

# Rates

- **Full Service provided:** It includes the consumables, instrument time and the time of the scientist involved. Rates are calculated based on the time of operation (hours and minutes of usage).
- Rates for individual services or as packages are outlined here below. The rates are subject to change without prior notice.
- Your collaboration with us entitles you for discounted rates. Please contact us at [sbc-bridge-l@usc.edu](mailto:sbc-bridge-l@usc.edu)

## Package 1: Lipid Cubic Phase Crystallization

Broad crystallization screen	USC Users/Collaboration	Non profit org/ Collaboration	Industry/ Collaboration
Full service provided	\$320/10 plates	\$690/10 plates	\$1035/10 plates

It includes crystallization screening of your target membrane protein against 10 selected screens using Lipid Cubic Phase crystallization method. Plates will be stored at 20 °C and automatically imaged on 0, 1, 3, 7, 14, 21 and 31 day after setup. SONICC will be used to identify the protein crystals. Experts will monitor images and the results will be discussed with the collaborators for further experiments. User should provide at least 25 µL of protein at 10 mg/mL or higher concentration.

## Package 2: Vapor Diffusion Crystallization

Broad crystallization screen	USC Users/Collaboration	Non profit org/ Collaboration	Industry/ Collaboration
Full service provided	\$640/20 plates	\$1580/20 plates	\$2370/20 plates

It includes crystallization screening of your target protein against 10 selected 96-well screens (3 drops per well; 2880 drops) both at 20 °C and 4 °C. Plates will be imaged on 0, 1, 3, 7, 14, 21 and 31 day after setup. Experts will monitor images and the results will be discussed with the collaborators for further experiments.

User should provide at least 40 µL of protein/plate at 10 mg/mL or higher concentration.

## Package 3: Crystal Optimization- Data Collection:

Crystal optimization /Data collection	USC Users/Collaboration	Non profit org/ Collaboration	Industry/ Collaboration
Full service provided (vapor diffusion)	\$2040	\$3380	\$5070
Full service provided (LCP)	\$2040	\$3380	\$5070

If any crystal is observed, the scientist will take on the optimization of the crystal/s for quality diffraction (Cryo conditions will also be screened and optimized for soluble protein). We will coordinate a data collection time for your project at a synchrotron facility. Samples will be harvested and shipped to synchrotron for data collection. The collected data at the obtained resolution will be delivered to the customer. It includes all the consumables, materials, preparation of cryo solutions, pins, cassettes / pucks and scientist time

## Package 4: Structure Determination

Structure determination	USC Users/Collaboration	Non profit org/ Collaboration	Industry/ Collaboration
Full service provided	\$1200	\$2400	\$3600

The collected data will be processed and the structure of the target protein will be determined using Molecular replacement or any other methods possible (MAD, SAD, SIR, SIRAS, etc.). It will provide you publication ready structure and crystallography tables and material and method. Just insert it into the paper. It assumes 40hrs of a scientist for structure production of a 200aa protein.

### LCP-FRAP pre-Crystallization Assay

Services	USC Users/Collaboration	Non profit org/ Collaboration	Industry/ Collaboration
Full service provided	\$35/plate	\$190/plate	\$285/plate

It includes the lipid preparation, setting the drops by NT8, running the FRAP and analyzing the data.

The protein sample will be mixed with lipid in a syringe in preparation for setting up drops using NT8 robot. FRAP will be utilized to monitor the diffusion rate of your protein in lipid at variety of conditions. The result will be analyzed and a report will be provided

### LCP Crystallization: NT8-Robot

Services	USC Users/Collaboration	Non profit org/ Collaboration	Industry/ Collaboration
Full service provided	\$30/plate	\$70/plate	\$105/plate

It includes the lipid preparation and setting up the drops by NT8.

### VD Crystallization: Mosquito Robot

Services	USC Collaboration	Non profit org/ Collaboration	Industry/ Collaboration
Setting up /plate	\$10/plate	\$10/plate	\$15/plate
Full service provided	\$35/plate	\$50/plate	\$75/plate

Setting up: User provides protein and the material and we just set up the drops.

Full service: It will include all the consumables, screen solutions, UV transparent cover and sitting up drops by Mosquito robot

### Crystal Optimization

Services	USC Collaboration	Non profit org/ Collaboration	Industry/ Collaboration
Full service provided (vapor diffusion)	\$60/plate	\$125/plate	\$185/plate
Full service provided (LCP)	\$60/plate	\$135/plate	\$203/plate

It includes all the chemicals, plates, covers, coverslips, and scientist time to plan a systematic and efficient optimization screen and also executes it. This may include micro, macro and streak seeding if needed.

## Crystal Harvesting

Services	USC Collaboration	Non profit org/ Collaboration	Industry/ Collaboration
Full service provided	\$160/50 crystals	\$400/50 crystals	\$600/50 crystals

It includes all the consumables, materials, preparation of cryo solutions, pins, cassettes / pucks and scientist time.

Quality crystals will be harvested for data collection. Cryo condition optimization and crystal seeding will be conducted for crystals in vapor diffusion conditions. Crystals will be kept in liquid nitrogen for transport to X-Ray/X-FEL source.

## Crystal Imager

Services	USC Collaboration	Non profit org/ Collaboration	Industry/ Collaboration
Storage and imaging	\$5/plate/Month	\$16/plate/Month	\$24/plate/Month

It includes the scientist time for making the screen templates and barcodes for each plate.

## Data Collection

Services	USC Collaboration	Non profit org/ Collaboration	Industry/ Collaboration
Full service provided	\$1300	\$2440	\$3660

It includes dewar shipping, scientists time, travel expenses, and screening/data collection of 50 crystals within 5 hours.

We can coordinate a data collection time for your project at a synchrotron facility. We will collect diffraction images from your crystals to be processed further for structural determination.

We have frequent access to three of the major national synchrotron facilities, namely APS, SSRL and LCLS for Use of X-ray or X-FEL (X-Ray Free Electron Laser) for data collection. We also have access to in-house X-ray beam at USC.

**APS:** <https://www1.aps.anl.gov/>

**SSRL:** <http://www-ssrl.slac.stanford.edu/>

**LCLS:** [https://portal.slac.stanford.edu/sites/lcls\\_public/Pages/Default.aspx](https://portal.slac.stanford.edu/sites/lcls_public/Pages/Default.aspx)

## Dragonfly

Services	USC Collaboration	Non profit org/ Collaboration	Industry/ Collaboration
Full service provided	\$25/plate	\$85/plate	\$125/plate

It will prepare you a personalized optimization plate for your crystal hit. It includes plate, sealing sheet, chemicals, dragon fly consumables and scientist's time

## Thermal Shift Assay

### Cary Eclipse Fluorescence Spectrophotometer or Rotor-Gene Q

Services	USC Collaboration	Non profit org/ Collaboration	Industry/ Collaboration
Full Service provided	\$80/run	\$320/run	\$480/run

User provides us the protein and the stabilizing agent/s in the format we instruct them. We do the full service including, running the experiment, analyzing the data and providing the user with result and an input from our experts for the next step.

We will test the stability of your protein in presence of what potentially stabilize your protein (pH, Ligand, inhibitors, substrates, buffer, etc.). The stabilizing agent will lead us for a successful crystallization of your target.

## Protein Purification

Services	USC Collaboration	Non profit org/ Collaboration	Industry/ Collaboration
Establishing a protocol	\$1700	\$2200	\$2600
Protein Purification	\$800	\$1000	\$1200

Establishing a purification protocol: Collaborators provide us 10-20gr of cell paste from a solubly expressed clone. We will apply several purification methods to establish the best protocol for purifying high quality material for crystallization.

Protein purification: Collaborators provide us 10-20gr of cell paste from a solubly expressed clone. A three-step purification (Affinity, Ion Exchange and Size Exclusion) will be applied and the purified protein will be handed to the customer either on ice or frozen.

We can purify your protein from Bacteria, Insect and Yeast cells.

SBC does not guaranty the protein yield, since it can be due to low expression, insolubility and other issues within the cells.