

## CBTP Buffer Titration Table

**HR2-831 & HR2-833**

### Description

Optimize™ reagents are preformulated macromolecular crystallization grade solutions designed specifically for the crystallization of proteins, peptides, and nucleic acids. Each Optimize solution is formulated using high purity salts, polymers, and buffers. Sterile filtered Optimize reagents are formulated at convenient ready to use concentrations.

Optimize reagents remove the guesswork and make the process of reproducing preliminary screening conditions and general optimization faster, easier, and more convenient. When using Optimize reagents the user moves directly from the screen to the optimization with no time wasted searching for and formulating salts, buffers, and viscous polymers. This Certificate of Analysis indicates the quality and performance of the reagent.

### Buffer Titration

The following table can be used to determine the appropriate mix of 1.0 M Citric acid and 1.0 M BIS-TRIS propane to produce the desired buffer pH. The recommended volumes produce a 0.1 M buffer in a final volume of 1,000 microliters. pH measurements performed at 25° Celsius.

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<b>pH</b>	<b>1.0 M Citric acid (<math>\mu</math>l)</b>	<b>1.0 M BIS-TRIS propane (<math>\mu</math>l)</b>	<b>Water / Other (<math>\mu</math>l)</b>
2.5	90	10	900
2.7	85	15	900
2.9	80	20	900
3.2	75	25	900
3.4	70	30	900
3.8	65	35	900
4.1	60	40	900
4.5	55	45	900
5.0	50	50	900
5.5	45	55	900
6.4	40	60	900
7.1	35	65	900
7.6	30	70	900
8.2	25	75	900
8.8	20	80	900
9.1	15	85	900
9.5	10	90	900

### Technical Support

Inquiries regarding Optimize reagent formulation, interpretation of screen results, optimization strategies and general inquiries regarding crystallization are welcome. Please e-mail, fax, or telephone your request to Hampton Research. Fax and e-mail Technical Support are available 24 hours a day. Telephone technical support is available 8:00 a.m. to 4:30 p.m. USA Pacific Standard Time.

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