

# Product Datasheet

## Intracellular Staining Flow Cytometry Kit NBP2-29450

Unit Size: 1 Kit

Storage of components varies. See protocol for specific instructions.

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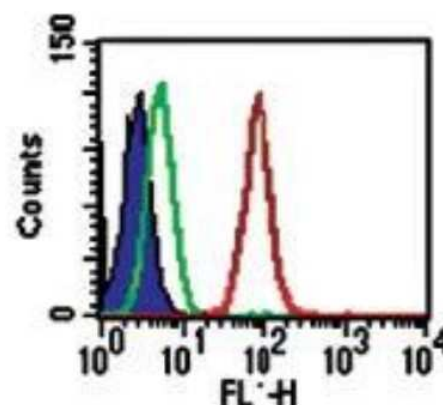


**NBP2-29450****Intracellular Staining Flow Cytometry Kit**

<b>Product Information</b>	
<b>Unit Size</b>	1 Kit
<b>Concentration</b>	Concentration is not relevant for this product. Please see the protocols for proper use of this product.
<b>Storage</b>	Storage of components varies. See protocol for specific instructions.
<b>Product Description</b>	
<b>Description</b>	This kit is optimized for intracellular staining of cells in flow cytometric applications. It is designed and optimized to minimize non-specific staining while maximizing signal-to-noise ratio for clear and consistent data.
<b>Species</b>	Human
<b>Reactivity Notes</b>	Human reactivity reported in scientific literature (PMID: 24804954).
<b>Kit Components</b>	1X Fixation Buffer (60 mL), 10X Permeabilization Buffer (2 x 60 mL), 1X Staining Buffer (2 x 60 mL), 1000X Brefeldin A (100 uL)
<b>Product Application Details</b>	
<b>Applications</b>	Flow Cytometry, Flow (Intracellular)
<b>Recommended Dilutions</b>	Flow Cytometry, Flow (Intracellular)
<b>Application Notes</b>	Brefeldin A is an inhibitor of intracellular protein transport. It blocks translocation of proteins from the endoplasmic reticulum to the Golgi apparatus and can enhance detection of some intracellular proteins. Researchers are encouraged to determine whether or not Brefeldin A is needed to assay for the protein of interest. Brefeldin A is light-sensitive, store at 4C in the dark. It should be diluted in culture media (1:1000) just prior to use. Add to cell culture and incubate for 4hr before harvesting cells. Use in Flow Intracellular reported in scientific literature (PMID 24804954).

**Images**

Flow Cytometry: Intracellular Staining Flow Cytometry Kit [NBP2-29450]  
 - Analysis of intracellular TLR9 in Ramos cells using IC-Flow kit to fix and permeabilize cells. Blue: Unstained Ramos cells, Green: Isotype control at 2 ug /10<sup>6</sup> Ramos cells, Red: Anti-TLR9 at 2 ug /10<sup>6</sup> Ramos cells.



## Publications

Zechner C, Henne WM, Sathe AA et al. Cellular abundance of sodium phosphate co-transporter SLC20A1/PiT1 and phosphate uptake are controlled post-transcriptionally by ESCRT The Journal of biological chemistry 2022-04-18 [PMID: 35447110] (FLOW)

Valencia Pacheco GJ, Pinzon Herrera F, Cruz Lopez JJ et al. Expression and activation of intracellular receptors TLR7, TLR8 and TLR9 in peripheral blood monocytes from HIV-infected patients. Colomb Med (Cali). 2013-06-30 [PMID: 24892454] (FLOW)

Burgener IA, Jungi TW. Antibodies specific for human or murine Toll-like receptors detect canine leukocytes by flow cytometry. Vet Immunol Immunopathol. 2008-07-15 [PMID: 18439687] (Flow Cytometry Control, Canine)

### Details:

Canine (dog) PBMC subpopulations: 1. 10083K [IC-Flow (Intracellular Staining Flow Assay) Kit.

Pradhan N, Pratheek BM, Garai A et al. Induction of apoptosis by Fe(salen)Cl through caspase-dependent pathway specifically in tumor cells. Cell Biol. Int. 2014-05-07 [PMID: 24804954] (Flow Cytometry Control, Human)

### Details:

Mouse splenocytes, human PBMC, Jurkat, EL4: Fig 5. GADPH was detected at ~36 kDa.

Sathe A, Reddy KV. TLR9 and RIG-I signaling in human endocervical epithelial cells modulates inflammatory responses of macrophages and dendritic cells in vitro. PLoS ONE. 2014-01-10 [PMID: 24409285] (WB, ICC/IF, Flow Cytometry Control, Human)

### Details:

End1/E6E7 endocervical epithelial cells: Flow (Intracellular), Fig 1C; IF (confocal microscopy), Fig 1D; WB, Figs S1A, S1C. Both CpG-ODN and Poly(I:C) stimulation upregulated TLR9 expression. TLR9 was detected at ~100 kDa in WB. Mouse monoclonal against T

Chamberlain ND, Kim SJ, Vila OM et al. Ligation of TLR7 by rheumatoid arthritis synovial fluid single strand RNA induces transcription of TNF-alpha in monocytes. Ann Rheum Dis. 2013-03-01 [PMID: 22730373]



## Procedures

### MSDS (NBP2-29450)

Intracellular Staining Flow Cytometry Kit:

#### Hazard Information

Chemical Name: Sodium Azide

Chemical Formula: NaN<sub>3</sub>

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 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.





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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.

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