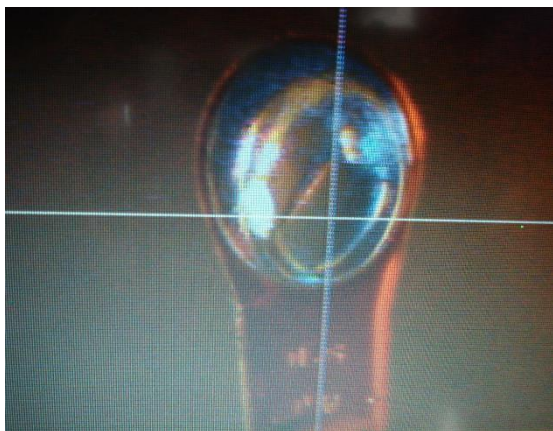


Front view

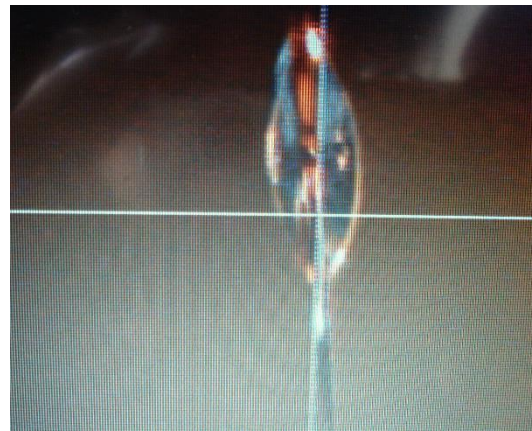


Side view

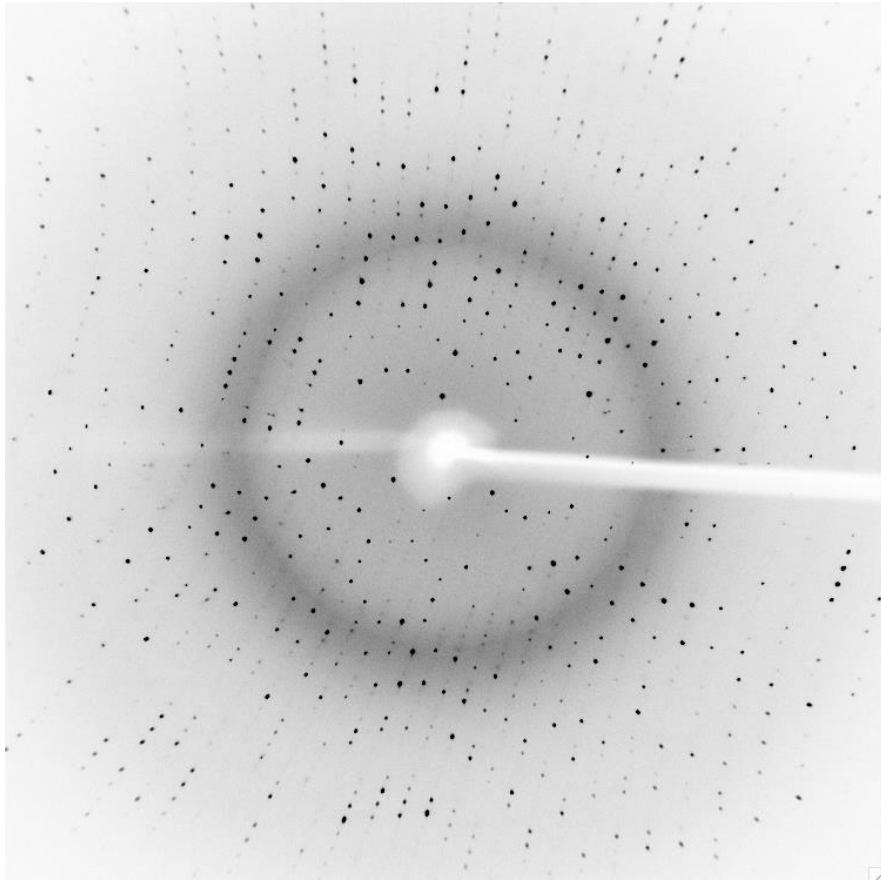
LithoLoops
0.5mm



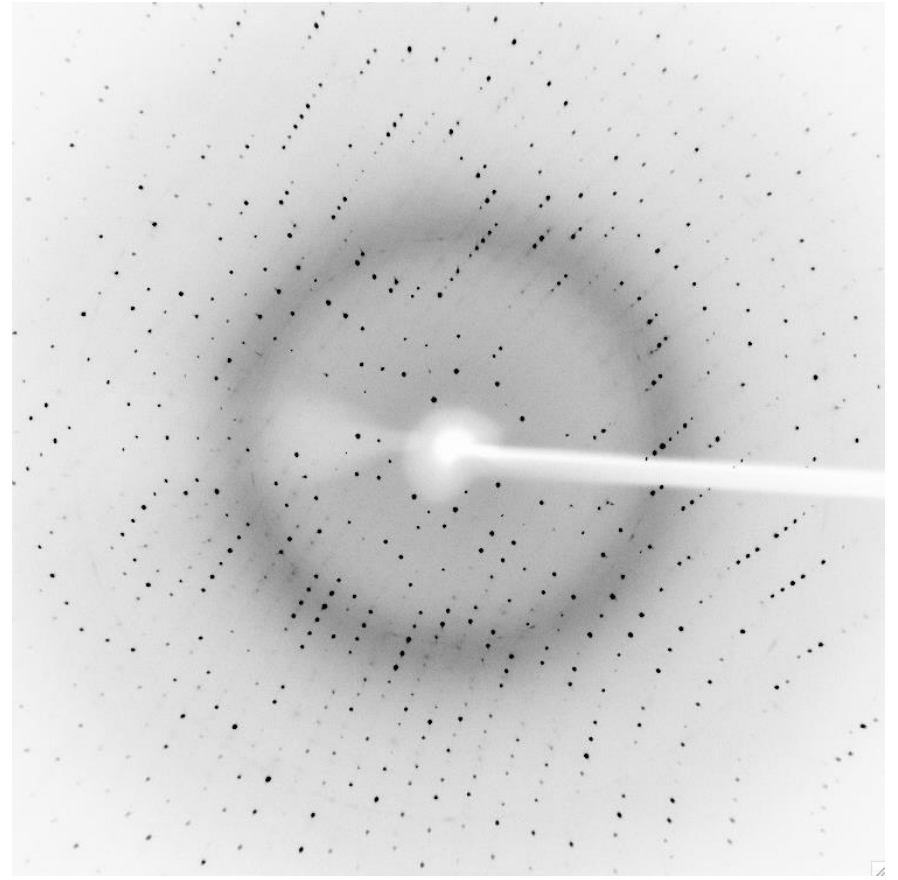
Front view



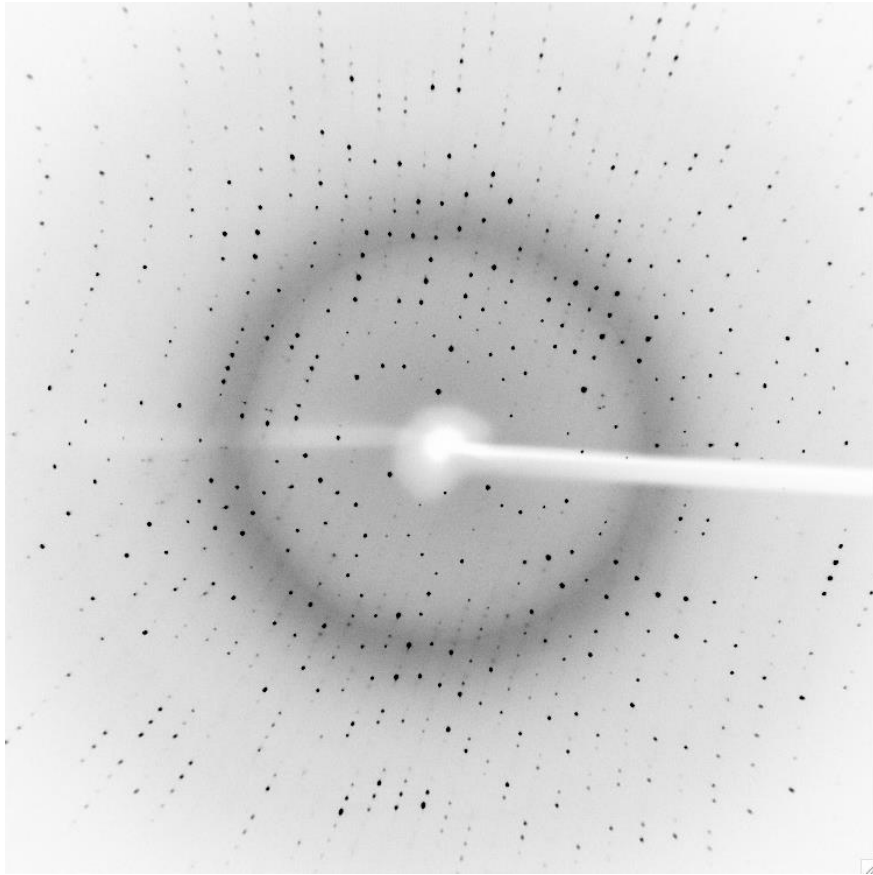
Side view



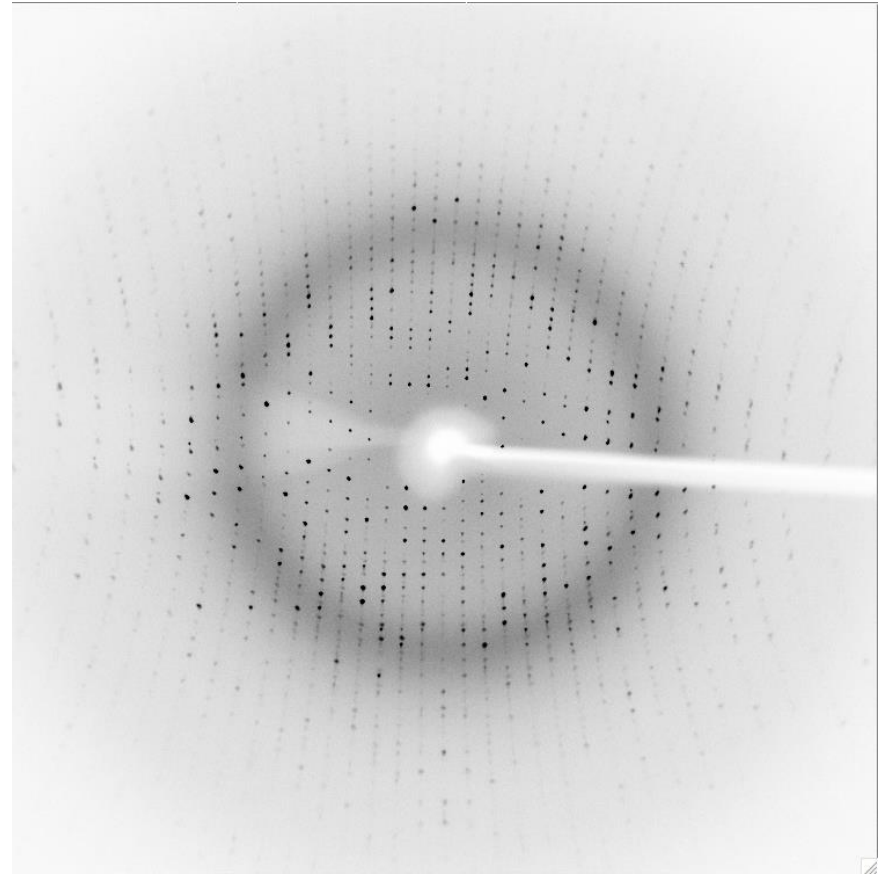
ActiLoops
0.3mm



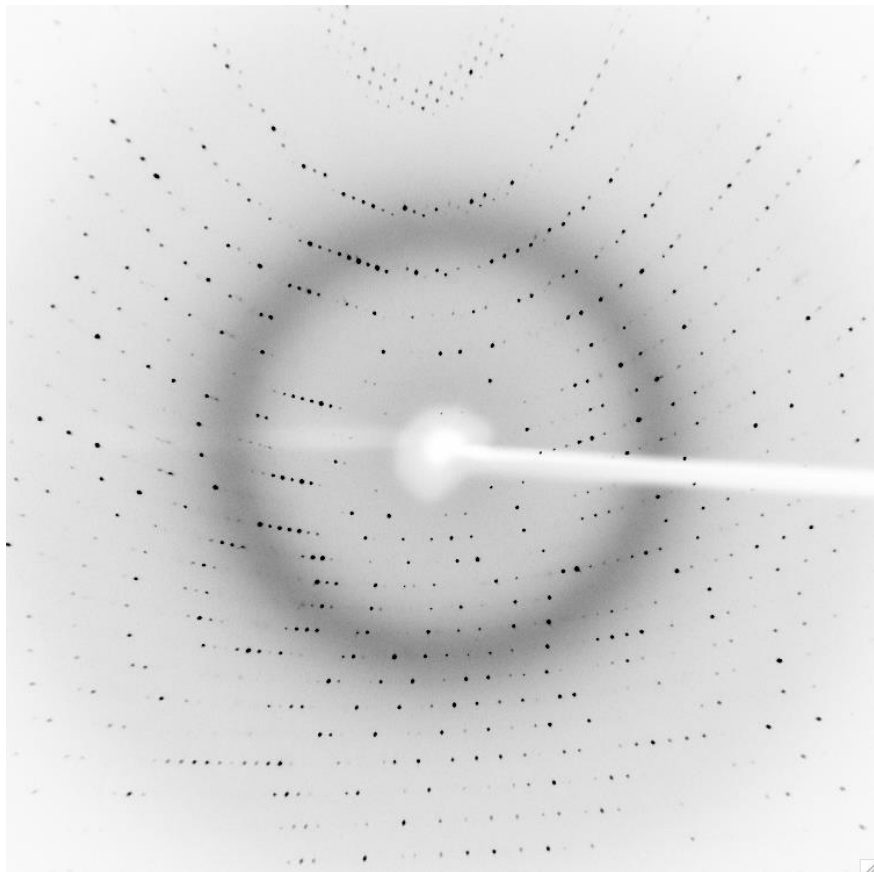
LithoLoops
0.3mm



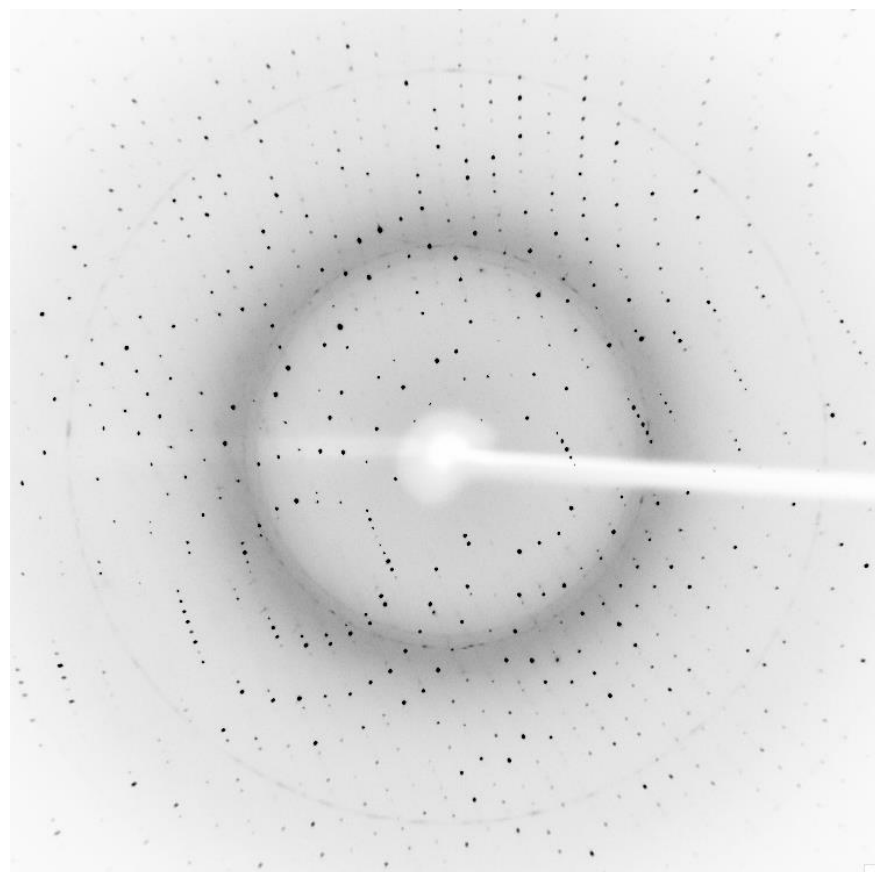
ActiLoops
0.4mm



LithoLoops
0.4mm



ActiLoops
0.5mm



LithoLoops
0.5mm