

## Certificate of Analysis

HR2-817

### Description

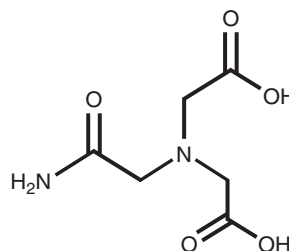
Optimize™ reagents are preformulated macromolecular crystallization grade solutions designed specifically for the crystallization of proteins, peptides, and nucleic acids. Each Optimize solution is formulated using high purity salts, polymers, and buffers. Sterile filtered Optimize reagents are formulated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

### 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.

Danielle Pagano  
Quality Control



### Property Test

Residue On Ignition

Infrared Spectrum

Trace Analysis

Residue (Filter Test)

Melting Point (Starting Material)

Absorbance ( $\lambda$ )

UV Absorption

pKa (20°C)

pKa (25°C)

Refractive Index

Refractive Index Range

Conductivity

Conductivity Range

Total Impurities

Al

As

Ba

Bi

Ca

Cd

Cl

Co

Cr

Cu

Fe

K

Li

Mg

Mn

Mo

Na

Ni

Pb

SO<sub>4</sub>

Sr

Zn

### Lot (Sample) Results

≤ 0.1%

Corresponds

Passed

No Residue

219°C (dec.) (lit.)

0.05 M in H<sub>2</sub>O

$\lambda$ : 260 nm A<sub>max</sub>: 0.20  
 $\lambda$ : 280 nm A<sub>max</sub>: 0.05

6.6

6.6

\_\_\_\_\_ at 20°C

1.36787 - 1.36913 at 20°C

\_\_\_\_\_ mS/cm at 25°C

42.2 - 50.4 mS/cm at 25°C

Insoluble matter, passes filter test

≤ 0.0005%

≤ 0.00001%

≤ 0.0005%

≤ 0.0005%

≤ 0.001%

≤ 0.0005%

≤ 0.1%

≤ 0.0005%

≤ 0.0005%

≤ 0.0005%

≤ 0.0005%

≤ 0.0005%

≤ 0.005%

≤ 0.0005%

≤ 0.0005%

≤ 0.0005%

≤ 0.05%

≤ 0.0005%

≤ 0.0005%

≤ 0.005%

≤ 0.0005%

≤ 0.0005%

### Property Test

### Lot (Sample) Results

Product Name

1.0 M ADA pH 6.5  
Titrated to pH 6.5 using NaOH (HR2-583)  
Useful pH range of ADA buffer is 5.6 - 7.5

Synonyms

N-(2-Acetamido)iminodiacetic acid or  
N-(Carbamoylmethyl)iminodiacetic acid

Product Number

HR2-817

Lot Number

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Formula

C<sub>6</sub>H<sub>10</sub>N<sub>2</sub>O<sub>5</sub> or H<sub>2</sub>NCOCH<sub>2</sub>N(CH<sub>2</sub>CO<sub>2</sub>H)<sub>2</sub>

Formula Weight (M<sub>r</sub>)

190.16

CAS Number

[26239-55-4]

EC Number

247-530-0

Beilstein Registry Number

1787181

Merck

14,147

Purity

≥ 99.0%

MDL Number

MFCD00008031

PubChem Substance ID

24845005

Titration (T) NaOH 0.1 N Range

99.0 - 101.0%

Appearance (Starting Material)

White Powder

Appearance (Solution)

Clear, Colorless

Loss On Drying

≤ 0.5% loss on drying, 20°C (HV)

Hampton Research

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