

Non-toxic Probe for Cell Staining Studies

Published date: March 3, 2015

Technology description

Novel non-toxic reagent for specifically detecting a cell membrane component

#biomedical #materials #researchtool #reagent

Northwestern University researchers have developed a new reagent for specifically staining phosphatidylethanolamine (PE) in cell membranes. PE is a major phospholipid found in cellular membranes, but it is difficult to study due to a dearth of molecular probes for its detection. There are only two specific PE binding molecules, and these exhibit toxicity when used in cell biology studies. This novel reagent modifies one of these PE-binding molecules such that its toxicity is drastically lowered. Furthermore, the staining process is simplified as this novel probe is rendered fluorescent by conjugation of GFP. This innovative staining reagent may enable many cell biology studies as it can be used in conjunction with flow cytometry and fluorescence microscopy for cell and tissue staining.

Application area

Live cell staining

Microinjection studies

Tissue and vesicular staining

Flow cytometry and fluorescence microscopy

Advantages

Nontoxic

Simple, single step staining

Specific for PE

Intense fluorescent signal

Institution

[Northwestern University](#)

Inventors

[Songwang Hou](#)

联系我们



叶先生

电话 : 021-65679356

手机 : 13414935137

邮箱 : yeyingsheng@zf-ym.com