

SAFETY DATA SHEET

According to Regulations
(EC) No. 1272/2008 and (EU) No. 453/2010

Cytodetect™ kit

1. Identification

1.1 Product Identifier

Product Name:	Cytodetect™ kit	
Product Number:	IQP-366	
REACH No.:	A registration number is not available for this mixture as the mixture or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.	
CAS No.:	Phorbol 12-Myristate 13-Acetate (PMA)	CAS No. 16561-29-8
	Ionomycin	CAS No. 56092-81-0
	Monensin	CAS No. 56092-82-1
	Sodium Azide	CAS No. 26628-22-8
	Paraformaldehyde	CAS No. 30525-89-4
	Saponin	CAS No. 8047-15-2

1.2 Relevant identified uses of the substance or mixture and uses advised against

The Cytodetect™ is available as a 50 tests kit. The product is composed of a set of reagents, i.e. Cytodetect™ Reagent A, B, C, D, E, F and G. Reagents A, B and C are solid and reagents D, E, F and G are liquid containing the ingredients as presented above. This product is intended for research use only. Not for use in humans. Not for *in vivo* use.

1.3 Details of the supplier of the safety data sheet

Company:	IQ PRODUCTS BV
Address:	Rozenburglaan 13a 9727 DL GRONINGEN THE NETHERLANDS
Telephone:	+31-50-5757000
Fax:	+31-50-5757002
E-mail address:	marketing@iqproducts.nl
Website:	www.iqproducts.nl

1.4 Emergency telephone numbers

Emergency Phone # 112

2. Hazard Identification

2.1 Classification of the substance or mixture

There are no reported further health hazards for the product in the current formulation and applications. Only reagents A, B, C, E and G contain dangerous substances in amounts that need to be hazard labeled according to EC Regulation No. 1272/2008. All other components of the product contain substances that may be hazardous when available in significant amounts and should be treated as potentially biohazardous.

Kit Components:

Reagent A: Stimulation reagent (A);

Reagent B: Stimulation reagent (B);

Reagent C: Accumulation reagent (C);

Reagent D: Washing Solution (10xD);

Reagent E: Fixative solution (E);

Reagent F: Permeabilization buffer (10xF);

Reagent G: Permeabilization reagent (100xG)

2.2 Label elements**Hazard Pictograms (GHS-US):**

Reagent A:	
Reagent B:	
Reagent C:	
Reagent D:	NOT APPLICABLE
Reagent E:	
Reagent F:	NOT APPLICABLE
Reagent G:	

Signal Word (GHS-US):

Reagent A: WARNING
 Reagent B: WARNING
 Reagent C: DANGER
 Reagent D: NOT APPLICABLE
 Reagent E: DANGER
 Reagent F: NOT APPLICABLE
 Reagent G: DANGER

Hazard Statements (GHS_US):

Reagent A	Reagent B	Reagent C	Reagent D	Reagent E	Reagent F	Reagent G
H315 Causes skin irritation	H302 Harmful if swallowed	H300 Fatal if swallowed	None apply	H302 Harmful if swallowed	None apply	H319 Causes serious eye irritation
H319 Causes serious eye irritation				H315 Causes skin irritation		H335 May cause respiratory irritation
H335 May cause respiratory irritation				H317 May cause an allergic skin reaction		
				H318 Causes serious eye damage		
				H332 Harmful if inhaled		
				H335 May cause respiratory irritation		
				H351 Suspected of causing cancer		

Precautionary Statements (GHS-US):

Reagent A	Reagent B	Reagent C	Reagent D	Reagent E	Reagent F	Reagent G
P302 + P350 If on skin, gently wash with plenty of soap and water	P301 + P310 If swallowed, immediately call a poison center or doctor/physician	P301 + P310 If swallowed, immediately call a poison center or doctor/physician	None apply	P301 + P310 If swallowed, immediately call a poison center or doctor/physician	None apply	P301 + P310 If swallowed, immediately call a poison center or doctor/physician
P305 + P351 + P338 If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.				P305 + P351 + P338 If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.		P305 + P351 + P338 If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
				P302 + P350 If on skin, gently wash with plenty of soap and water		P302 + P350 If on skin, gently wash with plenty of soap and water
						P304 + P340 If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing.

General

Reagent A	Reagent B	Reagent C	Reagent D	Reagent E	Reagent F	Reagent G
P280 Wear protective gloves / protective clothing / eye protection / face protection	P264 Wash hands thoroughly after handling	P262 Do not get in eyes, on skin or on clothing	P280 Wear protective gloves / protective clothing / eye protection / face protection	P210 Keep away from heat / sparks / open flames / hot surfaces – no smoking	P280 Wear protective gloves / protective clothing / eye protection / face protection	P261 Avoid breathing dust/fume/gas/mist/vapors/spray
	P330 Rinse mouth	P264 Wash hands thoroughly after handling		P261 Avoid breathing dust / fume / gas / mist / vapours / spray		P262 Do not get in eyes, on skin or on clothing
				P280 Wear protective gloves / protective clothing / eye protection / face protection		P280 Wear protective gloves / protective clothing / eye protection / face protection
				P262 Do not get in eyes, on skin or on clothing		

2.3 Other Hazards

All reagents should be handled in accordance with good laboratory practices using appropriate precautions. In addition, handle all patient samples with appropriate precautions as described in "Biosafety in Microbial and Biomedical Laboratories", 2nd ed., 1988. HHS Publication No. (CDC) 88-8395, Centers for Disease Control.

There are no reported further health hazards for the product in the current formulation and applications. The product contain substances that may be hazardous when available in significant amounts and should be treated as potentially biohazardous. No toxic effects are to be expected when the product is handled appropriately. The product may enter the body through inhalation, ingestion, skin contact and eye contact.

Sodium azide forms explosive compounds with heavy metals. Components of this product contain azide < 0,1% (w/v). Repeated contact of these components with lead and copper, commonly found in plumbing drains, should be avoided as this may result in the buildup of shock-sensitive compound. On disposal, flush with large amounts of water to prevent azide build-up.








3. Composition/Information on ingredients

3.1 Substances

Not applicable.

3.2 Mixtures

Composition of the product:

250 µl	Reagent A , Stimulation reagent (A) – containing PMA  WARNING
75 µl	Reagent B , Stimulation reagent (B) – containing Ionomycin  WARNING
250 µl	Reagent C , Accumulation reagent – containing Monensin  DANGER
100 ml	Reagent D , Washing solution (10xD) – containing Sodium azide
25 ml	Reagent E , Fixative solution – containing Sodium azide and Paraformaldehyde    DANGER
75 ml	Reagent F , Permeabilization buffer (10XF) – containing Sodium azide
7.5 ml	Reagent G , Permeabilization reagent (100XG) – containing Sodium azide and saponin  WARNING

Information on ingredients:

Phorbol 12-Myristate 13-Acetate (PMA)	CAS No. 16561-29-8	< 0.15% (w/v)
Ionomycin	CAS No. 56092-81-0	< 0.15% (w/v)
Monensin	CAS No. 56092-82-1	< 100%
Sodium Azide	CAS No. 26628-22-8	< 0.1% (w/v)
Paraformaldehyde	CAS No. 30525-89-4	< 5% (w/v)
Saponin	CAS No. 8047-15-2	< 16% (w/v)

4. First-aid Measures

4.1 Description of first aid measures

Inhalation:	Expose to fresh air. If breathing problems persist seek medical advice.
Skin Contact:	Wash with plenty of water for 15 minutes. Remove contaminated clothing. Seek medical advice.
Eye Contact:	Rinse with water for 15 minutes and seek medical advice.
Ingestion:	Rinse mouth with water for 15 minutes and seek medical advice.

4.2 Most important symptoms and effects, both acute and delayed

Not available.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that over exposure to materials other than this product may have occurred. Also see above under section 4.1.

5. Fire-fighting Measures

5.1 Extinguishing media

Extinguishing Media:	Use carbon dioxide, dry chemical extinguisher or water.
Protective Equipment:	An approved self-contained breathing apparatus and protective clothing should be used.
Special Fire and Explosion Hazards:	No special hazards determined.
Hazard Combustion Products:	Due to the composition and volume of this product, combustion products generated from it are not expected to present a significant hazard.

5.2 Special hazards arising from the substance or mixture

No special hazards determined.

5.3 Advice for firefighters

This product does not cause special protective equipment to be required. In the event of a large laboratory fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full-face piece operated in the pressure demand or other positive pressure mode. Water spray may be used to keep fire-exposed containers cool. Poisonous gases may be produced in fires.

6. Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Use universal precautions, appropriate personal protective equipment and standard safe laboratory practices to clean up spilled substance promptly. Absorb spill onto an appropriate material. Avoid contact with eyes, skin and clothing. Wear safety glasses and protective gloves.

6.2 Environmental Precautions

No known environmental precautions. Avoid release to the environment.

6.3 Methods and Material for Containment and Cleaning Up

Soak up spills with an appropriate absorbent material. Consult local, state, or federal regulations for proper disposal.

6.4 Reference to Other Sections

Follow protective measures provided in Sections 7 and 8.

7. Handling and storage

7.1 Precautions for safe handling

All reagents should be handled in accordance with good laboratory practices using appropriate precautions:

- No eating, drinking, or smoking in work areas
- Wash hands after use
- Remove contaminated clothing and protective equipment before leaving work area
- Avoid inhaling, ingesting, and contact with eyes and skin.

In addition, this product should be handled as though capable of transmitting infectious diseases. Universal precautions should be followed when using this product.

7.2 Conditions for Safe Storage, Including Any Incompatibilities

All components of the Cytodetect™ kit are stable if stored according to appropriate conditions until the expiration date as indicated on the label and on each component provided. Storage conditions recommended: 2 to 8 °C. Protect the kit from temperatures above 30°C and from prolonged time at room temperature. Do not freeze. Avoid direct sunlight.

7.3 Specific End Use(s)

The intended use is mentioned in section 1.2 no other specific uses are stipulated.

8. Exposure controls/personal protection

8.1 Control parameters

The product does not contain any materials that need to be monitored at the workplace.

8.2 Exposure controls

Universal precautions should be followed when using this product.

Wear appropriate personal protective equipment and follow safe laboratory practices.



Pictograms:

Respiratory: None required when product is used as recommended

Hands: Wear protective gloves according to EN 166

Eye / Face: Wear safety glasses according to EN 374

Skin / Body: None required

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

	Reagent A	Reagent B	Reagent C	Reagent D	Reagent E	Reagent F	Reagent G
Appearance	Lyophilized	Lyophilized	Solid, dry, white powder	Liquid, clear, colorless	Liquid, clear, faint pink	Liquid, clear, faint yellow	Liquid, clear, light yellow
Odour	No data available	No data available	No data available	No data available	No data available	No data available	No data available
Odour Threshold	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
pH	No data available	No data available	Not applicable	7,2 - 7,4	No data available	No data available	No data available
Melting point/freezing point	No data available	No data available	No data available	No data available	No data available	No data available	No data available
Initial boiling point and boiling range	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Flash point	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Evaporation rate	No data available	No data available	No data available	No data available	No data available	No data available	No data available
Flammability	No data available	No data available	No data available	No data available	No data available	No data available	No data available
Upper/lower Flammability or explosive limits	No data available	No data available	No data available	No data available	No data available	No data available	No data available
Vapour pressure	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Vapour density	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Relative density	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Water solubility	Fully miscible in water	Fully miscible in water	Fully miscible in water	Fully miscible in water	Fully miscible in water	Fully miscible in water	Fully miscible in water
Partition coefficient: n-octanol/water	No data available	No data available	No data available	No data available	No data available	No data available	No data available
Auto-ignition temperature	Not self-igniting data available	Not self-igniting data available	Not self-igniting data available	Not self-igniting data available	Not self-igniting data available	Not self-igniting data available	Not self-igniting data available
Decomposition temperature	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Viscosity	No data available	No data available	No data available	No data available	No data available	No data available	No data available
Explosive properties	Product is not explosive	Product is not explosive	Product is not explosive	Product is not explosive	Product is not explosive	Product is not explosive	Product is not explosive
Oxidizing properties	Product is not oxidizing	Product is not oxidizing	Product is not oxidizing	Product is not oxidizing	Product is not oxidizing	Product is not oxidizing	Product is not oxidizing

9.2 Other information

No other information available.

10. Stability and Reactivity

10.1 Reactivity

No known reactivity.

10.2 Chemical Stability

The product is stable under ambient storage and handling temperatures and under normal pressures.

10.3 Possibility of Hazardous Reactions

No hazardous reactions known when handled properly.

10.4 Conditions to Avoid

None identified.

10.5 Incompatible Materials

Metals and metallic compounds. Strong acids, strong oxidizing agents, powdered metals and reducing agents. Sodium azide forms explosive compounds with heavy metals. Components of this product contain azide < 0,1% (w/v). Repeated contact of these components with lead and copper, commonly found in plumbing drains, should be avoided as this may result in the buildup of shock-sensitive compound. No hazardous incompatibilities identified.

10.6 Hazardous Decomposition Products

No hazardous decomposition products are known to be formed by this product.

11. Toxicological information

11.1 Information on toxicological effects

Acute Toxicity: No toxic effect known.

Skin Corrosion/Irritation: No irritant effect known.

Serious Eye Damage/Irritation: No irritant effect known.

Respiratory or Skin Sensitization: No sensitizing effect known.

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.

Reproductive toxicity: No data available

STOT-single exposure: No data available

STOT-repeated exposure: No data available

Aspiration Hazard: Not Classified

Toxicity on Repeated Exposure: No toxic effect known.

12. Ecological information

12.1 Toxicity

Undetermined.

12.2 Persistence and Degradability

Undetermined.

12.3 Bioaccumulative Potential

Undetermined.

12.4 Mobility in Soil

Undetermined.

12.5 Results of PBT and vPvB Assessment

Undetermined.

12.6 Other Adverse Effects

No adverse effects are known when handled and disposed properly.

13. Disposal considerations

13.1 Waste treatment methods

Product:

There are no uniform EC regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding laws and regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.

Contaminated Packaging:

Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

14. Transport information

14.1 UN Number

Not determined.

14.2 UN Proper Shipping Name

Not determined.

14.3 Transport Hazard Class

Not determined.

14.4 Packing Group

Not classified.

14.5 Environmental Hazards

Not classified.

14.6 Special Precautions for Users

See subsections 6-8.

14.7 Transport in Bulk According to Annex II of MARPOL73/78 and the IBC Code

This product is provided only in non-bulk containers.

15. Regulatory information

15.1 Safety, health and environmental regulations specific for the substance or mixture

SARA Section 311/312 Hazard Classes are not applicable. This product is not classified. To the best of our knowledge, safety, health, and environmental regulations according to Regulation (EC) No. 1907/2006-REACH are not applicable.

15.2 Chemical safety assessment

No chemical safety assessment has been carried out.

16. Other information

Changes to the previous version

This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910:1200 and complies with Regulation (EC) 453/2010.

Literature References

Regulation (EC) No. 1272 / 2008

Regulation (EU) No.453 / 2010

Regulation (EC) No. 1907 / 2006

Disclaimer/Statement of Liability

The information presented in this Safety Data Sheet is based on the present state of our knowledge. The product should be used according to the instructions provided by the manufacturer, see "Instructions for use" as presented in the package insert accompanying every product. We make no warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. The product should be used according to the instructions provided by the manufacturer, see "instructions for use" as presented in the Package Insert accompanying every product. *IQ Products BV* nor any distributors thereof shall not be held liable for any claims, losses, or damages resulting from handling or from contact with the product.

This document can be found on our website, www.iqproducts.nl. Copies may also be requested by sending an email request to marketing@iqproducts.nl or by contacting your local product distributor.