Supplier of fluorescent and related biochemical reagents for life science research and drug discovery Glowing Products for ScienceTM

46117 Landing Parkway, Fremont, CA 94538 U.S.A. Tel: 1-510-265-1027; Fax: 1-510-265-1352 btinfo@biotium.com http://www.biotium.com/

SAFETY DATA SHEET

Date: June 20, 2019

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	CF488A Annexin V
Catalog Number:	99967
Unit Size:	250 uL
Manufacturer/Supplier:	Biotium, Inc.
	46117 Landing Parkway, Fremont, CA 94538, USA
	Phone: 1-510-265-1027, Fax: 1-510-265-1352
	Web: http://www.biotium.com

Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use.

2. HAZARDS IDENTIFICATION

GHS Classification		
Signal word	None	
Health hazards	None	
Physical hazards	None	
Hazard statements	None	
Precautionary statem	ents	None
WHMIS classification	None	
GHS hazard pictogr	ram	None

Classification according to Regulation (EC) No 1272/2008[CLP] None Classification according to Directive 1999/45/EC None

HMIS Classification Health hazard: 0 Flammability: 0 Physical hazards: 0 NFPA Rating Health hazard: 0 Fire: 0 Reactivity Hazard: 0

Labeling according to Regulation (EC) No 1272/2008[CLP]Hazard pictogramNoneSignal wordNoneHazard statementsNonePrecautionary statementsNone

3. COMPOSITION/INFORMATION ON INGREDIENTS

No components present at concentrations classified as hazardous to health or the environment.

FIRST- AID MEASURES
 General advice
 Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
 If inhaled
 If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
 In case of skin contact

Wash off with soap and plenty of water. Consult a physician. In case of eye contact



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Flush eyes with water as a precaution. **If swallowed** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide, dry chemical extinguishers, foam extinguishers or water. **Special protective equipment for firefighters** Wear self contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid breathing vapors, mist or gas. Remove all sources of ignition. **Environmental precautions** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. **Methods and materials for containment and cleaning up** Contain spillage. Soak up spilled substance with inert absorbent material. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid inhalation of vapor or mist. Avoid direct contact with substance. **Conditions for safe storage** Keep container tightly closed in a dry and well-ventilated place. Store at 4°C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters None

Personal protective equipment

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. **Respiratory protection**

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eye protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical Name	CF488A Annexin V
Appearance	Liquid
Odor	No data available
Odor threshold	No data available
pH	7-8
Melting point/freezing point	No data available

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Boiling point	No data available
Flash point	No data available
Evaporate rate	No data available
Flammability	No data available
Explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility	Water soluble
Partition coefficient:n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

10. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions. Possibility of hazardous reactions No data available **Conditions to avoid** Heat, flames and sparks. Materials to avoid No data available Hazardous decomposition products Hazardous decomposition products formed under fire conditions. - Carbon oxides Other decomposition products - No data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity		
Oral LD50	None	
Inhalation LC50	None	
Dermal LD50	None	
Other information	on on acute toxicity	No data available
Skin corrosion/irritation	No data available	
Serious eye damage/eye	irritation No data	ı available
Respiratory or skin sens	sitization No data available	3
Germ cell mutagenicity	No data available	
Carcinogenicity		
		greater than or equal to 0.1% is identified as
	irmed human carcinogen b	
		els greater than or equal to 0.1% is identified as a
carcinogen or potential car	. .	
		greater than or equal to 0.1% is identified as a known
or anticipated carcinogen l		
		Is greater than or equal to 0.1% is identified as a
carcinogen or potential car		
Reproductive toxicity		
	acity - single exposure (G	Blobally Harmonized System)
No data available	• •	
	cicity - repeated exposure	e (Globally Harmonized System)
No data available		
Aspiration hazard		
No data available		
Potential health effects	if inholed May anyon room	instant tract irritation
-	if inhaled. May cause resp	
Ingestion May be harmful	ii swallowed.	



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Skin May be harmful if absorbed through skin. May cause skin irritation. Eyes May cause eye irritation. Additional Information RTECS: None

12. ECOLOGICAL INFORMATION

Toxicity No info	rmation av	/ailable	
Persistence and degrad	ability	No infor	mation available
Biodegradation	No infor	mation av	ailable
Mobility in soil	No infor	mation av	ailable
Results of PBT and vPv	B assess	ment	No information available
Other adverse effects	No infor	mation av	ailable
Additional information	No infor	mation av	ailable

13. DISPOSAL CONSIDERATIONS

Do not dispose product directly into sewage. Consult local state or national regulation for proper disposal.

14. TRANSPORT INFORMATION

 IATA, IMDG, DOT (US), TDG
 Not dangerous goods during transportation

 UN number
 None

 UN proper shipping name None
 Transport hazard class

 Packing group
 None

 Environmental hazards
 None

 Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code
 None

 Special precaution for user
 None

15. REGULATION INFORTMATION

US Federal Regulations

US Toxic Substances Control Act (TSCA): Not listed SARA 302: No chemicals were found. SARA 313: No chemicals were found. SARA 311/312 Hazards: No chemicals were found.

WHMIS Hazard Class None

16. OTHER INFORMATION

Classification according to Regulation (EC) Nr. 1272/2008 Refer to section 2 and section 3

Prepared by:	Regu	Regulatory Department		
	Biotiu	m Inc.		
Version no.	3			
Revision date (Initials)		6/20/19 (LR)		
Reason for revision		Application of WHMIS labeling requirements		

The information provided above is believed to be correct to our best knowledge, but does not purport to be all inclusive, and shall be used only as a guide. This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. Biotium shall not be held liable for any damage resulting from handling or contact with the above product.

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SAFETY DATA SHEET

Date: June 20, 2019

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	5X Annexin Binding Buffer
Catalog Number:	99902
Unit Size:	15 mL
Manufacturer/Supplier:	Biotium, Inc.
	46117 Landing Parkway, Fremont, CA 94538, USA
	Phone: 1-510-265-1027, Fax: 1-510-265-1352
	Web: http://www.biotium.com

Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use.

2. HAZARDS IDENTIFICATION

GHS Classification		
Signal word	None	
Health hazards	None	
Physical hazards	None	
Hazard statements	None	
Precautionary statem	ents	None
WHMIS classification	None	
GHS hazard pictogr	ram	None

Classification according to Regulation (EC) No 1272/2008[CLP] None Classification according to Directive 1999/45/EC None

HMIS Classification Health hazard: 0 Flammability: 0 Physical hazards: 0 NFPA Rating Health hazard: 0 Fire: 0 Reactivity Hazard: 0

Labeling according to Regulation (EC) No 1272/2008[CLP]Hazard pictogramNoneSignal wordNoneHazard statementsNonePrecautionary statementsNone

3. COMPOSITION/INFORMATION ON INGREDIENTS

No components present at concentrations classified as hazardous to health or the environment.

FIRST- AID MEASURES
 General advice
 Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
 If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. In case of skin contact

Wash off with soap and plenty of water. Consult a physician. In case of eye contact



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Flush eyes with water as a precaution. **If swallowed** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide, dry chemical extinguishers, foam extinguishers or water. **Special protective equipment for firefighters** Wear self contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid breathing vapors, mist or gas. Remove all sources of ignition. **Environmental precautions** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. **Methods and materials for containment and cleaning up** Contain spillage. Soak up spilled substance with inert absorbent material. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid inhalation of vapor or mist. Avoid direct contact with substance. **Conditions for safe storage** Keep container tightly closed in a dry and well-ventilated place. Store at 4°C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters None

Personal protective equipment

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. **Respiratory protection**

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eye protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical Name	5X Annexin Binding Buffer
Appearance	Liquid
Odor	No data available
Odor threshold	No data available
pH	7-8
Melting point/freezing point	No data available



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Boiling point	No data available
Flash point	No data available
Evaporate rate	No data available
Flammability	No data available
Explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility	Water soluble
Partition coefficient:n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

10. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions. Possibility of hazardous reactions No data available Conditions to avoid Heat, flames and sparks. Materials to avoid No data available Hazardous decomposition products Hazardous decomposition products formed under fire conditions. - Carbon oxides Other decomposition products - No data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity Oral LD50 None Inhalation LC50 None Dermal LD50 None Other information on acute toxicity No data available Skin corrosion/irritation No data available Serious eye damage/eye irritation No data available Respiratory or skin sensitization No data available Germ cell mutagenicity No data available Carcinogenicity IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Reproductive toxicity No data available Specific target organ toxicity - single exposure (Globally Harmonized System) No data available Specific target organ toxicity - repeated exposure (Globally Harmonized System) No data available Aspiration hazard No data available Potential health effects Inhalation May be harmful if inhaled. May cause respiratory tract irritation.



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Ingestion May be harmful if swallowed. Skin May be harmful if absorbed through skin. May cause skin irritation. Eyes May cause eye irritation. Additional Information RTECS: None

12. ECOLOGICAL INFORMATION

ToxicityNo information availablePersistence and degradabilityNo information availableBiodegradationNo information availableMobility in soilNo information availableResults of PBT and vPvB assessmentNo information availableOther adverse effectsNo information availableAdditional informationNo information available

13. DISPOSAL CONSIDERATIONS

Do not dispose product directly into sewage. Consult local state or national regulation for proper disposal.

14. TRANSPORT INFORMATION

 IATA, IMDG, DOT (US), TDG
 Not dangerous goods during transportation

 UN number
 None

 UN proper shipping name None
 Transport hazard class

 Transport hazard class
 None

 Packing group
 None

 Environmental hazards
 None

 Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code
 None

15. REGULATION INFORTMATION

US Federal Regulations US Toxic Substances Control Act (TSCA): Not listed SARA 302: No chemicals were found. SARA 313: No chemicals were found. SARA 311/312 Hazards: No chemicals were found.

WHMIS Hazard Class None

16. OTHER INFORMATION

Classification according to Regulation (EC) Nr. 1272/2008 Refer to section 2 and section 3

 Prepared by:
 Regulatory Department Biotium Inc.

 Version no.
 4

 Revision date (Initials)
 6/20/19 (LR)

 Reason for revision
 Application of WHMIS labeling requirements.

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SAFETY DATA SHEET

Date: June 20, 2019

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name:	Ethidium Homodimer III
Catalog Number:	99904
Unit Size:	250 uL
Manufacturer/Supplier:	Biotium, Inc.
	46117 Landing Parkway, Fremont, CA 94538, USA
	Phone: 1-510-265-1027, Fax: 1-510-265-1352
	Web: http://www.biotium.com

Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use.

2. HAZARDS IDENTIFICATION

GHS Classification		
Signal word	None	
Health hazards	None	
Physical hazards	None	
Hazard statements	None	
Precautionary statements		None
WHMIS classification	None	
GHS hazard pictogram		None

Classification according to Regulation (EC) No 1272/2008[CLP] None Classification according to Directive 1999/45/EC None

HMIS Classification Health hazard: 0 Flammability: 0 Physical hazards: 0 NFPA Rating Health hazard: 0 Fire: 0 Reactivity Hazard: 0

Labeling according to Regulation (EC) No 1272/2008[CLP]Hazard pictogramNoneSignal wordNoneHazard statementsNonePrecautionary statementsNone

3. COMPOSITION/INFORMATION ON INGREDIENTS

No components present at concentrations classified as hazardous to health or the environment.

FIRST- AID MEASURES
 General advice
 Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
 If inhaled
 If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
 In case of skin contact
 Wash off with soap and plenty of water. Consult a physician.
 In case of eye contact



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Flush eyes with water as a precaution. **If swallowed** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIREFIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide, dry chemical extinguishers, foam extinguishers or water. **Special protective equipment for firefighters** Wear self contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid breathing vapors, mist or gas. Remove all sources of ignition. **Environmental precautions** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. **Methods and materials for containment and cleaning up** Contain spillage. Soak up spilled substance with inert absorbent material. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid inhalation of vapor or mist. Avoid direct contact with substance. **Conditions for safe storage** Keep container tightly closed in a dry and well-ventilated place. Store at 4°C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters None

Personal protective equipment

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. **Respiratory protection**

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Eye protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Chemical Name	Ethidium Homodimer III
Appearance	Red solution
Odor	No data available
Odor threshold	No data available
pH	7-8
Melting point/freezing point	No data available



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Boiling point	No data available
Flash point	No data available
Evaporate rate	No data available
Flammability	No data available
Explosive limits	No data available
Vapor pressure	No data available
Vapor density	No data available
Relative density	No data available
Solubility	Water soluble
Partition coefficient:n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

10. STABILITY AND REACTIVITY

Chemical stability Stable under recommended storage conditions. Possibility of hazardous reactions No data available Conditions to avoid Heat, flames and sparks. Materials to avoid No data available Hazardous decomposition products Hazardous decomposition products formed under fire conditions. - Carbon oxides Other decomposition products - No data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity Oral LD50 None Inhalation LC50 None Dermal LD50 None Other information on acute toxicity No data available Skin corrosion/irritation No data available Serious eye damage/eye irritation No data available Respiratory or skin sensitization No data available Germ cell mutagenicity No data available Carcinogenicity IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Reproductive toxicity No data available Specific target organ toxicity - single exposure (Globally Harmonized System) No data available Specific target organ toxicity - repeated exposure (Globally Harmonized System) No data available Aspiration hazard No data available Potential health effects Inhalation May be harmful if inhaled. May cause respiratory tract irritation.



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Ingestion May be harmful if swallowed. Skin May be harmful if absorbed through skin. May cause skin irritation. Eyes May cause eye irritation. Additional Information RTECS: None

12. ECOLOGICAL INFORMATION

ToxicityNo information availablePersistence and degradabilityNo information availableBiodegradationNo information availableMobility in soilNo information availableResults of PBT and vPvB assessmentNo information availableOther adverse effectsNo information availableAdditional informationNo information available

13. DISPOSAL CONSIDERATIONS

Do not dispose product directly into sewage. Consult local state or national regulation for proper disposal.

14. TRANSPORT INFORMATION

 IATA, IMDG, DOT (US), TDG
 Not dangerous goods during transportation

 UN number
 None

 UN proper shipping name None
 Transport hazard class

 Transport hazard class
 None

 Packing group
 None

 Environmental hazards
 None

 Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code
 None

15. REGULATION INFORTMATION

US Federal Regulations US Toxic Substances Control Act (TSCA): Not listed SARA 302: No chemicals were found. SARA 313: No chemicals were found. SARA 311/312 Hazards: No chemicals were found.

WHMIS Hazard Class None

16. OTHER INFORMATION

Classification according to Regulation (EC) Nr. 1272/2008 Refer to section 2 and section 3

 Prepared by:
 Regulatory Department Biotium Inc.

 Version no.
 4

 Revision date (Initials)
 6/20/19 (LR)

 Reason for revision
 Application of WHMIS labeling requirements.

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