

Laurel Vernarelli  
Poster Abstract

**EXPLORING THE PROCEDURE FOR 2 D ELECTROPHORESIS ANALYSIS OF A SUCCINIC ACID STANDARD.** *L. Vernarelli, L. Tubbs\*, P. Craig\*, Department of Chemistry, [lav8133@rit.edu](mailto:lav8133@rit.edu), [letsch@rit.edu](mailto:letsch@rit.edu)*

The Ames test is used to test for mutagenic and carcinogenic properties in new compounds, but includes false negatives and false positives as results. The method of 2 D Electrophoresis is being used to find a more reliable method of analysis for possible mutagenic compounds. This procedure is based on the comparison to a succinic acid standard. The procedure for collecting the standard sample is based on the isolation of proteins by centrifugation and sonication. The protein sample then undergoes Rnase treatment, isoelectric focusing and SDS-PAGE. The resulting gel containing the separated proteins is stained and imaged. The final succinic acid gel serves as a standard for comparison to other compounds being studied.