



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

**Cost and Time Savings:** By consolidating multiple assays into a single experiment, multiplexed ELISA assays offer cost and time savings compared to running separate assays for each analyte. This is not only reduces reagent and labor costs but also minimizes variability between experiments, improving overall data quality and reproducibility.