Flamma® Fluors

- Full spectrum of fluorescent substances line-up from UV to NIR
- Selectable options for a variety reactive group and functional group
- High purity and bright fluorescent performance

Flamma[®] Fluors Fluorochrome

Flamma® Fluor	λ _{Ex} (nm)	λ _{Em} (nm)	Excitation Laser Line	Replacement for
Flamma® 406	401	434	UV	Alexa Fluor® 405, Cascade Blue®, DyLight® 405, CF™ 405, Pacific Blue®
Flamma® 496	496	516	488 nm Laser	FAM, FITC, Fluorescein
Flamma® 488	495	519	488 nm Laser	Alexa Fluor® 488, Cy® 2, DyLight® 488, CF™ 488, ATTO 488
Flamma® 552	550	565	532, 543, 546, 555 or 568 nm Laser	Alexa Fluor® 555, Cy® 3, DyLight® 549, CF™ 488, ATTO 488
Flamma® 553	554	584	532, 543, 546, 555 or 568 nm Laser	Alexa Fluor® 546, TRITC
Flamma® 560	560	589	532, 543, 546, 555 or 568 nm Laser	Alexa Fluor® 568, CF [™] 568, ATTO 565, RITC
Flamma® 648	648	663	663, 635, or 640 nm Laser	Alexa Fluor® 647, Cy® 5, DyLight® 649, CF™ 647, ATTO 647N
Flamma® 675	675	691	680 or 685 nm Laser	Alexa Fluor® 680, Cy® 5.5, DyLight® 680, CF [™] 680, IRDye® 680LT
Flamma® 749	749	774	680 or 685 nm Laser	Alexa Fluor® 750, Cy® 7, DyLight® 750, CF™ 750, IRDye® 750
Flamma® 774	774	800	785 nm Laser	Cy® 7.5, CF™ 770
Flamma® 800	775	795	785 nm Laser	Alexa Fluor® 790, DyLight® 800, CF™ 790, IRDye® 800CW

Alexa Fluor Cascade Blue®, Pacific Blue®, and Texas Red® are registered trademarks of Invitrogen; ATTO dyes are products of ATTO-TEC GmbH; BD Horizon™ is a trademark of BD Biosciences; Cy® is a registered trademark of GE Healthcare. DyLight® is a registered trademark of Thermo Fisher Scientific; eFluor® is a registered trademark of eBioscience; IRDye® is a registered trademark of LI-COR Bioscience; LightCycler® is a registered trademark of Roche Applied Science.

Flamma® Fluors Application

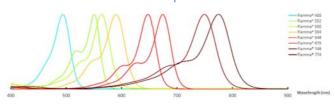
Reactive Flamma® Fluors	Reactive target group	Functionalized Flamma® Fluors
Flamma® Fluors NHS ester	- Amine (-NH ₂)	Flamma® Fluors Carboxylic acid
Flamma® Fluors Sulfo-NHS ester		Flamma® Fluors Amine
Flamma® Fluors Vinylsulfone		Flamma® Fluors Thiol
Flamma® Fluors Isothiocyanate		Click-chemistry Flamma® Fluors
Flamma® Fluors Maleimide	Thiol (-SH)	Flamma® Fluors Alkyne
Flamma® Fluors Hydrazide	Aldehyde, ketone	Flamma® Fluors PEG4-Alkyne
Flamma® Fluors Dichlorotriazine	& hydroxyl group	Flamma® Fluors ADIBO



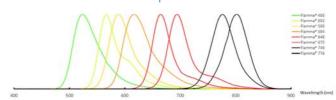
Flamma® Fluors

As Flamma® Fluors, which is a Fluorescent dye products group developed by a leading fluorescence technology of BioActs, is equipped with fluorescent substance line-up which can cover full spectral range from UV to NIR with its brighter fluorescence performance, it is compatible with optical conditions of most of fluorescent equipment. Along with this, it also provides a wide range of research applications with a variety of selectable options for reactive group and functional group.

Flamma® Fluors Absorbance Spectra

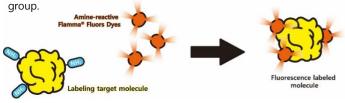


Flamma® Fluors Emission Spectra



Labeling Amine

Amine-reactive labeling method is the most commonly used method for labeling a variety of biomolecules besides proteins and peptides, and it is utilized in various imaging and production of probes for analysis purpose. Flamma® Fluors is for labeling amine and offers reactive functional options of NHS ester, Vinylsulfone, and Isothiocyanate, or unreactive functional group option of carboxyl

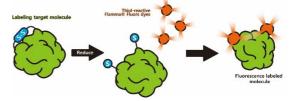


Labeling Aldehyde, Ketone & Hydroxyl group

Flamma® Fluors Hydrazide, which is for labeling Aldehyde and Ketone, and Flamma® Fluors Dichlorotriazine, which is for labeling Hydroxyl group, are utilized in fluorescent labeling of small compounds such as hormone and saccharide. To label Flamma® Fluors Hydrazide on polysaccharide and glycoprotein, oxidation process that oxidizes saccharide to Aldehyde is required prior to reaction. In general, method of using Sodium periodate-mediate oxidation of vicinal diol is utilized.

Labeling Thiol

Thiol-reactive labeling is a widely used method for labeling biomolecules besides Amine-reactive labeling, and it is extensively utilized in labeling proteomics, peptide, and ligand with amine labeling. Flamma® Fluors Maleimide high specifically binds to thiol group, and corresponded labeling to Thiol group of proteome or peptide uses Thiol group of cysteine. By using a reducing agent such as DTT, TCEP or 2-mercaptoethanol, pretreatment process should be undergone to reduce disulfide bond in protein. Reducing pretreatment process may deform tertiary structure of protein.



Click-Chemistry

Click chemistry is the most accurate and the fastest method of binding organic molecules, and it can be utilized in a variety of labeling method or cell analysis connected with bio orthogonal reaction of Click chemistry. To utilize Flamma® Fluors for click chemical bonding in various directions, BioActs has introduced Flamma® Fluors ADIBO products group that doesn't require copper catalyst, besides Flamma® Fluors Azide and Flamma® Fluors Alkyne products group.



CONTACT

Customer support : support@bioacts.com
Tel : +82-32-818-9100 • Fax : +82-31-818-2505

Website : www.bioacts.com

Copyright © 2016 BioActs. All rights reserved.
Unless otherwise specified, all products are for Research Use Only.
Not for use in diagnostic or therapeutic procedures.

