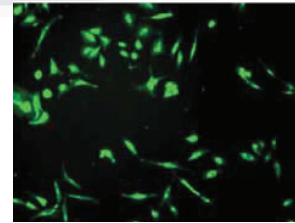


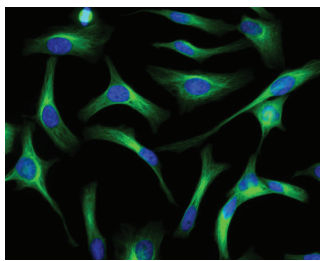
Flamma[®] Fluor Dyes

Strong Absorption, High Quantum Yield & Photostability

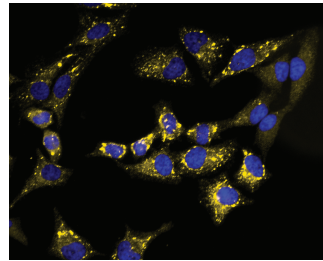
- Covering the full spectral range from UV to NIR
- Excellent fluorescence activity after conjugation
- Equipped with a variety of reactive groups
- High quantum yields and photostability
- High purity and compatible with most of biomolecules



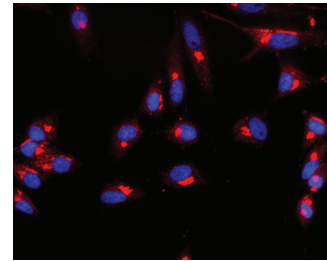
Flamma 488 Cell membrane imaging



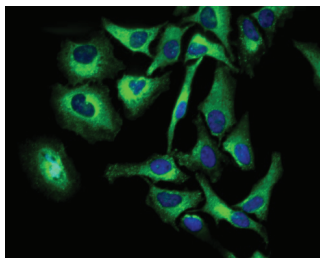
Tubulin



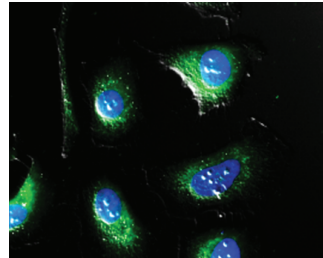
Mitochondria



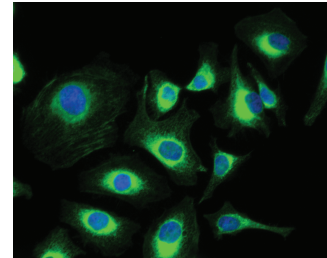
Golgi body



Autophagosome

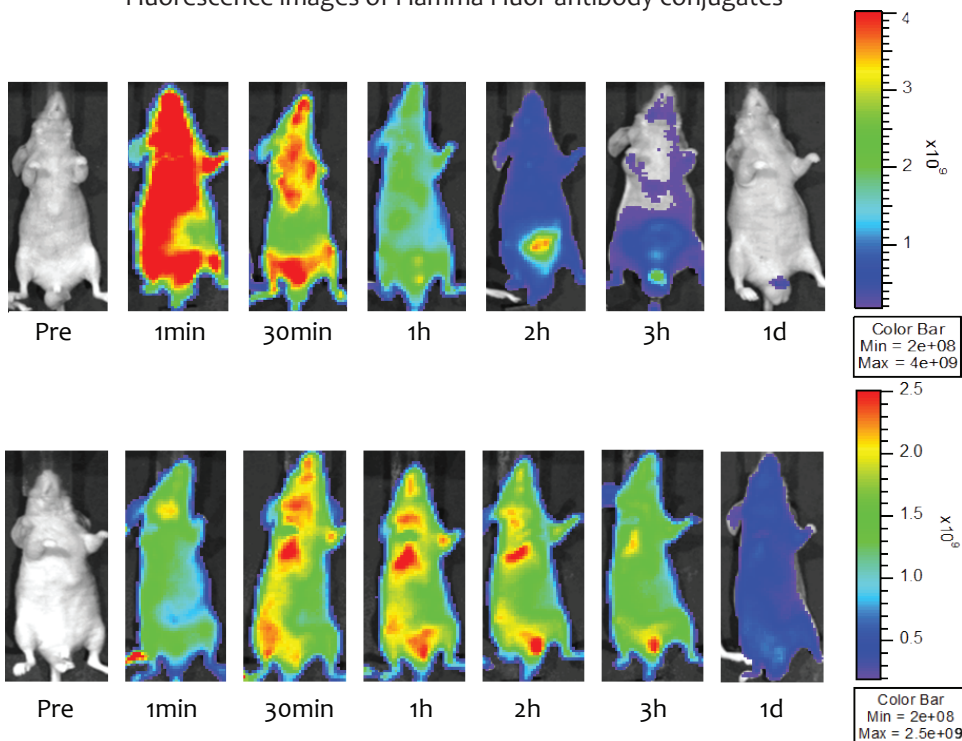


Peroxisome

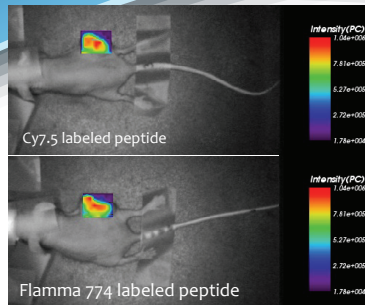


Endoplasmic Reticulum

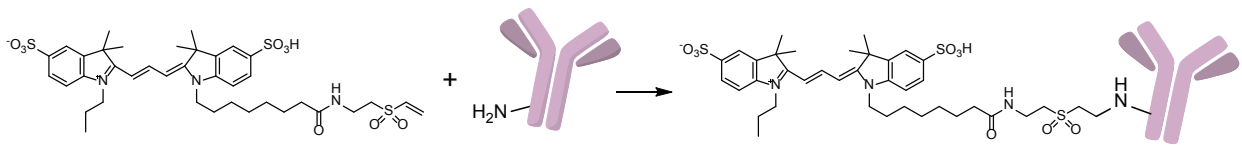
Fluorescence images of Flamma Fluor-antibody conjugates



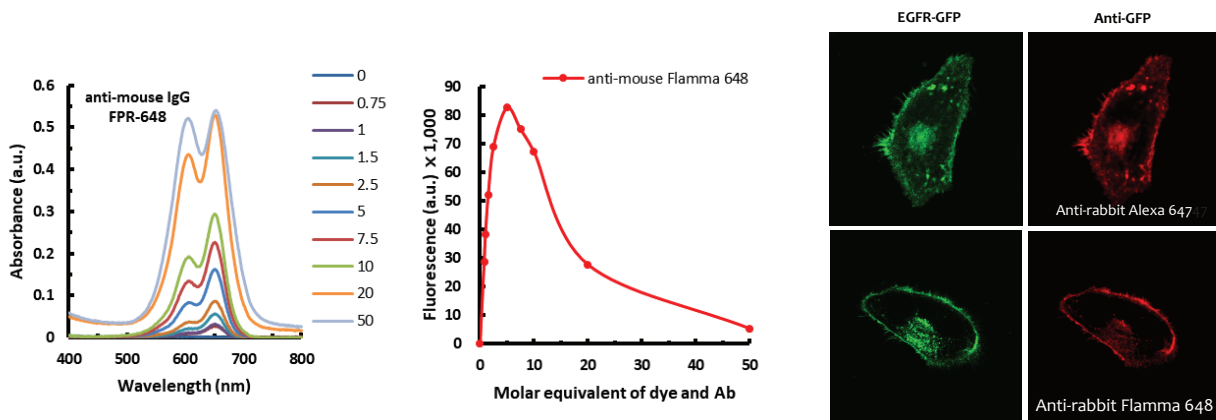
Fluorescence images of Flamma 749 (up) and Flamma 774 (bottom) Carboxylic acid injected mouse model



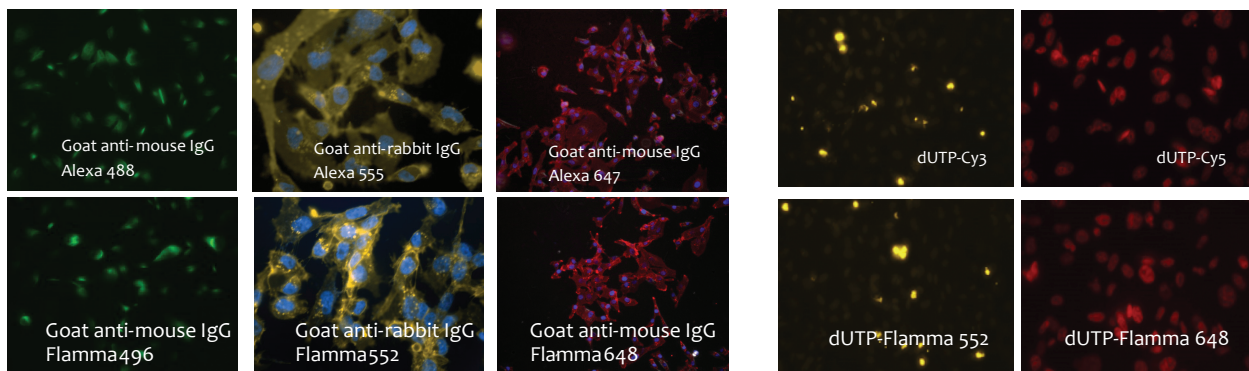
- High quantum yields and photostability
- Stable in a wide range of pH from 5 to 10
- Stable in both organic and aqueous solution
- Stable in high temperature
- Conjugated to an amine via 1,2-addition



Flamma Fluors Vinylsulfones label biomolecules via 1,2-addition, thus none of by product can be generated



Excitation vs. Dye/Protein ratio of Flamma Fluors Vinylsulfone conjugated secondary antibody



Immunofluorescent imaginings of Flamma Fluors vinylsulfone conjugated antibodies

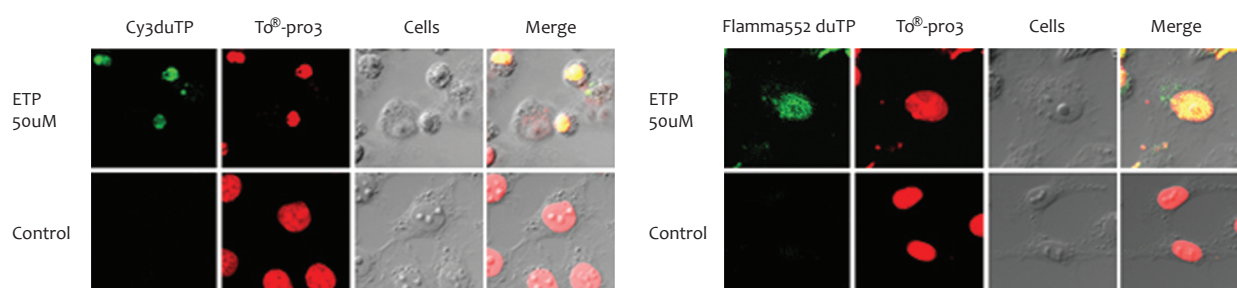


Flamma[®] Fluor Vinylsulfone Dyes

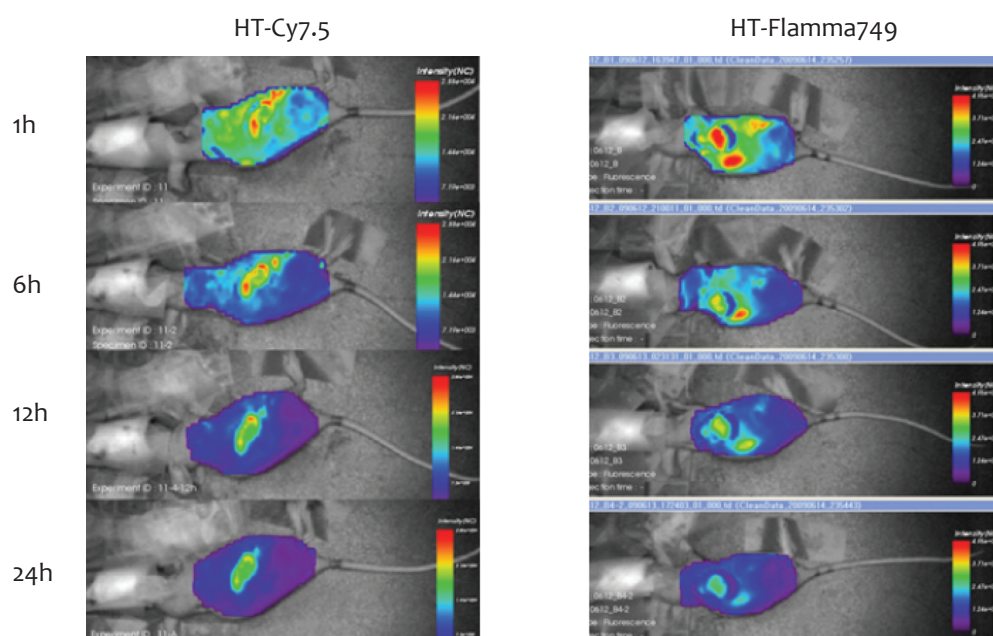
Bright Amine Reactive & pH Insensitive

Flamma Fluor vinylsulfone dye product list

Cat. No.	Product name	Emission color	Ex _{Max} (nm)	Em _{Max} (nm)	Common filter set	Excitation source
CWA1002	Flamma [®] 488 Vinylsulfone	● Green	493	519	FITC	488 nm
CWA1001	Flamma [®] 496 Vinylsulfone	● Green	494	520	FITC	488 nm
PWA1122	Flamma [®] 552 Vinylsulfone	● Yellow	551	563	TRITC	488, 532 nm
KWA1024	Flamma [®] 560 Vinylsulfone	● Orange	562	589	TRITC	532 nm
PWA1415	Flamma [®] 581 Vinylsulfone	● Orange	578	593	TRITC	532 nm
KOA1001	Flamma [®] 594 Vinylsulfone	● Orange	590	617	TRITC	532 nm
PWA1215	Flamma [®] 648 Vinylsulfone	● Red	648	663	Cy5	594, 633 nm
PWA1515	Flamma [®] 675 Vinylsulfone	● Far red	674	688	Cy5.5	633, 680 nm
PWA1308	Flamma [®] 749 Vinylsulfone	● NIR	749	774	Cy7	680 nm
PWA1603	Flamma [®] 774 Vinylsulfone	● NIR	775	800	Cy7.5	785 nm
POA1616	ICG Vinylsulfone	● NIR	785	812	Cy7.5	785 nm



Confirmation of DNA fragment using Flamma 552 vinylsulfone/Cy3-dCTP in Apoptotic cell

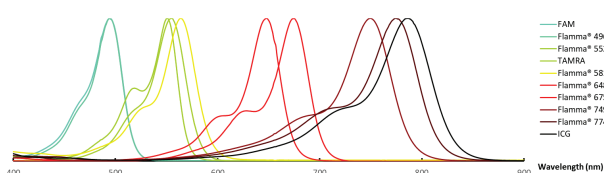


Animal model NIR imaging of Flamma 749 vinylsulfone and Cy 7.5

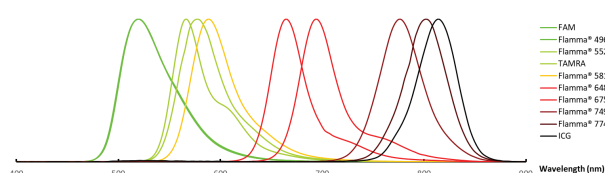
Flamma[®] Fluors product list

Flamma [®] Fluors	λ_{Ex} (nm)	λ_{Em} (nm)	Excitation Source	Spectrally Similar Dyes
FAM	494	518	488 nm	Fluorescein, FITC
Flamma[®] 496	496	516	488 nm	Alexa488, Cy2, DyLight488, FITC
Flamma[®] 552	550	565	543, 546 nm	Alexa555, Cy3, DyLight549, TRITC
TAMRA	553	576	543, 546, 555 nm	Alexa555, Cy3, DyLight549, TRITC
Flamma[®] 581	581	595	561 nm	Alexa594, DyLight594
Flamma[®] 648	648	663	594 nm	Alexa647, Cy5, DyLight649, CF680
Flamma[®] 675	675	691	647, 663 nm	Alexa680, Cy5.5, IRDye680LT
Flamma[®] 749	749	774	680, 685 nm	Alexa750, Cy7, DyLight755
Flamma[®] 774	774	806	785 nm	Alexa790, DyLight800, IRDye800
ICG	785	812	785 nm	Alexa790, DyLight800, IRDye800

Excitation Spectra



Emission Spectra



Flamma[®] Fluors Applications

Reactive Flamma [®] Fluors	Reacting toward	Functionalized Flamma [®] Fluors
Flamma [®] Fluors NHS ester	Primary Amine (-NH ₂)	Flamma [®] Fluors Carboxylic acid
Flamma [®] Fluors Sulfo-NHS ester		Flamma [®] Fluors Amine
Flamma [®] Fluors Vinylsulfone		FSD [™] Fluors Thiol
Flamma [®] Fluors Isothiocyanate		Click -Chemistry Flamma [®] Fluors
Flamma [®] Fluors Maleimide	Thiol (-SH)	Flamma [®] Fluors Alkyne
Flamma [®] Fluors Hydrazide	Aldehyde, Ketone(>C=O)	Flamma [®] Fluors PEG 4-Alkyne
Flamma [®] Fluors Dichlorotriazine	Hydroxyl (-OH)	Flamma [®] Fluors ADIBO

Custom Service: BioActs provides custom antibody/protein fluorescence labeling services with a wide selection of reactive dyes and proper labeling technology.

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Headquarter
 ADDRESS: 9, Cheongneung-daero 595beon-gil,
 Namdong-gu, Incheon 21666, Korea
 WEBSITE : www.bioacts.com
 PHONE : +82-32-818-9100
 FAX : +82-32-818-8206

MAILS
 ORDER SUPPORT: order@bioacts.com
 CUSTOMER SUPPORT: support@bioacts.com
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