07/28/2010	Kit Components	
Product code	Description	
NEL701A001KT	TSA Fluorescein System (50-150 slides)	
Components:		
VU/222322	Fluorescein Tyramide Reagent 0.05mg	
FP1020	Blocking Reagent	

Streptavidin HRP

TS-000300

Reviewed on 07/28/2010 Printing date 07/28/2010

### 1 Identification of substance

- · Product details
- · Trade name: Fluorescein Tyramide Reagent 0.05mg
- · Product number:VU/222322
- · Application of the substance / the preparation Laboratory chemicals
- · Manufacturer/Supplier:

Akoya Biosciences

100 Campus Drive, 6th Floor

Marlborough MA 01752

· Information department:

Technical Support

800-762-4000

Emergency information: If inside USA, call CHEMTREC at 1-800-424-9300

If outside USA, call CHEMTREC at 1-703-527-3887

### 2 Composition/Data on components

- · Chemical characterization:
- · CAS No. Description

Fluorescein Tyramide

· Identification number(s) N/A

## 3 Hazards identification

- · Hazard description: Not applicable.
- · Information pertaining to particular dangers for man and environment: Not applicable.
- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0

Fire = 0

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 0

Fire = 0

· GHS label elements Void

### 4 First aid measures

- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: If skin irritation continues, consult a doctor.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.

Printing date 07/28/2010 Reviewed on 07/28/2010

Trade name: Fluorescein Tyramide Reagent 0.05mg

(Contd. of page 1)

### 5 Fire fighting measures

· Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **Protective equipment:** Wear self-contained respiratory protective device.

### 6 Accidental release measures

- · Person-related safety precautions: Avoid formation of dust.
- · Measures for environmental protection: Dilute with plenty of water.
- · Measures for cleaning/collecting:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- · Additional information: No dangerous substances are released.

## 7 Handling and storage

- · Handling:
- · Information for safe handling: No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.

### 8 Exposure controls and personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Components with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists that were valid during the creation were used as basis.
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

- Breathing equipment: Use suitable respiratory protective device in case of insufficient ventilation.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Goggles recommended during refilling.

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Printing date 07/28/2010 Reviewed on 07/28/2010

Trade name: Fluorescein Tyramide Reagent 0.05mg

(Contd. of page 2)

General Information	
Form:	Solid
Color:	Light yellow
Odor:	Characteristic
Change in condition Melting point/Melting range: Boiling point/Boiling range:	
Flash point:	Not applicable.
Danger of explosion:	Product does not present an explosion hazard.
Density:	Not determined.
Solubility in / Miscibility with	
Water:	Fully miscible.
pH-value:	N/A

## 10 Stability and reactivity

· Organic solvents:

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Materials to be avoided:
- · Dangerous reactions No dangerous reactions known.
- · Dangerous products of decomposition: No dangerous decomposition products known.

0.0 %

## 11 Toxicological information

- · Acute toxicity:
- Primary irritant effect:
- · on the skin: May cause skin irritation.
- · on the eye: May cause eye irritation.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

The substance is not subject to classification.

### 12 Ecological information

· Other information: N/A

## 13 Disposal considerations

- · Product:
- · Recommendation: Must be specially treated adhering to official regulations.
- · Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

(Contd. on page 4)

Printing date 07/28/2010 Reviewed on 07/28/2010

Trade name: Fluorescein Tyramide Reagent 0.05mg

· Recommended cleansing agent: Water, if necessary with cleansing agents.

(Contd. of page 3)

### 14 Transport information

- · Land transport ADR/RID (cross-border):
- · ADR/RID class:
- · Maritime transport IMDG:
- · Marine pollutant: No
- · UN "Model Regulation": -
- · Transport/Additional information: Not dangerous according to the above specifications.

# 15 Regulations

- · Sara
- · Section 355 (extremely hazardous substances):

Substance is not listed.

Section 313 (Specific toxic chemical listings):

Substance is not listed.

· TSCA (Toxic Substances Control Act):

Substance is not listed.

- · Proposition 65
- · Chemicals known to cause cancer:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

· Chemicals known to cause developmental toxicity:

Substance is not listed.

- · Cancerogenity categories
- EPA (Environmental Protection Agency)

Substance is not listed.

· IARC (International Agency for Research on Cancer)

Substance is not listed.

· NTP (National Toxicology Program)

Substance is not listed.

· TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

(Contd. on page 5)

Printing date 07/28/2010 Reviewed on 07/28/2010

Trade name: Fluorescein Tyramide Reagent 0.05mg

(Contd. of page 4)

#### Product related hazard informations:

Observe the general safety regulations when handling chemicals.

The substance is not subject to classification according to the sources of literature known to us.

### 16 Other information

The information provided in this Material Safety Data Sheet is based on our present knowledge, and believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be considered a warranty or quality specification. All materials may present unknown hazards, and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards which exist. PerkinElmer Life and Analytical Sciences shall not be held liable for any damage resulting from handling or from contact with the product.

· Department issuing MSDS: EHS

· Contact:

Technical Support 800-762-4000

### · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

-USA

Printing date 07/28/2010 Reviewed on 04/05/2010

## 1 Identification of substance

· Product details

· Trade name: Blocking Reagent

· Product number: FP1020

· Application of the substance / the preparation Laboratory chemicals

· Manufacturer/Supplier:

Akoya Biosciences

100 Campus Drive, 6th Floor Marlborough, MA 01752

· Information department:

Technical Support

800-762-4000

Emergency information:

If inside USA, call CHEMTREC at 1-800-424-9300 If outside USA, call CHEMTREC at 1-703-527-3887

### 2 Composition/Data on components

- · Chemical characterization:
- CAS No. Description 9000-71-9 casein
- · Identification number(s) N/A

## 3 Hazards identification

- · Hazard description: Not applicable.
- · Information pertaining to particular dangers for man and environment: Not applicable.
- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0Fire = 0Reactivity = 0

· HMIS-ratings (scale 0 - 4)



Health = 0Fire = 0

REACTIVITY 0 Reactivity = 0

· GHS label elements Void

### 4 First aid measures

- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.

Printing date 07/28/2010 Reviewed on 04/05/2010

Trade name: Blocking Reagent

(Contd. of page 1)

### 5 Fire fighting measures

· Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· **Protective equipment:** Wear self-contained respiratory protective device.

### 6 Accidental release measures

- · Person-related safety precautions: Not required.
- · Measures for environmental protection: Do not allow to enter sewers/surface or ground water.
- · Measures for cleaning/collecting: Pick up mechanically.
- · Additional information: No dangerous substances are released.

### 7 Handling and storage

- · Handling:
- · Information for safe handling: No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.

## 8 Exposure controls and personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Components with limit values that require monitoring at the workplace: Not required.
- · Additional information: The lists that were valid during the creation were used as basis.
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

- · Breathing equipment: Not required.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection: Not required.

# 9 Physical and chemical properties

· General Information

Form: Solid

(Contd. on page 3)

Printing date 07/28/2010 Reviewed on 04/05/2010

Trade name: Blocking Reagent

		(Contd. of page 2
Color: Odor:	According to product specification Characteristic	
· Change in condition Melting point/Melting range: Boiling point/Boiling range:		
· Flash point:	Not applicable.	
· Flammability (solid, gaseous):	Product is not flammable.	
Danger of explosion:	Product does not present an explosion hazard.	
Density:	Not determined.	
Solubility in / Miscibility with Water:	Insoluble.	
· pH-value: · Organic solvents:	N/A 0.0 %	

## 10 Stability and reactivity

- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Materials to be avoided:
- · Dangerous reactions No dangerous reactions known.
- · Dangerous products of decomposition: No dangerous decomposition products known.

### 11 Toxicological information

- · Acute toxicity:
- · Primary irritant effect:
- · on the skin: May cause skin irritation.
- · on the eye: May cause eye irritation.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

The substance is not subject to classification.

### 12 Ecological information

· Other information: N/A

## 13 Disposal considerations

- · Product:
- · Recommendation: Must be specially treated adhering to official regulations.
- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

USA

Printing date 07/28/2010 Reviewed on 04/05/2010

Trade name: Blocking Reagent

(Contd. of page 3)

### 14 Transport information

- · Land transport ADR/RID (cross-border):
- · ADR/RID class: -
- · Maritime transport IMDG:
- · Marine pollutant: No
- · UN "Model Regulation": -
- · Transport/Additional information: Not dangerous according to the above specifications.

## 15 Regulations

- · Sara
- · Section 355 (extremely hazardous substances):

Substance is not listed.

Section 313 (Specific toxic chemical listings):

Substance is not listed.

TSCA (Toxic Substances Control Act):

Substance is not listed.

- · Proposition 65
- · Chemicals known to cause cancer:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

· Chemicals known to cause developmental toxicity:

Substance is not listed.

- · Cancerogenity categories
- · EPA (Environmental Protection Agency)

Substance is not listed.

· IARC (International Agency for Research on Cancer)

Substance is not listed.

· NTP (National Toxicology Program)

Substance is not listed.

· TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

· NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

· Product related hazard informations:

Observe the general safety regulations when handling chemicals.

(Contd. on page 5)

Printing date 07/28/2010 Reviewed on 04/05/2010

Trade name: Blocking Reagent

(Contd. of page 4)

The substance is not subject to classification according to the sources of literature known to us.

## 16 Other information

The information provided in this Material Safety Data Sheet is based on our present knowledge, and believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be considered a warranty or quality specification. All materials may present unknown hazards, and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards which exist. PerkinElmer Life and Analytical Sciences shall not be held liable for any damage resulting from handling or from contact with the product.

- · Department issuing MSDS: EHS
- · Contact:

Technical Support 800-762-4000

#### · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

- USA

Printing date 07/28/2010 Reviewed on 06/30/2010

## 1 Identification of substance

- · Product details
- · Trade name: Streptavidin HRP
- · Product number: TS-000300
- · Application of the substance / the preparation Laboratory chemicals
- · Manufacturer/Supplier:

Akoya Biosciences

100 Campus Drive, 6th Floor

Marlborough, MA 01752

· Information department:

Technical Support

800-762-4000

Emergency information:

If inside USA, call CHEMTREC at 1-800-424-9300

If outside USA, call CHEMTREC at 1-703-527-3887

### 2 Composition/Data on components

- · Chemical characterization
- **Description:** Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components: Void

· Additional Components			
7732-18-5	Water	50-75%	
99-20-7	trehalose	10-25%	
68-04-2	Sodium Citrate	2.5-10%	
7647-14-5	sodium chloride	1-2.5%	
9048-46-8	Albumins, blood serum	1-2.5%	

# 3 Hazards identification

- · Hazard description: Not applicable.
- Information pertaining to particular dangers for man and environment:

The product does not have to be labelled due to the calculation procedure of international guidelines.

· Classification system:

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· NFPA ratings (scale 0 - 4)



Health = 0

Fire = 0

Reactivity = 0

· HMIS-ratings (scale 0 - 4)



 $0 \quad Health = 0$ 

Fire = 0

REACTIVITY 0 Reactivity = 0

· GHS label elements Void

USA

Printing date 07/28/2010 Reviewed on 06/30/2010

Trade name: Streptavidin HRP

(Contd. of page 1)

### 4 First aid measures

- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: If skin irritation continues, consult a doctor.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.

### 5 Fire fighting measures

· Suitable extinguishing agents:

CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· Protective equipment: Wear self-contained respiratory protective device.

### 6 Accidental release measures

- · Person-related safety precautions: Not required.
- · Measures for environmental protection: Do not allow to enter sewers/ surface or ground water.
- · Measures for cleaning/collecting:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- · Additional information: No dangerous substances are released.

### 7 Handling and storage

- · Handling:
- · Information for safe handling: No special measures required.
- Information about protection against explosions and fires: No special measures required.
- Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.

### 8 Exposure controls and personal protection

- · Additional information about design of technical systems: No further data; see item 7.
- · Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

- · Additional information: The lists that were valid during the creation were used as basis.
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

- · Breathing equipment: Use suitable respiratory protective device in case of insufficient ventilation.
- · Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

(Contd. on page 3)

-1101

Printing date 07/28/2010 Reviewed on 06/30/2010

Trade name: Streptavidin HRP

(Contd. of page 2)

### · Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

#### · Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection: Goggles recommended during refilling.

# 9 Physical and chemical properties

· General Information	
Form: Color:	Fluid According to product specification
Odor:	Characteristic
· Change in condition Melting point/Melting range: Boiling point/Boiling range:	
· Flash point:	Not applicable.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Vapor pressure at 20°C (68°F): 23 hPa (17 mm Hg)	
· Density:	Not determined.
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· pH-value:	N/A
· Solvent content: Organic solvents: Water:	0.0 % 73.7 %
Solids content:	2.5 %

### 10 Stability and reactivity

- · Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Materials to be avoided:
- · Dangerous reactions No dangerous reactions known.
- · Dangerous products of decomposition: No dangerous decomposition products known.

### 11 Toxicological information

- · Acute toxicity:
- Primary irritant effect:
- · on the skin: May cause skin irritation.
- · on the eye: May cause eye irritation.
- · Sensitization: No sensitizing effects known.

(Contd. on page 4)

Printing date 07/28/2010 Reviewed on 06/30/2010

Trade name: Streptavidin HRP

(Contd. of page 3)

· Additional toxicological information:

The product is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

### 12 Ecological information

· Other information: N/A

### 13 Disposal considerations

- · Product:
- · Recommendation: Must be specially treated adhering to official regulations.
- · Uncleaned packagings:
- · Recommendation: Disposal must be made according to official regulations.

### 14 Transport information

- · DOT regulations:
- · Hazard class:
- · Land transport ADR/RID (cross-border):
- · ADR/RID class:
- · Maritime transport IMDG:
- · IMDG Class:
- · Marine pollutant: No
- · Air transport ICAO-TI and IATA-DGR:
- · ICAO/IATA Class: -
- · UN "Model Regulation": -
- · Transport/Additional information: Not dangerous according to the above specifications.

## 15 Regulations

- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

None of the ingredients is listed.

- Proposition 65
- · Chemicals known to cause cancer:

None of the ingredients is listed.

(Contd. on page 5)

Printing date 07/28/2010 Reviewed on 06/30/2010

Trade name: Streptavidin HRP

(Contd. of page 4)

#### · Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

#### Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

### Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

#### · Cancerogenity categories

#### · EPA (Environmental Protection Agency)

None of the ingredients is listed.

### · IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

#### · NTP (National Toxicology Program)

None of the ingredients is listed.

### · TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

### · NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

#### · OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

#### · Product related hazard informations:

Observe the general safety regulations when handling chemicals.

The product is not subject to identification regulations according to directives on hazardous materials.

# 16 Other information

The information provided in this Material Safety Data Sheet is based on our present knowledge, and believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be considered a warranty or quality specification. All materials may present unknown hazards, and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards which exist. PerkinElmer Life and Analytical Sciences shall not be held liable for any damage resulting from handling or from contact with the product.

#### · Department issuing MSDS: EHS

### · Contact:

Technical Support 800-762-4000

#### · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organization

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

ACGIH: American Conference of Governmental Industrial Hygienists

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)