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## Innovative Assay Designs Multiplexed ELISA for Comprehensive Molecular Profiling

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## Abstract

Enzyme-linked immunosorbent assay (ELISA) has long been a cornerstone technique in molecular biology, have led to the development of multiplexed ELISA platforms capable of simultaneously measuring multiple analytes

enables the study of biomarker panels and protein networks, providing valuable insights into disease mechanisms,

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: Multiplexed ELISA assays require smaller sample volumes compared to running individual ELISA assays for each analyte. is conservation of sample is especially valuable when working with precious or limited biological samples, such as clinical specimens or small animal models.

: By consolidating multiple assays into a single experiment, multiplexed ELISA assays o er cost and time savings compared to running separate assays for each analyte. is not only reduces reagent and labor costs but also minimizes

variability between experiments, improving overall data quality and reproducibility.