

Why upgrade to FluoroSpot?


You lose nothing. You gain everything.

FluoroSpot replaces enzymatic detection with fluorescence – giving you multiplexed cytokine data at single-cell resolution, from the same ELISpot protocol your lab already uses.

How methods compare

	ELISA / multiplex	ICS (flow cytometry)	ELISpot	FluoroSpot
Cell input required	Medium	High (>5,000 cells)	Very low	Very low (800 cells!)
Simultaneous cytokines	Yes, in supernatant	Yes, but secretion blocked	No, one at a time	Yes, up to 4 per well
Polyfunctional T cells	No	Yes, low sensitivity	No	Yes, high sensitivity
Secretion level	Concentration (pg/mL)	MFI (intracellular)	No	Yes, Relative Spot Volume (RSV)

Key numbers

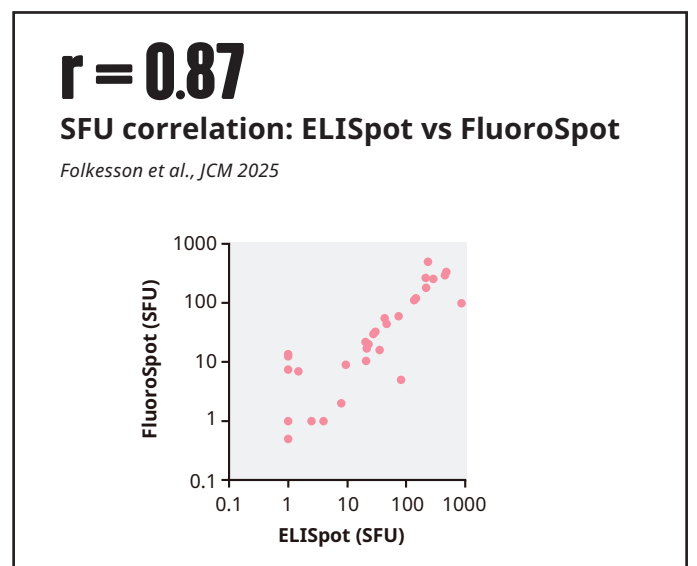
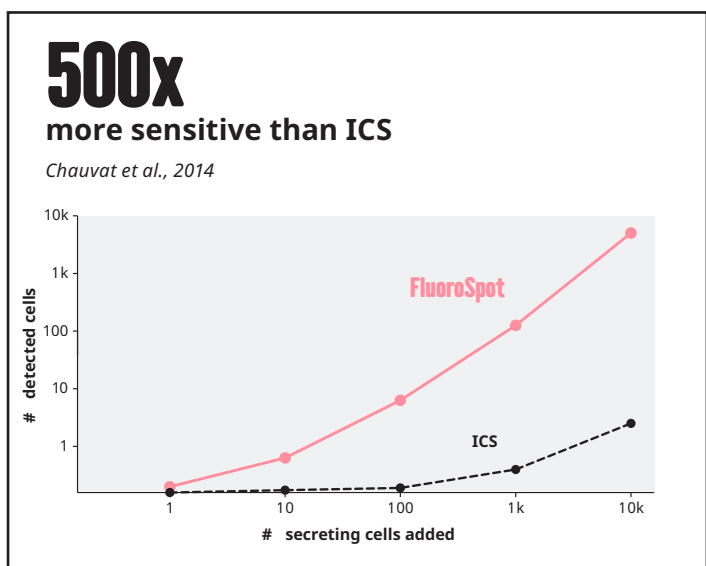


800
cells/well sufficient for full cytokine profiling

Schoutrop et al., JITC 2023



4
cytokines simultaneously in one well



What researchers say

With only 800 CAR T cells per well, FluoroSpot gave us resolution that ICS simply could not provide. For patient-derived samples where every cell counts, this is not a minor technical detail – it is what makes the experiment possible.

— Esther Schoutrop, Karolinska Institutet, Sweden

We transitioned our immunogenicity readout from ELISpot to the Mabtech IFN γ /GranzymeB FluoroSpot without changing our stimulation protocol. In the same experiment, we could now distinguish cells secreting IFN γ , GranzymeB, or both – which was critical for understanding the quality of the T cell response to our cancer immunotherapy candidate.

— Senior Scientist, Biotech company, USA

We have used Mabtech FluoroSpot antibodies and reagents for several years. The high quality and standard and competitive price will keep us hooked for years to come.

— Cecilia Lindestam Arlehamn, Statens Serum Institut, Denmark

When to use FluoroSpot?

Limited cell numbers

Cancer patients, pediatrics, rare biopsies – complete cytokine profile from 800 cells/well, where ICS fails entirely.

—Schoutrop et al., *JITC* 2023

Vaccine immunogenicity

Detect rare antigen-specific T cells at very low frequencies with multiplex cytokine read-out.

—Palmer et al., *Nat Med* 2022

Polyfunctional T cells

Triple- and quadruple-secreting cells are hallmarks of protective immunity – impossible to resolve with ELISpot or ELISA.

—Jergović et al., *J Immunol* 2022

Upgrading from ELISpot

Labs have switched to FluoroSpot using identical stimulation conditions and immediately gained simultaneous multi-cytokine readout. No revalidation needed.

—Wainberg et al., *Nat Med* 2025

