

CF™568 Dye

A red dye far superior to Alexa Fluor® 568

Technical Summary

Abs/Em Maxima: 562/583 nm

Extinction coefficient: 100,000

Molecular weight: 714

Flow cytometry laser line: 532 nm

Microscopy laser line: 568 nm

Direct replacement for: Alexa Fluor® 568, ATTO 565, DY-560, Rhodamine Red

Advantages

- Yields much brighter antibody conjugates than Alexa Fluor® 568
- Extremely photostable
- Highly water-soluble

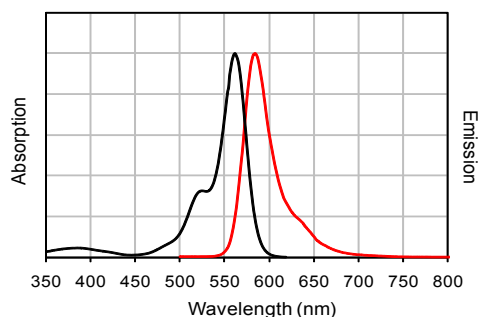


Figure 1. Absorption and emission spectra of CF™568 conjugated to goat anti-mouse IgG in PBS.

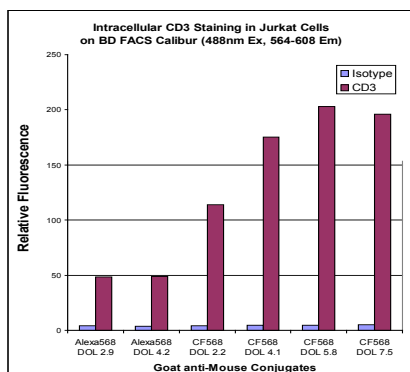


Figure 2. Intracellular staining of Jurkat cells was performed using mouse anti-CD3 or isotype control followed by goat anti-mouse IgG conjugates. Fluorescence was analyzed by flow cytometry on a BD FACS Calibur in the FL2 channel. Graph shows the relative fluorescence of the geometric means of each population of cells.

CF™568 is a red fluorescent dye with an excitation spectrum optimally matching the 568 nm line of the Ar-Kr mixed-gas laser (Figure 1). Antibody conjugates of CF™568 are much brighter than those of Alexa Fluor® 568. In addition, the photostability of CF™568 is superior to that of Alexa Fluor® 568 (Figure 3), making CF™568 a much better choice for demanding applications such as confocal microscopy and single molecule imaging.

A list of CF™568-based products is shown in Table 1. A list of CF™594-based products is shown in Table 1. Please visit www.biotium.com to view our full spectrum of CF™ dyes and related products, including secondary antibodies, antibody labeling kits, and bioconjugates including phalloidins, annexin V and α -bungarotoxin.

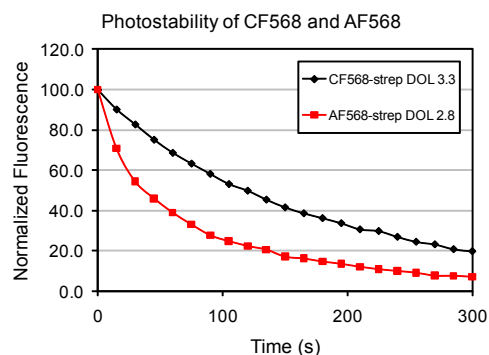


Figure 3. Intracellular staining of Jurkat cells was performed using anti-CD3-biotin followed by streptavidin-CF568 or streptavidin-AlexaFluor568. Cells were continuously exposed using a mercury arc lamp microscope. Images were captured every 15 seconds for 5 min and fluorescence intensity of each frame was normalized to the first image.

If you are looking for an antibody conjugate not listed in our catalog, please let us know. We may be able to add it as a new product, or perform a custom conjugation for you.



Biotium, Inc.

3159 Corporate Place, Hayward, CA 94545

www.biotium.com

US orders: 1-800-304-5357

CF™568 fluorescent reagents

Table 1. CF™568 Product List

Product Name	Size	Cat No.
CF™568 Secondary Antibody Conjugates		
Donkey Anti-Goat IgG (H+L) whole antibody (min X Chicken, Guinea Pig, Syrian Hamster, Horse, Human, Mouse, Rabbit, and Rat)	0.5 mL (2 mg/mL)	20106
Donkey Anti-Mouse IgG (H+L) whole antibody (min X Bovine, Chicken, Goat, Guinea Pig, Syrian Hamster, Horse, Human, Rabbit, and Sheep)	0.5 mL (2 mg/mL)	20105
Donkey Anti-Rabbit IgG (H+L) whole antibody (min X Bovine, Chicken, Goat, Guinea Pig, Syrian Hamster, Horse, Human, Mouse, Rat, and Sheep)	0.5 mL (2 mg/mL)	20098
Donkey Anti-Rat IgG (H+L) whole antibody (min X Bovine, Chicken, Goat, Guinea Pig, Syrian Hamster, Horse, Human, Rabbit, and Sheep)	0.5 mL (2 mg/mL)	20092
Donkey Anti-Sheep IgG (H+L) whole antibody (min X Chicken, Guinea Pig, Syrian Hamster, Horse, Human, Mouse, Rabbit, and Rat)	0.5 mL (2 mg/mL)	20095
Goat Anti-Chicken IgY (IgG) (H+L) whole antibody (min X Bovine, Goat, Guinea Pig, Syrian Hamster, Horse, Human, Mouse, Rabbit, Rat, and Sheep)	0.5 mL (2 mg/mL)	20104
Goat Anti-Guinea Pig IgG (H+L) whole antibody,	0.5 mL (2 mg/mL)	20108
Goat Anti-Human IgG (H+L) whole antibody (min X Bovine, Horse, and Mouse)	0.5 mL (2 mg/mL)	20097
Goat Anti-Mouse IgG (H+L) whole antibody	0.5 mL (2 mg/mL)	20100
Goat Anti-Mouse IgG (H+L) whole antibody (min x Human, Bovine, Horse, Rabbit, and Swine)	0.5 mL (2 mg/mL)	20101
Goat Anti-Mouse IgG (H+L), F(ab') ₂ fragment, 2 mg/mL	0.25 mL	20109
Goat Anti-Rabbit IgG (H+L) whole antibody	0.5 mL (2 mg/mL)	20102
Goat Anti-Rabbit IgG (H+L) whole antibody (min X Human, Mouse, and Rat)	0.5 mL (2 mg/mL)	20103
Goat Anti-Rabbit IgG (H+L), F(ab') ₂ fragment	0.25 mL (2 mg/mL)	20099
Goat Anti-Rat IgG (H+L) whole antibody (min X Human, Bovine, Horse, and Rabbit)	0.5 mL (2 mg/mL)	20096
Goat Anti-Swine IgG (H+L) whole antibody	0.5 mL (2 mg/mL)	20091
Rabbit Anti-Goat IgG (H+L) whole antibody	0.5 mL (2 mg/mL)	20107
Rabbit Anti-Mouse IgG (H+L) whole antibody (min X Human)	0.5 mL (2 mg/mL)	20093
Rabbit Anti-Rat IgG (H+L) whole antibody (min X Human)	0.5 mL (2 mg/mL)	20094
CF™568 Bioconjugates		
Annexin V	0.5 mL (50 ug/mL)	29010
α-Bungarotoxin	0.5 mg	00006
Phalloidin	300 U	00044
Streptavidin	1 mg	29035
CF™568 Reactive Dyes and Labeling Kits		
CF™568 hydrazide	1 mg	92154
CF™568 maleimide	1 mmole	92024
CF™568 succinimidyl ester	1 mmole	92131
CF™568 SE protein labeling kit	3 labelings (1 mg protein each)	92215
Mix-n-Stain CF™568 antibody labeling kit	1 labeling (5-20 ug antibody)	92275
Mix-n-Stain CF™568 antibody labeling kit	1 labeling (20-50 ug antibody)	92255
Mix-n-Stain CF™568 antibody labeling kit	1 labeling (50-100 ug antibody)	92235

CF is a trademark of Biotium; CF dye technologies are covered by pending US and international patents.
Listed products are for research use only. Not for use in diagnostic or therapeutic procedures.
Alexa Fluor is registered trademark of Invitrogen; ATTO dyes are products of ATTO-Tec GmbH; DY dyes are products of Dyomics GmbH



Biotium, Inc.
3159 Corporate Place, Hayward, CA 94545
www.biotium.com
US orders: 1-800-304-5357