

Crystal Former™ Advantages

Cat. No.	Amount
CF-10	10 pcs.
CF-50	50 pcs.
CF-100	100 pcs.



➤ Platform independent set up

The Crystal Former™ can be operated with standard pipettes or liquid-handling robots. After loading precipitant and protein solutions, the microfluidic architecture encourages proper mixing and separation of individual crystallization reactions.

➤ Reaction chamber dimension

The Crystal Former™ benefits from low sample consumption because of reaction volumes of 150 nl. The size of the chamber allows crystals to grow large enough so that they can be immediately suitable for X-ray diffraction. This allows users to move from the Crystal Former™ screen directly to X-ray diffraction studies.

Furthermore, the dimensions of the chamber allow a large number of chemical conditions to be sampled while the solutions equilibrate. This increases the probability that sampling conditions will be conducive to crystal formation.

➤ Optimal mixing kinetics

Although reaction chambers are large enough to facilitate the growth of usable high-quality crystals, individual reaction chambers are small enough so that viscous forces dominate. Additionally, the mixing of precipitant and protein inside the Crystal Former™ allows the gentle manipulation of protein solubility. This means that precipitant and protein solutions can mix optimally, allowing protein phase space to be thoroughly explored.

In tests comparing the Crystal Former™ to vapor diffusion, some proteins have up to a 30-fold higher probability of crystallizing as a result of our proprietary mixing kinetics.

➤ Direct access to crystal

The Crystal Former™ allows users to easily collect crystals grown inside the chip. This enables collection of diffraction patterns from crystals grown in the Crystal Former™ without the need to repeat experiments in larger volumes, or using different techniques. Direct access also permits smaller crystals to be harvested for subsequent seeding experiments.

