

Fluorescein dyes and labelling kits, Thermo Scientific Pierce

Thermo
SCIENTIFIC

NEW PN

Fluorescein dyes are used in wide ranging applications including fluorescence microscopy, flow cytometry and immunofluorescence based assays such as Western blotting and ELISA.

FITC and NHS-fluorescein are reactive toward primary amine groups on proteins, peptides and other biomolecules, while fluorescein-5-maleimide and 5-IAF react with free sulfhydryls on cysteine residues.

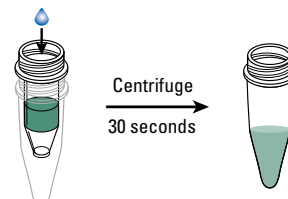
Most activated fluorescein derivatives are mixture of isomers with reactive groups attached at the 5- and 6-positions of the bottom ring. The properties of these isomers are indistinguishable in terms of excitation and emission spectra and for protein applications there is no need to isolate a specific isomer. The single isomer is used in high resolution separation techniques such as sequencing and capillary electrophoresis.

Step 1. Labelling reaction



Add antibody to vial containing pre-measured dye. Incubate 1 hour at room temperature.

Step 2. Removal of excess fluorescent dye



Apply labelling reaction to Spin Desalting Column.

Recover labelled antibody

Catalogue No	Description
PN46424	FITC, 1g
PN46425	FITC, 100mg
PN46409	NHS-Fluorescein, 1g
PN46410	NHS-Fluorescein, 100mg
PN62246	5-Iodoacetamido-fluorescein (5-IAF), 25mg
PN62245	Fluorescein-5-maleimide, 25mg
PN53027	FITC antibody labelling kit Includes: FITC, 3 vials Borate buffer, 1mL Spin columns, x 6 Microcentrifuge collection tubes, x 12 Purification resin, 5mL
PN53029	Fluorescein antibody labelling kit Includes: NHS Fluorescein, 3 vials Borate buffer, 1mL Spin columns, x 6 Microcentrifuge collection tubes, x 12 Purification resin, 5mL

Protocol summary for Thermo Scientific Pierce fluorescent antibody labelling kits.

Properties of activated fluorescein dyes

Fluorescein derivative	MW	Ex/Em maxima, nm
FITC (Fluorescein Isothiocyanate)	389.2	494/518
NHS-Fluorescein	473.4	494/518
5-Iodoacetamido-fluorescein (5-IAF)	515.3	494/518
Fluorescein-5-maleimide	515.3	494/518

Rhodamine dyes and labelling kits, Thermo Scientific Pierce

Thermo
SCIENTIFIC

NEW PN

Rhodamine dyes are used in fluorescence microscopy, flow cytometry and immunofluorescence-based assays such as Western blotting and ELISA.

TRITC, NHS-rhodamine and Texas Red™ Sulfonyl Chloride are reactive towards primary amine groups on proteins, peptides and other biomolecules.

Rhodamine dyes are often a mixture of isomers with reactive groups attached at the 5- and 6-positions of the bottom ring. The properties of these isomers are indistinguishable in terms of excitation and emission spectra and for protein applications there is no need to isolate a specific isomer. The single isomer is used in high resolution separation techniques such as sequencing and capillary electrophoresis.

Properties of activated rhodamine dyes

Rhodamine derivative	MW	Ex/Em maxima, nm
TRITC (Tetramethylrhodamine Isothiocyanate)	443.5 (Supplied as chloride salt, MW 479.0)	544/572
NHS-Rhodamine	527.5	552/575
Texas Red Sulfonyl Chloride	625.2	596/615

Catalogue No	Description	Quantity
PN46112	TRITC	10mg
PN46406	NHS-Rhodamine	25mg
PN46115	Texas Red Sulfonyl Chloride	10mg
PN53031	Rhodamine antibody labelling kit Efficiently label and purify 3 x 1mg of IgG or other protein in 1hr. Includes: NHS Rhodamine, 3 vials Borate buffer, 1mL Spin columns, x6 Microcentrifuge collection tubes, x12 Purification resin, 5mL	Kit

