Magic Fast™ FITC Conjugation Kit

CD4002-1 mg

(User Reference Guide)

Important Notes

The information provided in this document and the methods included in this package are for information purposes only. Creative Diagnostics provides no warranty of performance or suitability for the purpose described here in. The performance of labeling using this kit may be affected by antibodies. Sample data are provided for illustration and example purposes only. Information about the chemicals and reagents used in the kit are provided as necessary.
The agents provided are for research use only. Not for use in diagnostic procedure.

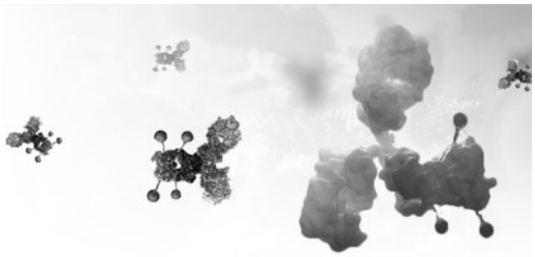
Product Overview

Creative Diagnostics has designed the Magic Fast™ FITC conjugation kit to enable the direct labeling of any antibodies to accelerate life science fundamental research and the development of the diagnostic kit. Our technology can be used to label both small and large quantities of biomolecules with ease. The researcher simply pipettes their materials into the vial and incubates for 1 hour.

Performance

- Material selection: Any proteins, Antibodies, Antibody fragments, Peptides or other biomolecules with available amine groups.
- Reactivity: free -NH_2.
- Linkage stability: Activation of proprietary reagents within the offered solution results in directional covalent bonding of FITC to the biomolecules.
- East-to-go: By circumventing desalting or dialysis steps that commonly interrupt traditional antibody conjugation procedures, the researchers get the conjugated biomolecules after simply mixing the materials together.
- Rate: Instant reaction; the whole process less than 1.5 hours.
- Consistence: Good reproducibility from batch to batch.

45-1 Ramsey Road, Shirley, NY 11967, USA
Email:info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221



Kit Components

Cat.	FITC	Regulating Buffer	DMSO	Purification Column	Collection Tube
CD4002 1 mg	1 vial	50 μl	150 μl	2 Columns	2 Tubes
Note: The kit above is designed for antibodies. Please follow same technical tips if required.					

Recommended Application Notes

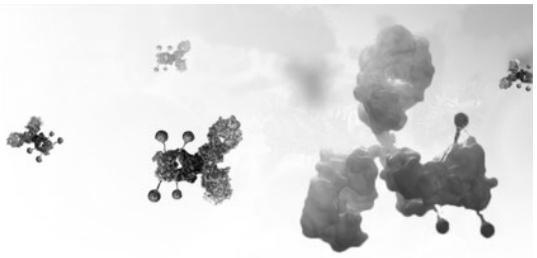
- Regulating Buffer (μl) / Material (μl): 10 μl / 100 μl
- Material (μg) / FITC (μl): 100 μg / 4 μl

Each laboratory should determine an optimum amount for use in its particular application.

Buffer Considerations

Buffer Components & Conditions	
Amine free buffer (e.g HEPES, MES, MOPS and phosphate)	Yes
Borate buffer	Yes
Chelating agents (e.g. EDTA)	Yes
Glycerol	No
Glycine	No
Material supplied in ascites fluid, serum, hybridoma or tissue culture media	No
Merthiolate	No
Non-buffering salts (e.g. sodium chloride)	Yes
Other biomolecules	Primary amines required
Peptides	Yes
pH	6.5-8.5
Proclin	No
Proteins	No
Purified antibody	Yes
Sodium Azide	No
Sugars	Yes
Thiomersal / Thimerosal	No
Tris	No

45-1 Ramsey Road, Shirley, NY 11967, USA
Email:info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221



Storage

- FITC: Stable at 2-8℃ for 1 year. Keep in dark place.
- Regulating Buffer: Stable at 2-8℃ for 1 year.
- DMSO: Stable at 2-8℃ for 1 year.
- Conjugated Materials: Stable at 4℃ for 1 year.

Attention

- Keep the kit at 2-8℃, do not freeze.
- Kit components may be reversed during transportation, please centrifuge before use.
- The FITC should be used and prepared on the spot, and the dissolved FITC cannot be stored for a long time.
- The buffer in the purification column contains the toxic component sodium azide (NaN3), so avoid contact with skin, eyes and mucous membranes when used.
- DMSO has certain toxicity, which is permeable to human skin and irritating to eyes. Avoid contact with skin, eyes and mucous membrane when used.
- The operation of dialysis, concentrating and concentration determination of antibodies before conjugating cause the loss of antibodies, so the appropriate usage of antibodies should be prepared according to the specific situation before conjugating.

Assay Procedure

1. Equilibrate all materials and prepared reagents to room temperature prior to use.
2. Centrifuge the lyophilized FITC for a few seconds.
3. Add 50 µl of DMSO to the lyophilized FITC and mix gently.
4. Add 10 µl of Regulating Buffer to each 100 µl of antibody (the recommended antibody concentration is 1-2mg/ml) and mix gently.
5. Add 4 µl of FITC solution to each 100 µg of antibody be labeled and mix gently.
6. Place the antibody-FITC mixture on a horizontal shaker for 1 hours in the dark at room temperature (22-25℃).
7. After incubating, the conjugation is required purification.
8. Centrifuge the Purification Column at 3000rpm for 2min.
9. Move the Purification Column to a new Collection Tube and add the antibody-FITC coupling to the Purification Column. If the sample volume is less than 50 µl, the liquid should first be filled to 50 µl using the buffer in the Collection Tube. The maximum sample volume should not exceed 100 µl.
10. After the sample penetrated into the packing, centrifuge at 3000rpm for 2min.

45-1 Ramsey Road, Shirley, NY 11967, USA
Email:info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221

11. The antibody-FITC should be stored at 4℃.

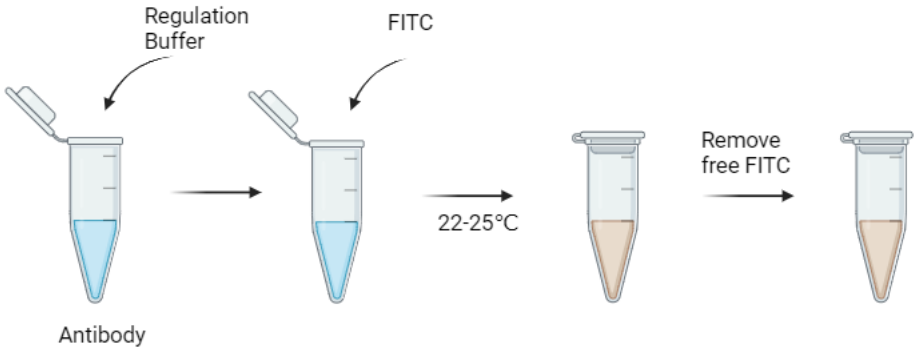


Figure 1. Assay Procedure of Magic Fast™ FITC Conjugation Kit

Note: The kit above is designed for antibodies.

45-1 Ramsey Road, Shirley, NY 11967, USA
Email:info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221