

## PRODUCT INFORMATION SHEET

### ***IQ Perm - concentrate for cell permeabilization***

**IQ Perm**      **REF**    IQP-350      **VOLUME**    40 ml

**RUO**    **For Research Use Only**

- Summary**      Detection of intracellular antigens or substrates often require rapid fixation, usually by formaldehyde or glutaraldehyde, followed by treatment with a permeabilizing reagent. IQ Perm is such a permeabilizing reagent which utilizes Triton X-100 as the major active component that allows entry of antibodies and other probes. IQ Perm is suitable for permeabilization of both erythrocytes and leukocytes. Our experience has shown that IQ Perm is used at various dilutions, depending on the cells of interest.
- Usage**            IQ Perm is intended as a permeabilizing agent for fixed cells prior to antibody staining and subsequent analysis by flow cytometry. It is also suitable for immunofluorescence and in situ hybridization of intracellular probes and subsequent analysis by microscopy.  
For different type of cells, the dilution of IQ Perm should be optimized. For example, a 1:10 dilution of IQ Perm is often optimal erythrocytes, whereas a 1:4 dilution is more suitable for leukocytes.
- Applications**    Permeabilization of cells before:
- Flow Cytometry (intracellular staining)
  - Fluorescence microscopy
  - In-situ hybridization
- Availability**    IQ Perm is provided as a concentrate in 40 mL volume. This bottle is sufficient for 105 - 265 individual tests, depending upon the application using approximately one million cells for each assay.

### **IQ Perm procedure**

Note: Prior to preparing the working dilution of the IQ Perm verify that there is no precipitate in the bottle of concentrate. **If some precipitate has formed, mix well, then dilute.**

#### **Working procedure for erythrocytes**

1. Prepare a 1:10 dilution working solution from IQ Perm reagent concentrate:

IQ Perm concentrate	5 ml
Reagent grade water (H <sub>2</sub> O)	45 ml
2. Mix the solution well.
3. Make a 1:20 dilution EDTA anti-coagulated blood using PBS with 0.5% BSA.
4. Place 10 µL of the diluted cells into a 12 X 75 mm polystyrene plastic tube.
5. Add 0.75 mL glutaraldehyde (0.03% glutaraldehyde in PBS without BSA) to tube.
6. Vortex upon addition of glutaraldehyde to cells and intermittently during incubation at room temperature for 10 minutes. Avoid erythrocyte clump formation by ensuring cells remain in suspension during this fixation step.
7. Add 1.5 mL of IQ Perm working solution to each tube and incubate at room temperature for 10 minutes.
8. Vortex upon addition of the IQ Perm solution and at least twice during incubation, again minimizing cell aggregates.
9. Spin for 60 seconds with cell washer and discard for 5 seconds. Alternatively centrifuge at least 5 minutes in a centrifuge at 600 x g, and then discard supernatant.
10. Vortex tube for at least 15 seconds to completely disperse pellet.
11. The cells are now ready for staining.



### Handling and Storage

Store the working solution in the refrigerator (2-8°C) and keep the remaining stock solution at room temperature (20-25°C).

Working solution expires at 30 days or at detection of any cloudiness in the solution. Stock solution may be used until labeled outdate.

### Precautions

Follow proper laboratory procedure and precautions in accordance with federal, state, and local regulations when disposing of all materials.

All biologic specimens and materials with which they come into contact are to be considered biohazards and should be handled as if capable of transmitting infection.

**WARNING** - Reagent contains a dilute, but strong detergent, Triton X-100 (t-octylphenoxypolyethoxyethanol) which may be harmful if swallowed or if exposed to eyes. In case of exposure, rinse with plenty of water and seek medical advice.

**Warranty** Products sold hereunder are warranted only to conform to the quantity and contents stated on the label at the time of delivery to the customer. There are no warranties, expressed or implied, which extend beyond the description on the label of the product. IQ Products is not liable for property damage, personal injury, or economic loss caused by the product.

---

### Explanation of used symbols

	Description
	Catalogue number
	Caution, consult accompanying document
	Keep away from (sun)light
	Biological risks
	Temperature limitation (°C)
	Research Use Only
	Batch number
	Use by yyyy-mm-dd
	Manufacturer



IQ Products BV  
Rozenburglaan 13a  
9727 DL Groningen, The Netherlands

+31 (0)50 57 57 000  
 +31 (0)50 57 57 002  
 Technical [marketing@iqproducts.nl](mailto:marketing@iqproducts.nl)  
 Orders [orders@iqproducts.nl](mailto:orders@iqproducts.nl)  
 [www.iqproducts.nl](http://www.iqproducts.nl)