

Fluclair™ Red

Fluclair™ is the quantum dot with low cytotoxicity, it is useful for labeling various cells containing stem cells.

Quantum dots are the inorganic fluorescent probes with more potent luminance and longer life than fluorescent dyes such as FITC, Cy and green fluorescent protein. Because Fluclair™ does not contain cadmium in the core region, it is feature that has low cytotoxicity compared with quantum dots containing cadmium so far. Therefore, it is useful for intracellular imaging and *in vivo* imaging after transplantation of cells that Fluclair™ is introduced.

This product is for laboratory research use only; use in any such application is the responsibility of the user.

[Concentration] : Indicated on the label

[Protocol for introduction into cells]

- 1) Dissolve cell penetrating peptides (octa-arginine, referred to as R8) in water to a concentration of 8.0 mmol/L. And filter sterilization is carried out using a 0.2 μ m filter.
- 2) Mix this product and R8 solution at a ratio of 1:1, store at room temperature for 15 minutes.
- 3) Prepare the cell suspension of $4 \times 10^4 \sim 1 \times 10^5$ cells/mL, mix the above mixed solution and cell suspension at a ratio of 1:40.
- 4) Incubate under the appropriate condition for 24 hours.
- 5) View the cells with an imaging instrument (emission 670 nm).

[Storage] : Store at 2 ~ 10°C, protect from light

[Package] : 250 μ L

[References] :

- 1) Ogihara, Y., Yukawa, H., Kameyama, T., Nishi, H., Onoshima, D., Ishikawa, T., Torimoto, T. and Baba, Y. : *Sci. Rep.*, **7**, 40047 (2017).
- 2) Yukawa, H. and Baba, Y. : *Anal. Chem.*, **89**, 2671 (2017).
- 3) Yukawa, H., Suzuki, K., Kano, Y., Yamada, T., Kaji, N., Ishikawa, T. and Baba, Y. : *Cell Med.*, **6**, 83 (2013).

FUJIFILM Wako Pure Chemical Corporation

1-2, Doshomachi 3-Chome, Chuo-Ku, Osaka 540-8605, Japan
Telephone : + 81-6-6203-3741
Facsimile : + 81-6-6201-5964
<http://fwk.fujifilm.co.jp>

FUJIFILM Wako Chemicals U.S.A. Corporation

1600 Bellwood Road
Richmond, VA 23237
U.S.A.
Telephone : + 1-804-271-7677
Facsimile : + 1-804-271-7791
<http://www.wakousa.com>

FUJIFILM Wako Chemicals Europe GmbH

Fuggerstrasse 12
D-41468 Neuss
Germany
Telephone : + 49-2131-311-0
Facsimile : + 49-2131-311100
<http://www.wako-chemicals.de>

2305KA2