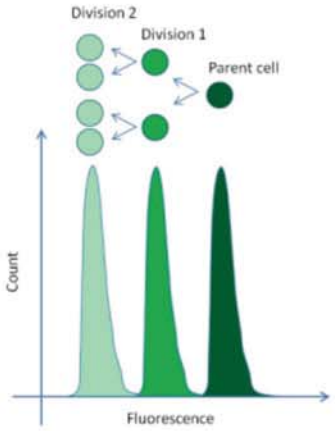
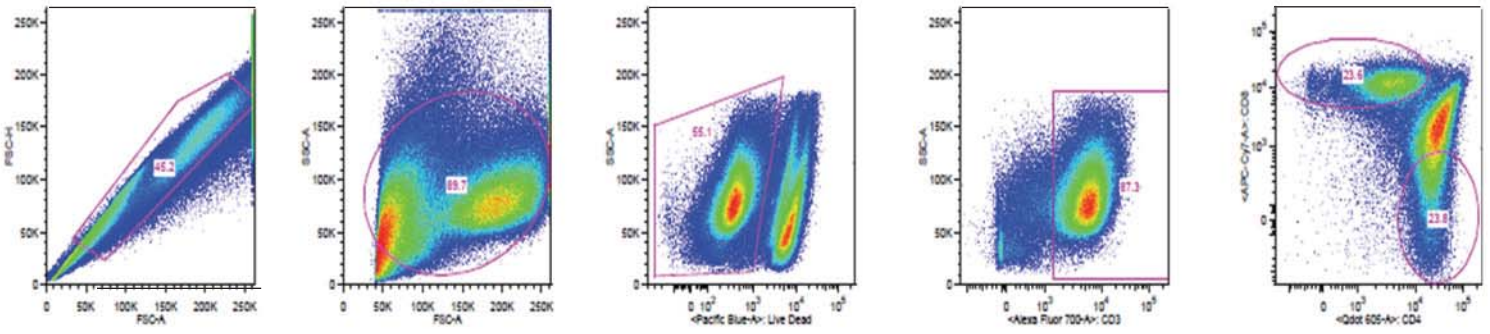
Lymphoproliferation by CFSE

Lymphoproliferation is one of the classic assessments of lymphocyte response to *in vitro* stimulation. While several methods exist to quantify this response, ABL scientists prefer the use of carboxyfluorescein diacetate succinimidyl ester, or CFSE. Use of common cellular markers, such as CD3, CD4 and CD8, coupled with simple proliferation analysis can be used to monitor target cell compound toxicity via flow cytometry. Our scientists can also use this same technique to monitor tumor cell growth and efficacy during early drug development phases.

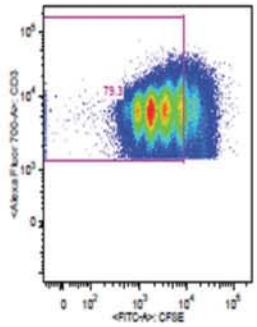


However, the most common use for the lymphoproliferation assay is the assessment of CD4+ cells in response to stimuli following anti-viral treatment. As an example, ABL has performed numerous assays to evaluate proliferative HIV-specific responses post vaccination and can apply this method to detect pathogen-specific responses in immunosuppressed subjects. Please contact us for more information on how ABL can analyze lymphocyte proliferation on behalf of your study.

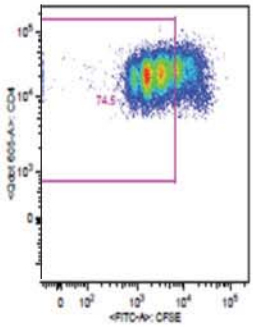
Color	Marker	Use
Pacific Blue	Live/Dead	Viability
AlexaFluor 700	CD3	T Cell
Qdot 605	CD4	T Cell Subset (Helper)
APC	CD8	T Cell Subset (Cytotoxic)
FITC	CFSE	Proliferation



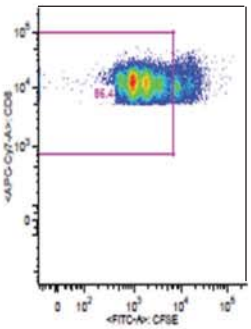
CD3+ Proliferation



CD4+ Proliferation



CD8+ Proliferation



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