

Silica Hydrogel - 24 tubes - 500 µl

Quick & easy kit format for crystallization in gels



Product codes:

Reference: HR 2310

Product gallery:



Product description:

- Proprietary Silica Hydrogel formulation with neutral pH
- Gel matrix can reduce nucleation & sedimentation

Gels are a very efficient media for growing macromolecular crystals.1-5 Silica gels in particular have the advantage in that they are stable, usable over a wide range of temperatures (0-60°C), and are compatible with a wide variety of precipitants and additives used for crystal growth. The Silica Hydrogel Kit provides you with the materials you need to make gels at room temperature which polymerize rapidly and form a porous matrix with a pH of 7.0. The neutral pH allows one to use the gel with minimal influence on the pH of the precipitant.

Why use the Silica Hydrogel for crystallization? Depending upon the macromolecule and selected conditions, gels can reduce nucleation and sedimentation, provide added stability, and allow crystals to grow larger. The porous network minimizes natural convection. Crystals are suspended in the gel network so that they do not form sediments and can grow free from strain exerted by the container or other crystals. The gel fissures around a growing crystal forming a cusp-like cavity. Heterogeneous and secondary nucleation are reduced in the presence of a silica hydrogel.3 The Silica Hydrogel can be used for liquid-gel, liquid-gel-liquid, vapor diffusion, as well as dialysis crystallization methodologies. The gel is compatible with a wide range of salts, polymers, organic solvents, and buffers used for macromolecular crystallization in a pH range from 3 to 10.



Each Silica Hydrogel kit contains twelve 500 microliter tubes of sodium silicate solution and twelve 500 microliter tubes of acetic acid solution. All solutions are formulated using ultra-pure water and are sterile filtered. Crystallization accessories are sold separately.

Per maggiori informazioni visita il sito https://hamptonresearch.com/

Product features:

CRF - TIPO: Silica Hydrogel Kit