

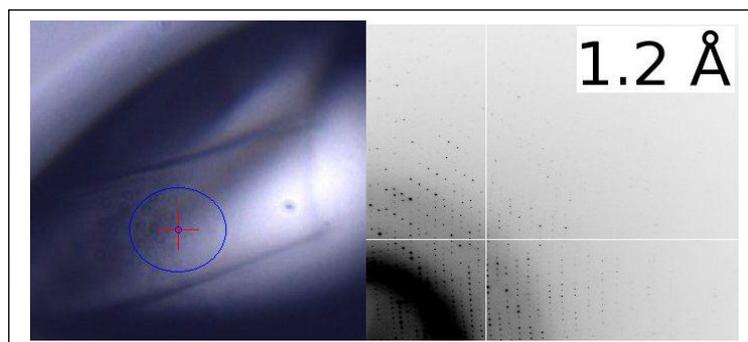
# CryoProtX™

*Better Cryoprotection for quality diffraction....*



Finding a cryoprotectant that gives the optimum in terms of diffraction limit, mosaicity and crystal longevity can be a laborious and frustrating task. The traditional binary approach of soaking in differing amounts of single compounds consumes both potentially good crystals and often results in making do with the first "ok" result. Ideally in a balanced cryoprotectant the mild solubility enhancing effect of the glycols should be counteracted by the addition of MPD or DMSO that can act as precipitants. Therefore, an approach using a complex mixture of glycols and cryoprecipitants should yield improved results.

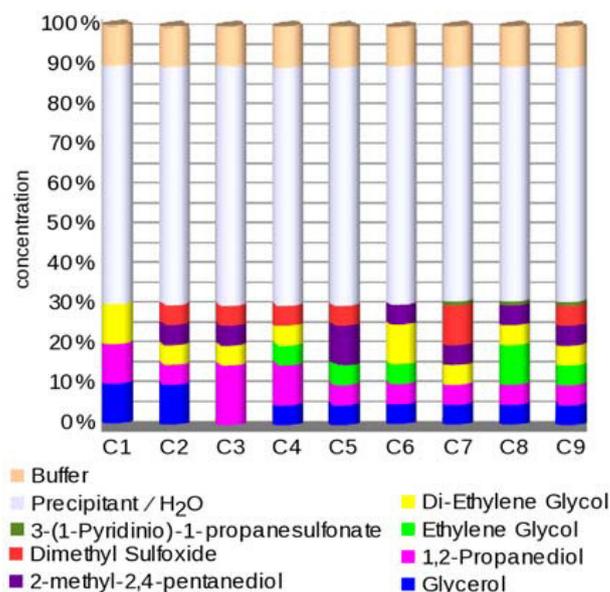
**CryoProtX** achieves this by allowing the user to create a high quality cryoprotectant from the nine provided intelligent CryoMixes™, reducing both the time and crystal consumption whilst increasing the likelihood of successful cryocooling of the crystal for the highest quality data.



**Figure 1:** An example of quality cryoprotection achieved using solution C9 from CryoProtX, buffer PCTP at pH 7 from The Really Useful Buffer Kit™ and a final precipitant concentration of 18% MPEG-2K mixed as shown in Figure 2.

## Features of CryoProtX:

- Preserve the highest diffraction potential of crystals with lower mosaicities.
- CryoMixes are provided ready-to-use for single step cryosoaking.
- Ideal for PEG and low salt crystallization hits.
- Includes pre-made buffers for pH screening.
- Vastly reduce the chances of crystal cracking or dissolving.
- Provided with additives that may improve crystal longevity at synchrotron radiation sources.
- Fully customizable for individual projects.
- Ideal for heavy atom, ligand or back soaks.
- Suitable for screening with low affinity, low solubility inhibitors.



**Figure 2:** Examples of the nine starting CryoMix formulations (up to 30% mark) plus PEG/Salt (precipitant) and buffer mixes.

Developed and formulated in the laboratory of Dr. Enrico Stura, CryoProtX is manufactured and distributed under an exclusive licence with CEA Life Sciences Division, Saclay, France.

**Order CryoProtX now:**  
MD1-61 = 46 x 1.5 mL kit.