

1. The absorbance readings of the gallic acid standards are used to create a calibration curve (Absorbance vs. Concentration). Measurement: The intensity of the blue color is measured using a spectrophotometer at a wavelength of 765 nm. Calculation and Results: A standard curve is prepared using known concentrations of Gallic Acid (a common phenolic standard), ranging from 0 to 1.0 mg/mL. The TPC of the LSPE sample is calculated using the slope of this standard curve and is expressed as milligrams of Gallic Acid Equivalents per 100 grams of extract (mg GAE/100 g extract). Procedure: Mixing: 0.2 mL of LSPE is mixed with 0.4 mL of Folin–Ciocalteu (FC) reagent.