notes on methodology

Nonstainable polyester film, Cronar, for electrophoresis of plasma lipoproteins

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Summary The Photo Products Department of E. I. du Pont de Nemours has recently made available a new type of polyester film, Cronar, for use in the electrophoretic separation of plasma lipoproteins. This film does not take up lipid dyes. There is no background color. The film remains clear and transparent after staining for lipoproteins.

Supplementary key words lipoprotein · electrophoresis · agarose · agar

IN 1968 Noble (1) described a method for the electrophoresis of plasma lipoproteins in agarose gel. The agarose was placed and allowed to gel on a polyester film strip, Cronar (E. I. du Pont de Nemours), which at that time did not stain with the several lipid dyes in common usage. About two years ago the manufacturer altered the subbing material on the surface of the Cronar. This substance took up lipid dyes, producing a fairly dense but uniform background color.

Through the sincere efforts of Mr. Heyson and Mr. Gass of the Photo Products Department of du Pont, a type of subbing on the Cronar has been developed which does not stain, and the background with this material remains clear and transparent.

This new product, type P-7R Cronar, is now available in rolls 12 in. × 100 ft. Order directly from Mr. George H. Heyson, Research Manager, Photo Products Department, E. I. du Pont de Nemours and Co., Parlin, N.J. 08859; telephone 201-257-4600, extension 597.

It should be noted that the process of "subbing" the Cronar film bonds photographic emulsions to the polyester. It likewise serves to bond the agarose to the polyester. If the agarose is applied to the opposite side of the Cronar, the agarose gel occasionally slides off during fixing. The subbing is applied to the inside surface when the Cronar is removed from the roll. A soft lead pencil will mark the subbed side and not the sub-free side, and acetone will cause clouding of the subbed side.

The method (1) further described the use of agar in combination with agarose. The purpose of incorporating agar in the formulation was to increase the gel strength of the 0.5% agarose. Subsequently, the manufacture of agarose has improved to the point where 0.5% agarose has adequate gel strength, and the addition of agar should be omitted.

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REFERENCES

1. Noble, R. P. 1968. Electrophoretic separation of plasma lipoproteins in agarose gel. *J. Lipid Res.* **9:** 693–700.