

# FLAER (proaerolysin)



iFluor TM 488

FLAER

100 test

**RUO**

## 1. PRODUCT DESCRIPTION

**Antigen:** Mammalian GPI Protein

**Purity:** >90% pure tested via polyacrylamide gel electrophoresis (PAGE)

**Concentration:** 50 µg/ml

**Tested application:** flow cytometry

**Species reactivity:** Human

**Storage instruction:** store in the dark at 2-8 °C

**Storage buffer:** aqueous buffered solution containing protein stabilizer and 0.09% sodium azide (NaN<sub>3</sub>).

**Recommended usage:** Immunostep's FLAER is utilized in a clinical laboratory setting for multiparameter flow cytometry. It is used in conjunction with antibodies such as CD45, CD33, CD24, CD15, and CD14 to detect PNH clones (FLAER-negative cells) within monocyte and granulocyte lineages. This method provides a sensitive and accurate test, which can be combined with the CD55/CD59 assay to detect PNH clones in red blood cells. This reagent is effective for direct immunofluorescence staining of human tissue for flow cytometric analysis using 1 test for 10<sup>6</sup> cells.

**Presentation:** liquid

## 2. ANTIGEN DETAILS

**Large description:** FLAER is a unique protein that binds tightly and specifically to mammalian glycol-phosphatidylinositol (GPI) anchored proteins on the cell surface. In healthy individuals, FLAER binds to nearly all GPI-expressing human lymphocytes, monocytes, and granulocytes. However, in patients with Paroxysmal Nocturnal Hemoglobinuria (PNH), white blood cells lose the expression of GPI-anchored cell-surface proteins, resulting in FLAER failing to bind to lymphocytes, monocytes, and granulocytes (1).

Detection of PNH clones can be achieved through flow cytometry using fluorescently labeled antibodies to other GPI-linked proteins such as CD59 and CD55. However, these antibodies have low binding affinity to GPI-anchored surface antigens, often leading to false-negative results. Due to FLAER's high binding affinity to the GPI anchor itself, only PNH cells, which lack the GPI-anchored surface protein, will be negative. This provides confirmatory results for the presence of PNH clones (2).

**Other Names:** Proaerolysin

**Gene ID:** 6964, 6965

**Molecular weight:** The molecular weight of FLAER (fluorescently labeled aerolysin), which is a variant of proaerolysin, is approximately 52 kDa.

Please, refer to [www.immunostep.com](http://www.immunostep.com) technical support for more information.

## 3. WARRANTY

Warranted only to conform to the quantity and contents stated on the label or in the product labelling at the time of delivery to the customer. Immunostep disclaims hereby other warranties. Immunostep's sole liability is limited to either the replacement of the products or refund of the purchase price.

## 4. REFERENCES

- Buckley JT. Purification of cloned proaerolysin released by a low protease mutant of *Aeromonas salmonicida*. *Biochem Cell Biol*. 1990 Jan;68(1):221-4. doi: 10.1139/o90-029. PMID: 2190617.
- Sutherland DR, Kuek N, Davidson J, Barth D, Chang H, Yeo E, Bamford S, Chin-Yee I, Keeney M. Diagnosing PNH with FLAER and multiparameter flow cytometry. *Cytometry B Clin Cytom*. 2007 May;72(3):167-77. doi: 10.1002/cyto.b.20151. PMID: 17285629.

## 5. EXPLANATION OF SYMBOLS



Form



Catalog reference



Contains sufficient for <n> test



Regulatory Status



Quantity per test



Research Use Only



Concentration



Manufacturer

## 6. MANUFACTURED BY: IMMUNOSTEP S.L.



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