

Identification by Immunoelectrophoresis in Gel Analytical Method Verification [†]

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Abstract: The verification of the analytical methods is a regulatory requirement of the health authorities. In the identification method by immunoelectrophoresis in gel, the proteins of the samples are separated, and then they are precipitated with normal human antiserum, forming a band that is detected by visual observation.

The objective of this study is to demonstrate the specificity of the method to identify the main component of each blood product through the presence of a single precipitation band.

For the evaluation, it was determined:

- Sample 1: Human albumin for electrophoresis standard
- Sample 2: Human Immunoglobulin for electrophoresis standard
- Sample 3: GammaSub - UNC
- Sample 4: GammaSub – UNC + Human albumin for electrophoresis standard
- Sample 5: Gamma Sub – UNC + Human Immunoglobulin for electrophoresis standard

In the gel, it is observed:

- For samples 2,3,4, a single band corresponds to gamma globulin.
- For sample 1, a band corresponding to albumin.
- For sample 5, two bands correspond to albumin and gamma globulin.

The technique specifically differentiates the precipitation band corresponding to each protein.

Keywords: identification; gamma globulin; protein; electrophoresis; precipitation.

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Conflicts of Interest

The authors declare that they have no conflicts of interest.