ZOOM® Carrier Ampholytes

Technical Information

Introduction

ZOOM® Carrier Ampholytes are mixtures of amphoteric species containing sulfonate and carboxylic groups at one end, and free primary and secondary amino groups at the other. As the degree of substitution and chain length vary, many molecular components constitute a ZOOM® Carrier Ampholyte. The average molecular weight distribution is 400-700 Daltons.

The ZOOM® Carrier Ampholytes provide:

- High resolution due to multimeric composition
- Fast staining and destaining times
- Clear background due to very low non-specific binding of dyes and stains
- No interaction with metal ions

Contents

ZOOM® Carrier Ampholytes are supplied sterile filtered as a 40% aqueous solution and are available in the following pH ranges.

Product	Quantity	Catalog no.
ZOOM® Carrier Ampholytes 3-10	10 ml	ZM0021
ZOOM® Carrier Ampholytes 4-7	10 ml	ZM0022
ZOOM® Carrier Ampholytes 6-9	10 ml	ZM0023
ZOOM® Carrier Ampholytes 9-11	10 ml	ZM0024
ZOOM® Carrier Ampholytes 4-6	10 ml	ZM0025
ZOOM® Carrier Ampholytes 5-7	10 ml	ZM0026
ZOOM® Carrier Ampholytes 6-8	10 ml	ZM0027

Storage

Store at 4°C. Product stable for 1 year when stored properly.

Note: Storing some ZOOM® Carrier Ampholytes at low temperature may result in precipitate formation. Dissolve precipitate by warming the solution to 50°C.

Using ZOOM[®] Carrier Ampholytes

Use ZOOM® Carrier Ampholytes at a final concentration of 0.5% in the rehydration buffer for isoelectric focusing using the ZOOM® IPGRunner™ System. To prepare rehydration buffer, refer to the ZOOM® IPGRunner™ System manual. You can download the manual from our Web site at www.invitrogen.com or contact Technical Service (see next page).

If you are using ZOOM® Carrier Ampholytes to prepare IEF gels, refer to *Current Protocols in Molecular Biology* (Ausubel *et al.*, 1994, Current Protocols in Molecular Biology New York: Greene Publishing Associates and Wiley-Interscience).

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Technical Information, Continued

Product Qualification

A 2% ZOOM® Carrier Ampholyte solution must have the following specifications:

Ampholytes	рН	pH Gradient	Conductivity
ZOOM® Carrier Ampholytes 3-10	6.9 ± 0.4	$3.3 \pm 0.5\text{-}10.0 \pm 0.6$	400-890 μS/cm
ZOOM® Carrier Ampholytes 4-7	5.79 ± 0.4	$4.0 \pm 0.3 7.0 \pm 0.4$	150-550 μS/cm
ZOOM® Carrier Ampholytes 6-9	7.65 ± 0.4	$6.0 \pm 0.4 9.0 \pm 0.4$	200-650 μS/cm
ZOOM® Carrier Ampholytes 9-11	10.4 ± 0.4	$8.9 \pm 0.4 – 10.7 \pm 0.4$	200-700 μS/cm
ZOOM® Carrier Ampholytes 4-6	5.2 ± 0.3	$4.0 \pm 0.3 \text{-} 6.1 \pm 0.3$	150-400 μS/cm
ZOOM® Carrier Ampholytes 5-7	6.4 ± 0.3	4.8 ± 0.3 - 7.3 ± 0.3	150-390 μS/cm
ZOOM® Carrier Ampholytes 6-8	7.6 ± 0.4	6.2 ± 0.4 - 8.2 ± 0.3	150-550 μS/cm
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Technical Service

For more information or technical assistance, call, write, fax, or email. Additional international offices are listed on our Web page (www.invitrogen.com).

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