R&D Systems Tools for Cell Biology Research™

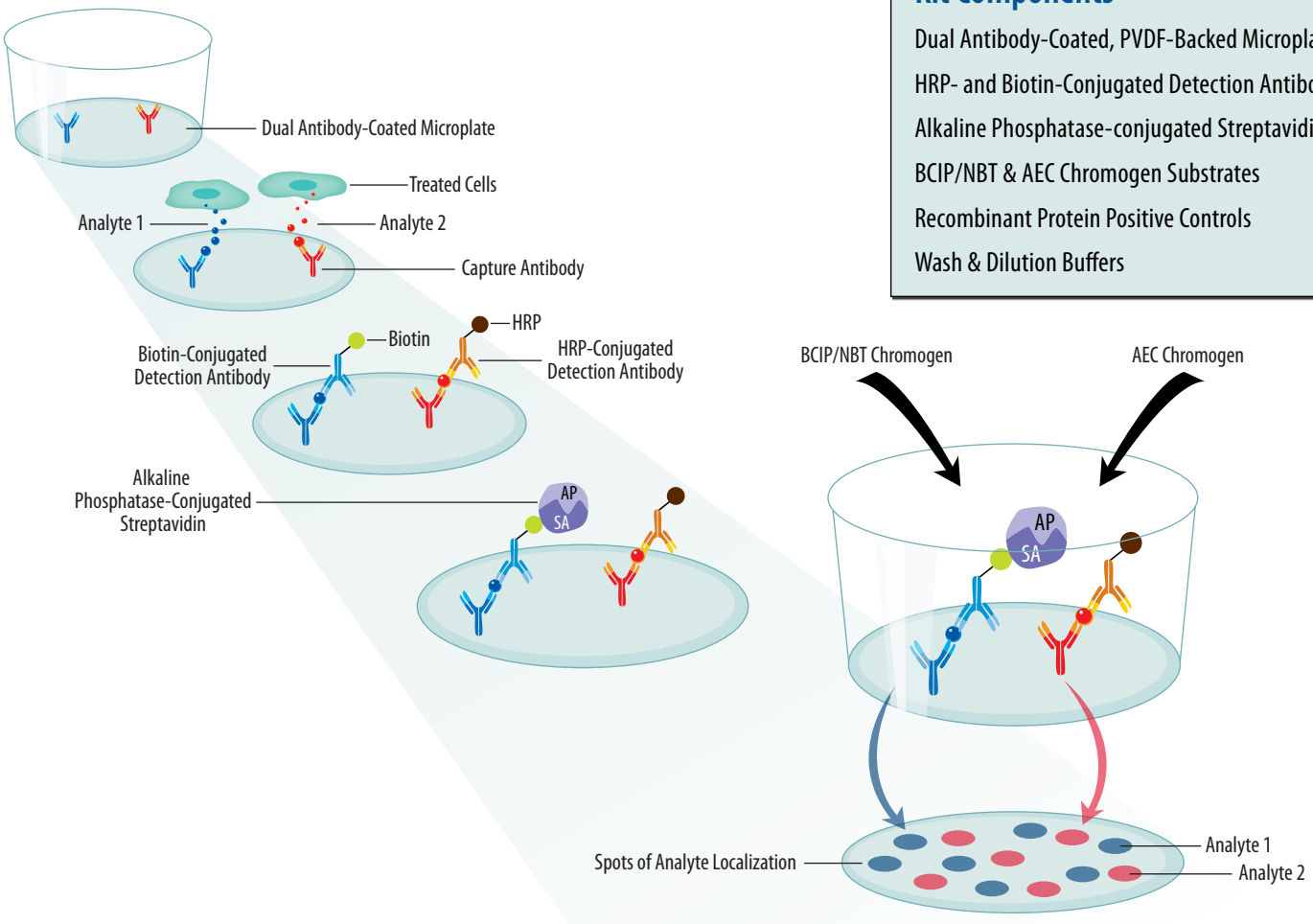
Dual-Color ELISpot Kits

A Simple Method for Simultaneously Detecting the Secretion of Two Cytokines

- ✓ Simultaneously determine the frequency of cells secreting two different cytokines
- ✓ Appropriate for monitoring immune responses
- ✓ Measure responses with frequencies below 1 in 100,000 cells
- ✓ Highly reproducible
- ✓ Suitable for high-throughput analysis using small volumes of primary cells
- ✓ Does not require prior cell expansion *in vitro*

Assay Principle

R&D Systems Dual-Color ELISpot Kits are designed to simultaneously quantitate the frequency of individual cells in a population secreting two different cytokines using a version of the sandwich ELISA immunoassay. Stimulated cells are incubated in a dual antibody-coated, membrane-backed microplate well. Secreted cytokines are bound by immobilized capture antibodies and detected using HRP- or biotin-conjugated detection antibodies. Spots at the sites of cytokine localization, representing individual cytokine-secreting cells, are visualized using alkaline phosphatase (AP)-conjugated Streptavidin (SA) followed by BCIP/NBT chromogen substrate or AEC chromogen substrate to detect HRP.



Kit Components

- Dual Antibody-Coated, PVDF-Backed Microplate
- HRP- and Biotin-Conjugated Detection Antibodies
- Alkaline Phosphatase-conjugated Streptavidin
- BCIP/NBT & AEC Chromogen Substrates
- Recombinant Protein Positive Controls
- Wash & Dilution Buffers