



3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

Product Information

MARKERS FOR TWO DIMENSIONAL ELECTROPHORESIS (pI Range 7.6-3.8; M.W. Range 17,000-89,000)

Product No. **M 3411**
Store at -70°C

Product Profile

Content: Each vial contains approx. 200 μl total of a mixture of four proteins in 8 M urea and 2% β -mercaptoethanol. The contents of each vial are sufficient for 20-40 applications on gels that will be stained with Coomassie Blue (Brilliant Blue G) or 200-400 applications on gels that will be stained with silver stain.

Sigma 2D markers are prepared to provide a diagonal line across a 2D gel; as the pI increases, the molecular weight decreases. These markers are suitable for use as an internal or external standard.

Storage

Store at -70°C
Repeated freezing and thawing is not recommended.

NOTE: For silver stained gels repeat the staining procedure once to obtain full intensity spots for the amyloglucosidase.

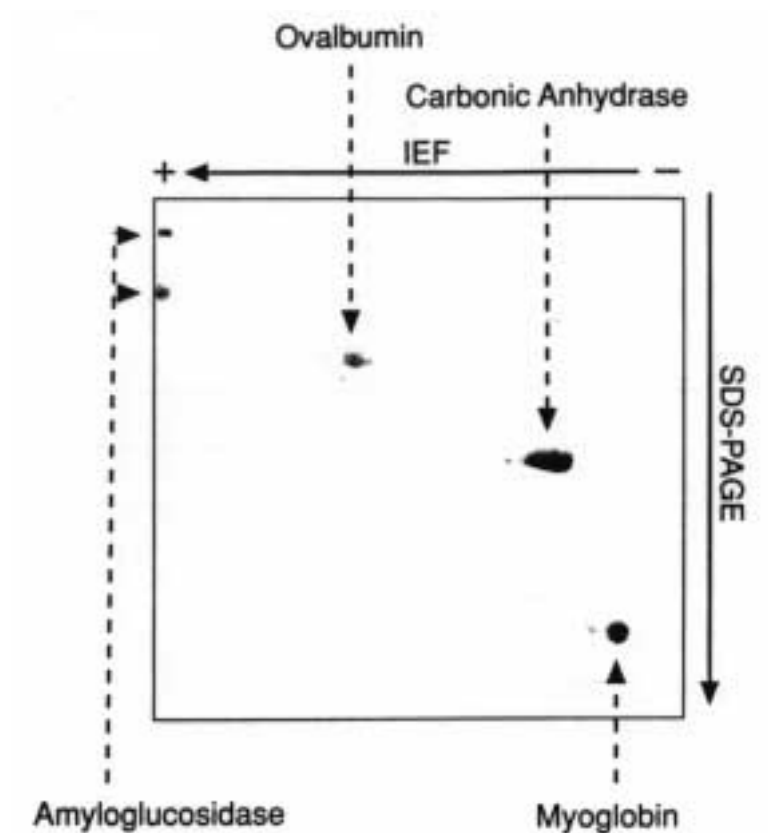
Prod. No.	Protein	Approx. M.W.	Approx. pI
A 8437	Amyloglucosidase from <i>Aspergillus niger</i>	89,000; 70,000	3.8
O 4757	Ovalbumin	45,000	5.1
C 4806	Carbonic Anhydrase from Human Erythrocytes	29,000	7.0
M 7911	Myoglobin from Horse Heart	17,000	7.6

Preparation Instructions

Gels to be Coomassie Blue stained: Add 4 μl of the desired Pharmalyte or Ampholine to the marker vial for a final ampholyte concentration of 2% (v/v). Vortex until the contents of the vial are completely mixed. Aliquot the unused portion and freeze at -70°C .

Gels to be silver stained: Dilute the marker 1:10 with sample buffer (sample buffer is prepared by mixing 800 μl of a 10 M urea solution, 20 μl of Triton X-100, 50 μl of Ampholine or Pharmalyte and 50 μl of β -mercaptoethanol). Vortex until the contents of the vial are completely mixed. Aliquot the unused portion and freeze at -70°C .

Recommended Application Quantities: Apply 10-20 μl of prepared marker mixture to a large tube 2D unit, 5-10 μl to a mini-tube 2D unit, 10 μl to an Immobiline strip 2D system, or 3-6 μl to a capillary tube 2D unit.



5 μ l of 2D markers (M-3411) were separated with a mixture of Ampholine pH 3.5 - 9.5 and Ampholine pH 2.5 - 4.5 in the ratio 4:1. Gel was stained with Coomassie Brilliant Blue G.

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 Ampholine and Immobiline are registered trademarks of Pharmacia LKB Biotechnology AB.
 Coomassie Brilliant Blue G is a trademark of Imperial Chemical Industries PLC.

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