# **Product Datasheet**

# Plasmacytoid Dendritic Cell Kit NBP2-29610

Unit Size: 1 Kit

Store at 4C. Do not freeze.

www.novusbio.com



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**Publications: 1** 

Protocols, Publications, Related Products, Reviews, Research Tools and Images at: www.novusbio.com/NBP2-29610

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# NBP2-29610

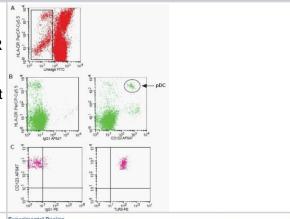
Plasmacytoid Dendritic Cell Assay Kit

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| <b>Product Information</b>         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Unit Size                          | 1 Kit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Concentration                      | Concentration is not relevant for this product. Please see the protocols for proper use of this product.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Storage                            | Store at 4C. Do not freeze.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Product Description</b>         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Species                            | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Kit Components                     | hLMAX: Human Lineage Marker Antibody Mix, (Human CD3- CD14-CD16-CD19-CD20-CD56-HLA-DR antibodies)* 10 ul/test 300 ul, CD123 AF647 (human CD123 Alexa Fluor 647 conjugate) antibody 5 ul/test 125 ul, TLR9 PE (human TLR9 PE conjugate) antibody 5 ul/test 125 ul, Mouse IgG1 Isotype control Alexa Fluor 647 conjugate antibody 5 ul/test 125 ul, Mouse IgG1 Isotype control PE conjugate antibody 5 ul/test 125 ul, Staining buffer (1X) 2 x 60 ml, Fixation buffer (1X) 60 ml, Permeabilization buffer (10X) 2 x 60 ml                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Product Application Details</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Applications                       | Flow Cytometry                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Recommended Dilutions              | Flow Cytometry                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Application Notes                  | Plasmacytoid Dendritic Cell (pDC)/TLR9 Kit is validated by Flow Cytometry for identifying human TLR9 expression in pDC from human whole blood, freshly isolated peripheral blood mononuclear cells (PBMC) and frozen PBMC. Before you begin:  It is recommended that users follow the protocol provided for the best results with this kit. Permeabilization buffer is supplied as a 10X solution. Dilute with deionized water to its fi nal 1X working concentration immediately prior to use (example: 1 ml of 10X Permeabilization buffer to 9 ml of deionized water). Single color (AF647, FITC, PE, PerCP-Cy5.5) stained samples are recommended as compensation controls for fl ow cytometric analysis. Reagents for compensation controls are not provided in this kit. All staining and incubation steps should be done using light protected procedures. Commonly this is done by covering the sample racks or ice bucket with tin foil. |

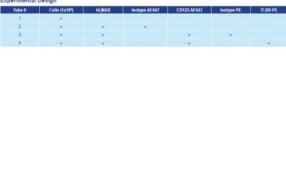


# **Images**

Flow Cytometry: Plasmacytoid Dendritic Cell Assay Kit [NBP2-29610] - A. Cell surface staining of fresh PBMC with hLMAX. Lineage negative and HLA-DR positive cells were gated. B. Lineage negative and HLA-DR positive cells were analyzed for Mouse IgG1 (left panel) or CD123 (right panel). The pDC population (CD123 positive and HLA-DR high) was gated. C. pDCs were analyzed for Mouse IgG1 (left panel) or TLR9 (right panel). The pDC were TLR9 positive.



Plasmacytoid Dendritic Cell Assay Kit [NBP2-29610]



## **Publications**

Sato D, Suzuki Y, Kano T et al. Tonsillar TLR9 expression and efficacy of tonsillectomy with steroid pulse therapy in IgA nephropathy patients. Nephrol Dial Transplant. 2012 Mar [PMID: 21778277] (Flow-CS, Flow-IC, Human)

#### Details:

Plasmacytoid Dendritic Cell (pDC)/TLR9 Kit (IMG-6630K) & Human Lineage Marker/HLA-DR Antibody Mix (hLMAX). Flow (cell surface & intracellular): Primary human tonsillar B cells, Fig 3B.



## **Procedures**

# MSDS (NBP2-29610)

Paraformaldehyde

Hazard Information

Chemical Name: Paraformaldehyde

CAS Number: 30525-89-4

#### Hazard Identification

Inflammation, blistering, irritation, blindness, watering eyes, eye redness, itchy eyes.

#### First Aid Measures

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Consult a physician.

Skin Contact: Flush skin with excess amounts of water for at least 15 minutes. No known effect from skin contact. Inhalation: Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. SPEED IS ESSENTIAL, OBTAIN MEDICAL AID IMMEDIATELY.

Ingestion: If swallowed, get medical aid immediately. Only induce vomiting if directed to do so by medical personnel. Never give anything by mouth to an unconscious person.

## Handling and Storage

Handling: Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Store at 4oC. Store in a tightly closed container. Light and moisture sensitive.

Exposure Controls / Personal Protection

Gloves: Protect the skin by handling with rubber/latex gloves.

Eye Protection: Protect eyes by wearing face shield and safety goggles.

Other Precautions: Wear appropriate protective clothing.

# Physical and Chemical Properties

Form: Liquid Color: Colorless Odor: Odorless

Melting Point: No data available

Boiling Temperature: No data available

Density: No data available

Vapor Pressure: No data available
Solubility in Water: Very Low
Flash Point: No data available
Explosion limits: No data available
Ignition Temperature: No data available

#### Stability and Reactivity

Stable under recommended storage conditions.

## **Disposal Considerations**

Chemical residues are generally classified as special waste, and as such covered by regulations which vary according to location. Contact your local waste disposal authority for advice, or pass to chemical disposal company. Rinse out empty containers thoroughly before disposal.

#### Other Information

The information contained in this material safety datasheet is believed to be accurate but it is the responsibility of the user to determine the applicability of these data to the formulation of necessary safety precautions. NOVUS shall not be held responsible for any damage resulting from the use of the above product or the information contained in this material safety data sheet.

#### Saponin



Hazard Information

Chemical Name: Saponin CAS Number: 8047-15-2

#### Hazard Identification

Irritation, eye inflammation, redness, watering

First Aid Measures

Eye Contact: Causes very serious eye irritation.

Skin Contact: May cause skin irritation.

Inhalation: May causes serious respiratory tract irritation. Harmful if inhaled.

Ingestion: May be harmful if swallowed. Call a physician.

## Handling and Storage

Handling: Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Store at 4oC in a tightly closed container.

Exposure Controls / Personal Protection

Gloves: Protect the skin by handling with rubber/latex gloves.

Eye Protection: Protect eyes by wearing face shield and safety goggles.

Other Precautions: Wear appropriate protective clothing.

# Physical and Chemical Properties

Form: Liquid Color: Brown Odor: Odorless

Melting Point: No data available

Boiling Temperature: No data available

Density: No data available

Vapor Pressure: No data available Solubility in Water: Very Low Flash Point: No data available Explosion limits: No data available Ignition Temperature: No data available

# Stability and Reactivity

Stable under recommended storage conditions.

# **Disposal Considerations**

Chemical residues are generally classified as special waste, and as such covered by regulations which vary according to location. Contact your local waste disposal authority for advice, or pass to chemical disposal company. Rinse out empty containers thoroughly before disposal.

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#### Sodium Azide

Hazard Information

Chemical Name: Sodium Azide Chemical Formula: NaN3 CAS Number: 26628-22-8

EEC-No: 247-852-1

## Hazard Identification



Very toxic if swallowed. Contact with acids liberates very toxic gas.

#### First Aid Measures

Eye Contact: Irrigate thoroughly with water for at least 15 minutes. Seek medical advice.

Skin Contact: Wash skin thoroughly with soap and water for at least 15 minutes. Remove contaminated clothing and wash before re-use. In severe cases, obtain medical attention.

Inhalation: Remove from exposure, rest and keep warm. In severe cases, seek medical advice.

Ingestion: Wash out mouth thoroughly with water and give plenty of water to drink. Seek medical advice.

## Accidental Release Measures

Wear appropriate protective clothing. Inform others to keep a safe distance. Spread soda ash liberally over spillage. If local regulations permit, mop up cautiously with plenty of water and run to waste, diluting greatly with running water. Otherwise transfer to container and arrange removal by disposal company. Wash site of spillage thoroughly with water.

#### Handling and Storage

Handling: Avoid prolonged contact with copper or lead, especially in drainage systems or mercury and other heavy metals which may result in the formation of explosive azides. Under no circumstances eat, drink or smoke while handling this material. Wash hands thoroughly after working with this material. Contaminated clothing should be removed and washed before re-use.

Exposure Controls / Personal Protection

Respirator: Dust respirator Ventilation: Extraction hood Gloves: Rubber or plastic

Eye Protection: Lab goggles or face shield

Other Precautions: Plastic apron, sleeves, boots - if handling large quantities.

# Physical and Chemical Properties

Form: Liquid Color: Colorless Odor: Odorless

Melting Point: No data available

Boiling Temperature: No data available

Density: No data available

Vapor Pressure: No data available Solubility in Water: Very soluble Flash Point: No data available Explosion limits: No data available Ignition Temperature: No data available

# Stability and Reactivity

# Stable unless heated.

Slow reaction at ambient temperature unless water contains dissolved carbon dioxide. Decomposes violently with chromyl chloride. Contact with acids liberates highly toxic gas: forms readily detonable salts with many materials, particularly heavy metals.

#### Toxicological Information

After ingestion, irritation of mucous membranes in the mouth, pharynx, esophagus and gastrointestinal tract. Danger of skin absorption.

#### **Disposal Considerations**

Chemical residues are generally classified as special waste, and as such covered by regulations which vary according to location. Contact your local waste disposal authority for advice, or pass to chemical disposal company. Rinse out empty containers thoroughly before disposal.

#### Other Information

The information contained in this material safety datasheet is believed to be accurate but it is the responsibility of the



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#### Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Kits are guaranteed for 6 months from date of receipt.

For more information on our guarantee, please visit www.novusbio.com/guarantee.

