

NIMT[®] FeOlabel Texas Red

Product Description

Product no F0-FL2-100, F0-FL2-500

Fluorescently labeled iron oxide nanoparticles for intracellular labeling of cells.

Contents and Storage

- ✓ NIMT[®]FeOlabel Texas Red

NIMT[®]FeOlabel Texas Red is shipped on ice. It should be stored at 2-8 °C upon arrival.

NIMT[®]FeOlabel Texas Red is stable for 6 months at 2-8 °C.

NIMT[®]FeOlabel Texas Red is for R&D use only.

Avoid exposure to light.

Quality Control

NIMT[®]FeOlabel Texas Red is tested to ensure lot-to-lot consistency. Functionality test of NIMT[®]FeOlabel Texas Red is done by examination of particle uptake using fluorescence microscopy.

NIMT[®]FeOlabel Texas Red is tested for absence of microbial contamination with blood agar plates, Sabouraud dextrose agar plates and fluid thioglycolate medium.

Introduction

NIMT[®]FeOlabel Texas Red is specially designed for efficient uptake into mammalian cells. NIMT[®]FeOlabel Texas Red is an imaging agent based on lipid coated nanoparticles with an iron oxide core formulated to yield high cellular uptake while minimizing cell cytotoxicity.

General Guidelines

Cell Culture

For commercially available cell lines we recommend following the suppliers guidelines regarding culture medium and supplement as well as subculturing and seeding conditions.

Cell conditions before labeling with NIMT[®]FeOlabel Texas Red:

- ✓ Cells should be subcultured 2-3 days before transfection to ensure normal cell metabolism.
- ✓ Antibiotics can be included in the medium used during labelling and the subsequent incubation.
- ✓ Serum can be included in the medium used during labelling and the subsequent incubation.

Cell labeling using NIMT[®]FeOlabel Texas Red

It is strongly recommended to test different amounts of NIMT[®]FeOlabel Texas Red per cell measured as pg iron/cell. Usually 10-100 pg iron/cell yields sufficient iron oxide labeling for studies using fluorescence microscopy and MRI. However this should be optimized for the particular cell line used. Outlined below is a general protocol for labeling of cells in vitro:

1. Calculate the amount of pg iron/cell. Multiply this amount with number of cells to be labeled.
2. **IMPORTANT!** Always dilute NIMT[®]FeOlabel Texas Red particles in sterile water before addition to cell culture.
3. Add NIMT[®]FeOlabel Texas Red particles suspended in water to the cell culture
4. Incubate 1 hour to overnight.
5. Analyze labeling by fluorescence microscopy