

2D-XtractTM Chaotropic Extraction Buffer

INTRODUCTION

2D-XtractTM is a dry, urea-based and ready-to-use protein solubilization buffer. 2D-XtractTM is a proprietary modification of urea based chaotropic extraction buffers. Normal urea based buffers solubilize proteins effectively however can modify the native charge of the proteins, due to carbamylation. A process that modifies amino groups, inducing changes in the isoelectric point of proteins leading to artifactual 2D results.

2D-XtractTM is a dry, pre-mixed combination of urea, thiourea, CHAPS and non detergent sulfobetaine (ND SB 201) for maximum solubilizing strength. The dry format allows researcher's to freshly rehydrate as much or as little as is required and therefore prevent urea induced carbamylation.

ITEMS SUPPLIED Cat. # 786-501

2D-Xtract TM	25gm
Diluent-III	30ml

STORAGE CONDITION: As specified on the bottle labels.

INSTRUCTION FOR USE:

For optimal performance of 2D-Xtract[™], vigorously shake the powder before use and prepare fresh immediately prior to solubilization.

- 1. Vigorously shake the 2D-Xtract[™] bottle for 15 seconds.
- 2. For 100µl final 2D-XtractTM buffer, weigh 50mg dry 2D-XtractTM in to a suitable tube.
- 3. Add 110µl Diluent-III for every 50mg of 2D-Xtract[™] and alternatively vortex and incubate at room temperature until a clear solution is achieved.
- 4. If additional reagents are required, including reducing agents, inhibitors, carrier ampholytes and dyes, these are added at this point. Vortex to mix.
- 5. Use the prepared 2D-Xtract solution immediately and discard any unused buffer.

RELATED PRODUCTS

 <u>FOCUS Protease Arrest (Cat # 786-108F)</u>: A protease cocktail specifically developed for sample preparation for 2Dstudies and provides >95% inhibition of protease activity.
<u>Perfect-FOCUS (Cat # 786-124)</u>: A kit for preparing samples for 2D gels.
FOCUS-Fast Silver (Cat # 786-240): Sufficient for 25 gels.

<u>NOTE</u>: For other related products, visit our web site at <u>www.GBiosciences.com</u> or contact us.

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