



Detergent Screen - 0.25 ml, Deep Well block format - 250 μ l

Manipulate sample-sample and sample-solvent interactions, including non-specific aggregation due to hydrophobic interactions, to alter sample solubility, or obtain or improve crystalline samples.

Product codes:

Reference: HR 2407

Product gallery:



Product description:

- Developed at Hampton Research
- For use with either membrane or soluble proteins
- Compatible with vapor diffusion, microbatch, and free interface diffusion methods
- 96 Deep Well block format
- Classification of Detergents in screen
- Ionic
- Non-ionic
- Zwitterionic
- Non-detergent Sulfobetaines

Note: HR2-407 Detergent Screen is a new formulation and has replaced the original HR2-406 Detergent Screen HT.

For crystallization to take place, a protein must be soluble in aqueous solution. Ideally the sample should be homogeneous, monodisperse, and in a state of aggregation conducive to interactions which will promote the nucleation and subsequent growth of a crystal. Unfavorable aggregation can compete with, obstruct, and prevent the normal ordering or the sample into a crystal. Many



proteins, typically membrane proteins, membrane associated proteins, and soluble proteins contain hydrophobic residues on the surface which can lead to non-specific aggregation, a deterrent to solubility and crystallization. Mild, biological detergents can perturb and manipulate hydrophobic sample-sample and sample-solvent interactions. Incorporating detergents into the solubilization or crystallization reagent during screening and optimization is a popular and effective strategy for identifying conditions which promote and enhance solubility and crystallization. Besides improving the crystallization properties for some proteins and nucleic acids, detergents have also been shown to alleviate problems of twinning and secondary nucleation and can also produce different crystal forms.

Since it can be difficult to impossible a priori to predict and select which detergent or solubilizing agent will minimize the general nonspecific interactions yet at the same time sustain the specific interactions necessary for crystallization, the screening of a portfolio of detergent and solubilizing reagents is an efficient and effective strategy to identify the appropriate and best detergent reagent. The Detergent Screen is a set of solubilization and crystallization specific, mild, biological detergent reagents in a ready to use format at concentrations appropriate for solubility and crystallization screens. The Detergent Screen format allows one to identify a detergent effect as well as help select the best detergent reagent.

Each Detergent Screen kit contains 96 unique detergents. 0.25 ml of detergent solution is formulated at 10 times the reported CMC (unless otherwise noted) in sterile filtered deionized water. The Detergent Screen kit contains 96 solutions in a single Deep Well block, a single sheet of AlumaSeal II Sealing Film, User Guide, Formulations, and Scoring Sheet.

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

Product features:

CRF - TIPO: Detergent Screen