# **Spark and Fire Dyes**

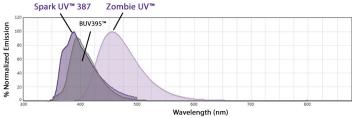
## Covering the Spectrum From Ultraviolet to Infrared

From dyes with unique emission spectra to innovative chemistries, we're equipped to offer you fluorophore options that fill spectral spaces and push the limits of flow cytometry. Explore our diverse set of dyes, crafted by experts and peer-reviewed by your colleagues.

#### To view a full list of our fluorophores, visit:

#### biolegend.com/en-us/fluorophore-families

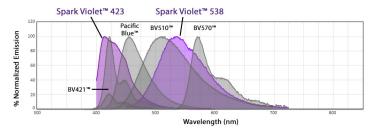
### Ultraviolet Laser (355 nm)



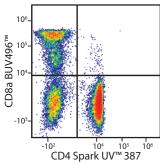
Fluorophore	Excitation Max	Emission Max	Brightness (1-5, 5=brightest)	Closest Equivalent
Spark UV™ 387	351 nm	387 nm	1	BUV395™

Note: Closest equivalent fluorophores listed are based on spectral profile read.

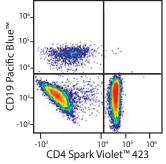
## Violet Laser (405 nm)



Fluorophore	Excitation Max	Emission Max	Brightness (1-5, 5=brightest)	Closest Equivalent
Spark Violet™ 423	400 nm	415, 423 nm	3	Super Bright 436
Spark Violet™ 538	399 nm	538 nm	1	Pacific Orange™



**Spark UV™ 387** shows minimal excitation with violet, blue, yellow/green, and red lasers. It has excellent heat stability and unmixes well from neighboring UV dyes.



The ability to unmix **Spark Violet™ 423** from Pacific Blue™ and Brilliant Violet 421™ on spectral cytometers provides an expansion of choices for researchers' panels.

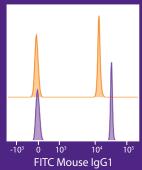
#### Ask about compensation beads-coming soon!

We are adding compensation beads to our extensive portfolio of ancillary flow cytometry reagents.

#### Key features:

- Comes in two vials containing positive and negative beads separately
- Verified to bind to most human, mouse, and rat immunoglobulin isotypes, kappa and lambda chains.
- Binds to rabbit, hamster, and donkey immunoglobulins
- Compatible with specialized, fluorophore-specific buffers

Contact your local representative or <a href="mailto:sales@biolegend.com">sales@biolegend.com</a> for sampling!

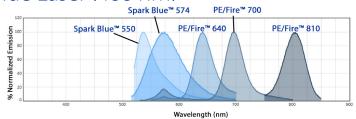


Representative staining profile of competitor (top) and BioLegend (bottom) compensation beads stained with FITC Mouse IgG1, k isotype control (clone MOPC-21).

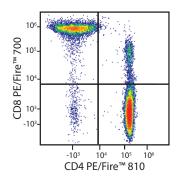


## Spark and Fire Dyes

### Blue Laser (488 nm)

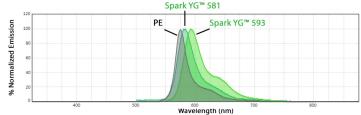


Fluorophore	Excitation Max	Emission Max	Brightness (1-5, 5=brightest)	Closest Equivalent
Spark Blue™ 550	516 nm	540 nm	1	Alexa Fluor® 532
Spark Blue™ 574	506 nm	574 nm	1	-
PE/Fire™ 640	565 nm	639 nm	4	-
PE/Fire™ 700	565 nm	695 nm	5	PE/Cyanine5.5
PE/Fire™ 810	565 nm	806 nm	4	-

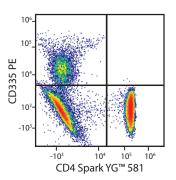


**PE/Fire™ 810** emits deep into the near infrared beyond the range of typical flow cytometry fluorophores. It should be noted PE and its tandems can also be excited by the Yellow/ Green laser.

## Yellow/Green Laser (561 nm)

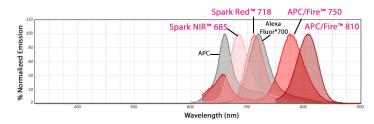


Fluorophore	Excitation Max	Emission Max	Brightness (1-5, 5=brightest)	Closest Equivalent
Spark YG™ 581	565 nm	581 nm	2	cFluor™ YG 584
Spark YG™ 593	574 nm	593 nm	3	-

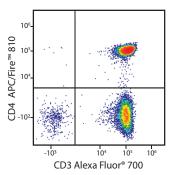


**Spark YG™ 581** and Spark YG™ 593 exhibit minimal excitation from the blue laser, allowing them to be unmixed from PE.

## Red Laser (633 nm)



Fluorophore	Excitation Max	Emission Max	Brightness (1-5, 5=brightest)	Closest Equivalent
Spark NIR™ 685	660 nm	685 nm	2	Alexa Fluor® 660
Spark Red™ 718	697 nm	711 nm	4	BD Horizon™ R718
APC/Fire™ 750	650 nm	774 nm	2	APC/H7
APC/Fire™ 810	650 nm	807 nm	3	-



**APC/Fire™ 810** emits deep into the infrared, making it easy to use to drop-in a marker and expand an existing panel.

Alexa Fluor®, Pacific Blue™, and Pacific Orange™ are trademarks of Life Technologies Corporation.

Brilliant Violet™, Brilliant Ultraviolet™, and BD Horizon™ are trademarks of Becton, Dickinson and Company.

cFluor™ is a trademark of Cytek Biosciences.

BioLegend products are manufactured in an ISO 13485:2016 certified facility following GMP compliant procedures, ensuring the highest quality and stability.