



Slice pH - 0.5 ml, Deep Well block format - 500 μ l

Solubility screen stability screen crystallization screen, Preformulation screening, Sample buffer optimization for crystallization cryo-electron microscopy and NMR,

Product codes:

Reference: HR 2070

Product gallery:



Product description:

- 96 pH titrated high purity 1.0 M buffer reagents
- Vapor diffusion assay for solubility, stability & crystallization
- pH 3.5 to 9.6 in 0.1 pH increments
- Evaluate 20 different buffers
- Use with ThermoFluor, Filter Plate, Dynamic Light Scattering, SEC, Native Gel, Western, Dot Blot/ELISA diagnostic assays to optimize sample solubility and stability

Slice pH is a solubility screen, a stability screen, and a crystallization screen.

pH is an effective solubility, stability and crystallization variable because most proteins demonstrate pH dependent solubility minima and will solubilize, precipitate, or crystallize at particular pH values or in the presence of specific buffers. The solubility minima may correspond with the isoelectric point (pI) of the protein, but this is not always the case. The solubility minima and maxima is often complex and may depend on other chemical and physical variables in the crystallization experiment.

Using Slice pH one isolates pH, buffer type and relative supersaturation from other chemical and physical variables and to screen the effect that pH and buffer type have on the solubility, stability,



homogeneity, monodispersity and crystallization of the sample. Varying the pH can alter the protonation state and charge of amino acid residues in the protein, generating different species of the protein for solubility and crystallization screening.

The change in pH can have a dramatic effect on inter and intramolecular contacts in the protein and can manipulate how the protein interacts with itself, the surrounding solvent and chemicals in the drop. By screening buffer type and pH in an environment of increasing relative supersaturation, Slice pH simultaneously delivers as a solubility and a crystallization screen for proteins. After the screen, and once the appropriate sample buffer and pH are identified, the sample can be exchanged into the identified buffer and pH for optimal solubility and stability. From this point, the sample in the optimized buffer reagent can be used for crystallization trials or other assays. Further, crystallization screening and optimization experiments may be more appropriately focused on the optimal pH range and buffer type.

The Slice pH kit contains 500 microliters of 96 reagents in a V-Bottom (conical bottom) 96 Deep Well polypropylene microplate, user guide, formulations and a sealing film.

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

Product features:

CRF - TIPO: Slice pH