

Product Information

CF™640R, Amine

Catalog Number **SCJ4600040**

Storage Temperature -20°C

TECHNICAL BULLETIN

Product Description

CF™640R, amine is used to label activated carboxylic acids in proteins or other molecules

CF640R is a rhodamine-based far-red fluorescent dye with excitation and emission maxima very similar to those of Cy™5 and Alexa Fluor® 647. CF640R is much brighter than Cy5 and at least as bright as Alexa Fluor 647. A major advantage of CF640R over Cy 5 and Alexa Fluor 647 is its exceptional photostability. Cy5 and Alexa Fluor 647 are cyanine-based dyes and, like other cyanine dyes in general, have intrinsically poor photostability. The combination of excellent brightness and photostability makes CF640R ideal for confocal microscopy, single- molecule imaging and other demanding applications based on fluorescence detection.

CF640R dye properties:

Abs/Em Maxima: 642/662 nm (See Figure 1)

Extinction coefficient: 105,000

Molecular weight: ~1,034

Flow cytometry laser line: 633, 635 or 640 nm

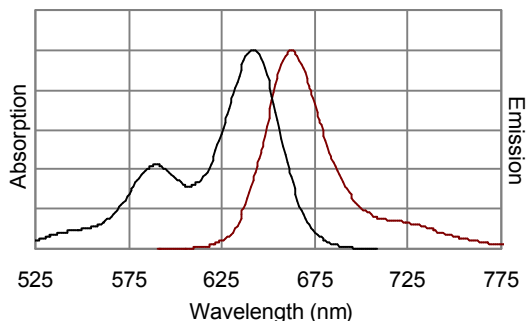
Microscopy laser line: 633, 635 or 640 nm

Direct replacement for: Alexa Fluor 647, Cy5, and

IRDye® 650

Figure 1.

Absorption and emission spectra of CF640R conjugated to goat anti-mouse IgG in PBS.



Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Stock solutions may be prepared in water or DMSO.

Storage/Stability

Store the dye desiccated at -20°C . When stored as directed, the dye should remain active for at least 6 months.

This product is distributed by Sigma-Aldrich Co. under the authorization of Biotium, Inc. This product is covered by one or more US patents and corresponding patent claims outside the US patents or pending applications owned or licensed by Biotium, Inc. including without limitation: 12/334,387; 12/607,915; 12/699,778; 12/850,578; 61/454,484. In consideration of the purchase price paid by the buyer, the buyer is hereby granted a limited, non-exclusive, non-transferable license to use only the purchased amount of the product solely for the buyer's own internal research in a manner consistent with the accompanying product literature. Except as expressly granted herein, the sale of this product does not grant to or convey upon the buyer any license, expressly, by implication or estoppel, under any patent right or other intellectual property right of Biotium, Inc.

Buyer shall not resell or transfer this product to any third party, or use the product for any commercial purposes, including without limitation, any diagnostic, therapeutic or prophylactic uses. This product is for research use only. Any other uses, including diagnostic uses, require a separate license from Biotium, Inc. For information on purchasing a license to use this product for purposes other than research, contact Biotium, Inc., 3159 Corporate Place, Hayward, CA 94545, Tel: (510) 265-1027. Fax: (510) 265-1352. Email: btinfo@biotium.com.

CF is a trademark of Biotium.

Alexa Fluor is a registered trademark of Invitrogen.

Cy is a trademark of GE Healthcare.

IRDye is a registered trademark of Li-COR Biosciences.

AKN,MAM 10/11-1