Guide of Analysis of Differentially Expressed Proteins by Two-dimensional Electrophoresis

Two-dimensional electrophoresis refers to isoelectric focusing electrophoresis in the first direction and SDS-PAGE in the second direction. After the charge and relative molecular weight of the sample are separated twice, the isoelectric point and relative molecular weight of the molecule can be obtained. The result of separation is not a band, but a point.

Difficulté **Moyen** | Durée **2 heure(s)** | Catégories **Science & Biologie** | Coût **1 USD ($)**

Sommaire

Introduction

Using two-dimensional electrophoresis to find protein differences is one of the most important and common methods to study differentially expressed proteins. This experimental manual focuses on the main methods of two-dimensional electrophoresis, the analysis methods of differential proteins and the optimization of parameters.

Matériaux

Outils

Étape 1 - Sample loading.

The loading volume of the 24 cm adhesive strip is approximately 750-1000μg of protein sample*7, and the total volume mixed with the hydration solution is 450μL.

Étape 2 - First direction isoelectric focusing*8.

Set the operating parameters of the IPGphor instrument. The operating temperature is 20°C, the maximum current per glue strip is 50μA, and the following voltage settings are shown.

Notes et références

reference: Guide of Analysis of Differentially Expressed Proteins by Two-dimensional Electrophoresis