

Pre-Experiment information

Date: _____

Name: _____ Research Group: _____

Email: _____ Room #: _____ Phone #: _____

Compound: _____

Derivative: no yes *If yes, describe: _____

Sequence / File: _____

Molecular Weight: _____ PubMed #: _____

Purpose of study: Screening Conditions Unit Cell Determination Structure Solution

Expected Crystal Symmetry: _____ Expected Resolution: _____ Å

Expected Cell Dimensions (Å, °): a _____ b _____ c _____ α _____ β _____ γ _____

Plan for Phasing: Molecular Replacement with PDB structure: _____
 SAD with heavy atom(s): _____
 MAD with wavelengths: _____

Screening Information

Sample 1 Concentration: _____ pH: _____

Precipitant: _____ Concentration: _____

Cryoprotectant: _____ Concentration: _____

Other Reservoir Components: _____

Crystal Color : _____ Crystal Shape: _____

Crystal Age: _____ Crystal Size: : _____ x _____ x _____ mm³

Exposure Time: _____ Observed Resolution _____ Å

Sample 2 Concentration: _____ pH: _____

Precipitant: _____ Concentration: _____

Cryoprotectant: _____ Concentration: _____

Other Reservoir Components: _____

Crystal Color : _____ Crystal Shape: _____

Crystal Age: _____ Crystal Size: : _____ x _____ x _____ mm³

Exposure Time: _____ Observed Resolution _____ Å

Sample 3 Concentration: _____ pH: _____

Precipitant: _____ Concentration: _____

Cryoprotectant: _____ Concentration: _____

Other Reservoir Components: _____

Crystal Color : _____ Crystal Shape: _____

Crystal Age: _____ Crystal Size: : _____ x _____ x _____ mm³

Exposure Time: _____ Observed Resolution _____ Å

Sample 4 Concentration: _____ pH: _____
 Precipitant: _____ Concentration: _____
 Cryoprotectant: _____ Concentration: _____
 Other Reservoir Components: _____
 Crystal Color : _____ Crystal Shape: _____
 Crystal Age: _____ Crystal Size: : _____ x _____ x _____ mm³
 Exposure Time: _____ Observed Resolution _____ Å

Sample 5 Concentration: _____ pH: _____
 Precipitant: _____ Concentration: _____
 Cryoprotectant: _____ Concentration: _____
 Other Reservoir Components: _____
 Crystal Color : _____ Crystal Shape: _____
 Crystal Age: _____ Crystal Size: : _____ x _____ x _____ mm³
 Exposure Time: _____ Observed Resolution _____ Å

Sample 6 Concentration: _____ pH: _____
 Precipitant: _____ Concentration: _____
 Cryoprotectant: _____ Concentration: _____
 Other Reservoir Components: _____
 Crystal Color : _____ Crystal Shape: _____
 Crystal Age: _____ Crystal Size: : _____ x _____ x _____ mm³
 Exposure Time: _____ Observed Resolution _____ Å

Data Collection Record

Full Data Collection **Unit Cell** **Examination**

Sample #: Crystal Temp: Exposure Time (s):

X-ray source: Cu Mo Generator kV: Generator mA:

Observed Crystal Symmetry: _____ Observed Resolution: _____ Å
 Observed Cell Dimensions (Å, °): a _____ b _____ c _____ α _____ β _____ γ _____

Notes: