abcam

Product datasheet

FITC Conjugation Kit (Fast) - Lightning-Link® ab188285

44 References 画像数 8

製品の概要

製品名

FITC Conjugation Kit (Fast) - Lightning-Link®

製品の概要

FITC Conjugation Kit / FITC Labeling Kit (Fast) (ab188285) uses a simple and quick process for FITC / Fluorescein labeling / conjugation of antibodies. It can also be used to conjugate other proteins or peptides. Learn about our **antibody labeling kits and their advantages**.

To conjugate an antibody to FITC / Fluorescein using this kit:
- add modifier to antibody and incubate for 15 mins
- add quencher and incubate for 5 mins
The conjugated antibody can be used immediately in WB, ELISA, IHC etc. No further purification is required and 100% of the antibody is recovered for use.

Learn about buffer compatibility below; for incompatible buffers and low antibody concentrations, use our rapid **antibody purification and concentration kits**. Use the **FAQ** to learn more about the technology, or about conjugating other proteins and peptides to FITC.

Custom size conjugation kits up to 100 mg are available on demand. Please contact us to discuss your requirements.

特記事項

This product is manufactured by Expedeon, an Abcam company, and was previously called Lightning-Link® Rapid Fluorescein Labeling Kit. 310-0005 is the same as the 100 ug size. 310-0010 is the same as the 3 x 100 ug size. 310-0030 is the same as the 3 x 10 ug size. 310-0015 is the same as the 1 mg size.

Amount and volume of antibody for conjugation to FITC

Kit size	*Recommended amount of antibody*[1]	*Maximum amount of antibody*	*Maximum antibody volume*[2]
3 x 10 µg	3 x 10 µg	3 x 20 µg	3 x 10 µL
100 µg	1 x 100 µg	1 x 200 µg	1 x 100µL
3 x 100 µg	3 x 100 µg	3 x 200 µg	3 x 100 µL
1 mg	1 x 1 mg	1 x 2 mg	1 x 1 mL

[1] Using the maximum amount of antibody may result in less labelling per antibody.

[2] Ideal antibody concentration is 1mg/ml. 0.5 - 1 mg/ml can be used if the maximum antibody volume is not exceeded. Antibodies > 2 mg/ml or < 0.5 mg/ml should be diluted /concentrated.

Buffer Requirements for Conjugation

Buffer should be pH 6.5-8.5.

Compatible buffer constituents

If a concentration is shown, then the constituent should be no more than the concentration shown. If several constituents are close to the limit of acceptable concentration, then this can inhibit conjugation.

50mM / 0.6% Tris[1]	0.1% BSA[2]	50% glycerol
0.1% sodium azide	PBS	Potassium phosphate
Sodium chloride	HEPES	Sucrose
Sodium citrate	EDTA	Trehalose

[1] Tris buffered saline is almost always ≤ 50 mM / 0.6%

[2] BSA can also interfere with the use of the conjugated antibody in tissue staining.

Incompatible buffer constituents

Thiomerosal	Proclin	Glycine
Arginine	Glutathione	DTT

If a constituent of the buffer containing your antibody or protein is not listed above, please check the **FAQ** or **contact us**.

Only purified antibodies are suitable for use, ie. where other proteins, peptides, or amino acids are not present: antibodies in ascites fluid, serum or hybridoma culture media are incompatible.

Storing and handling conjugation kits

Lyophilized Lightning-Link® components are hygroscopic.

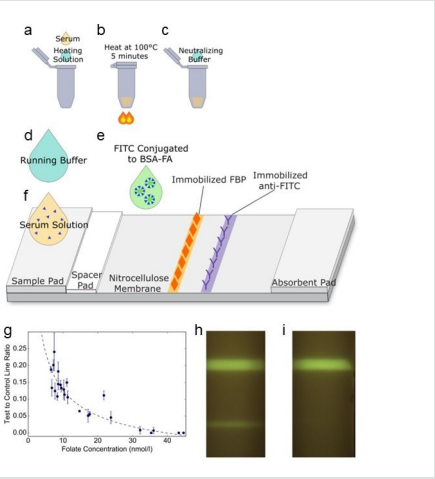
Kits are intentionally shipped at ambient temperature with silica gel to avoid exposure to moisture. Upon receipt, store the kit frozen and protect from moisture. Before opening the outer container, allow the lyophilized components to reach room temperature to minimize condensation.

製品の特性

保存方法 Store at -20°C. Please refer to protocols.

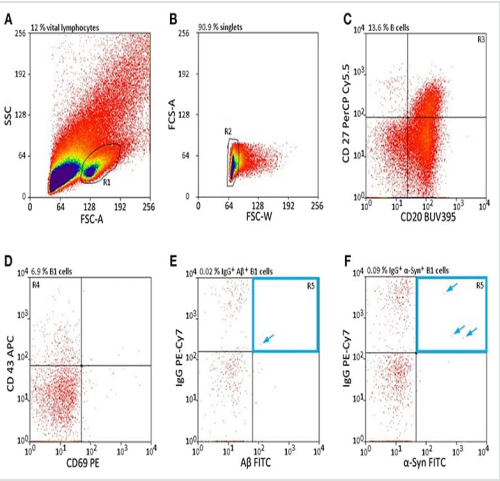
内容	1 mg	100 µg	3 x 10 µg	3 x 100 µg
ab273993 - FITC Mix	1 x 1mg	1 x 100µg	3 x 10µg	3 x 100µg
ab273994 - Modifier reagent	1 x 200µl	1 x 200µl	1 x 200µl	1 x 200µl
ab273995 - Quencher reagent	1 x 200µl	1 x 200µl	1 x 200µl	1 x 200µl

画像



Lateral flow assay - FITC Conjugation Kit (Fast) - Lightning-Link® (ab188285)

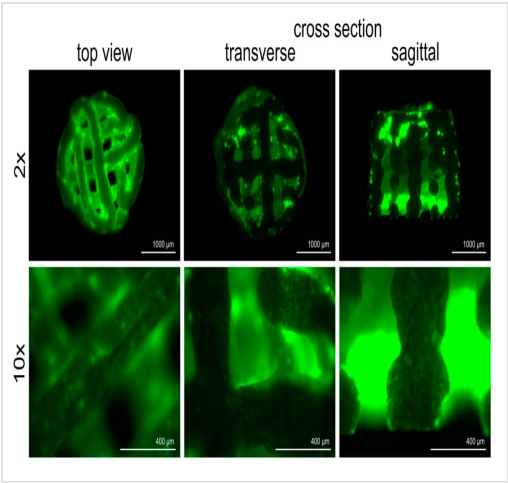
Rey, Elizabeth G., Julia L. Finkelstein, and David Erickson used FITC Conjugation Kit (Fast) - Lightning-Link® (ab188285) as part of examining folate concentration in human serum. They used the kit to conjugate FITC to FA-BSA conjugates for use in lateral flow assay. Schematic of sample processing and lateral flow assay, and human serum results. (a) Combination of serum sample with high-pH buffer. (b) Heating of serum solution. (c) Addition of acidic buffer to lower pH. (d) Application of prepared serum solution to LFA. (e) Application of running buffer. (f) Addition of FITC conjugates to nitrocellulose membrane. Human serum results. (g) Mean T/C ratio versus folate concentration for 24 human serum samples. Error bars shown are standard deviation, n = 3. Dotted line shows four-parameter logistic curve fit. (h,i) Images of fluorescent signal from test strip for low and high folate concentration serum, respectively.



Flow Cytometry - FITC Conjugation Kit (Fast) - Lightning-Link® (ab188285)

Albus, Alexandra, et al used FITC Conjugation Kit (Fast) - Lightning-Link® (ab188285) as part of examining Naturally occurring autoantibodies (nAb)-Secreting B1 Cells. They used the kit to conjugate FITC to anti-α-Synuclein antibody for use in flow cytometry.

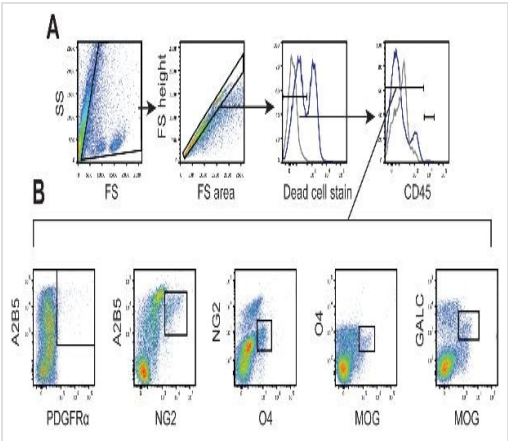
nAbs-secreting B1 cells are rare and highly specific. (A–F) Gating strategy to sort only CD20+ CD27+ CD43+ CD69− IgG+, and Aβ+ (E) /α-Syn+ (F) B cells. Percentages above each plot indicate the proportion of cells resulting from the previous gate. Arrows indicate single cells in gate R5. CD, cluster of differentiation; FSC, forward scatter; SSC, sideward scatter.



Fluorescence Microscopy - FITC Conjugation Kit (Fast)- Lightning-Link

Image from Baranowski, Andreas, et al., Materials, 11(11):2336, doi: 10.3390/ma11112336. Reproduced under the Creative Commons license https://creativecommons.org/licenses/by/4.0/

Baranowski, Andreas, et al used FITC Conjugation Kit (Fast) - Lightning-Link® (ab188285) as part of examining whether the bioactive coating of calcium phosphate cements (CPCs) with bone sialoprotein (BSP) results in increased bone formation. They used the kit to conjugate FITC to bone sialoprotein prior to the coating of a three-dimensional printed CPC scaffolds. After several washing steps, the remaining BSP (green) was visualized via microscope and the BSP coating was thus qualitatively evaluated.

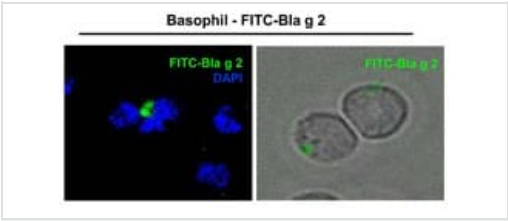


Flow Cytometry - FITC Conjugation Kit (Fast)- Lightning-Link

Image from Robinson, Andrew P., et al., PloS one; 9(9):e107649. doi: 10.1371/journal.pone.0107649.Reproduced under the Creative Commons license https://creativecommons.org/licenses/by/4.0/

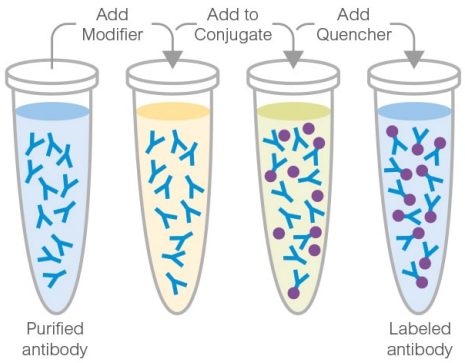
Robinson, Andrew P., et al used FITC Conjugation Kit (Fast) - Lightning-Link® (ab188285) as part of characterizing oligodendroglial populations. They used the kit to conjugate FITC to Rat anti-PDGFRalpha antibody, clone APA5, for use in flow cytometry.

SJL/J mice were immunized with PLP139–151 and scored daily for clinical disease. A cohort of SJL/J mice was sacrificed, and spinal cords were analyzed by flow cytometry (n=5). (A) Cells were distinguished from debris by forward and side scatter then singlet cells were gated. Live cells were gated by dead cell exclusion, and CNS resident cells were identified as CD45− or CD45low. (B) Oligodendroglial cells were defined by double positive staining: A2B5+PDGFRα+ early OPCs, A2B5+NG2+ intermediate OPCs, NG2+O4+ late OPCs, O4+MOG+ pre-myelinating oligodendrocytes, and GALC+MOG+ mature oligodendrocytes.

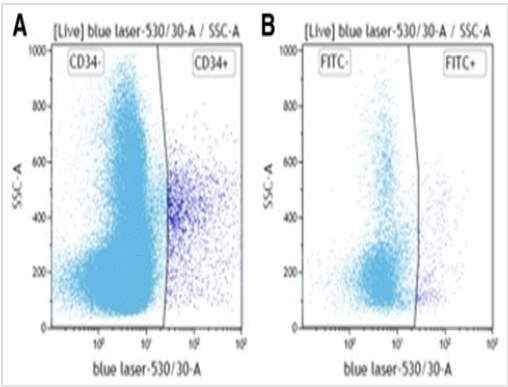


Immunocytochemistry - FITC Conjugation Kit (Fast) - Lightning-Link

Do, Danh C., et al used FITC Conjugation Kit (Fast) - Lightning-Link® (ab188285) as part of examining Bla g 2 uptake by human basophils. They used the kit to conjugate FITC to cockroach allergen Bla g 2 for use in immunocytochemistry.
Human basophils were incubated with FITC conjugated Bla g 2 (FITC‖Bla g 2, green) for overnight at 37°C, washed, and analyzed by fluorescent microscopy. Nucleus was stained with the DAPI (blue).



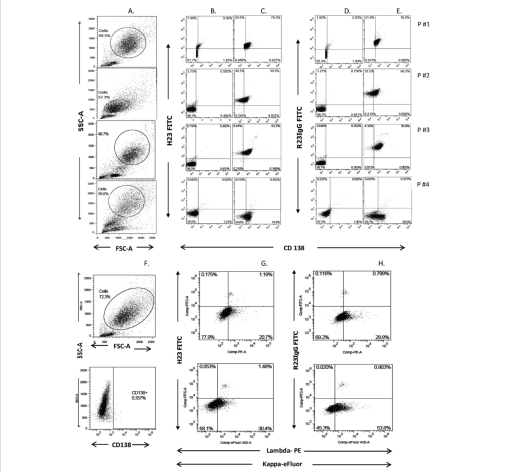
conjugation



ab188285 FITC Conjugation Kit used to label mouse anti-sheep CD34 antibody with FITC

Lydon et al. used ab188285 FITC Conjugation Kit to label mouse anti-sheep CD34 antibody with FITC.

Data shows a) Representative light-scatter (SSC-A) vs fluorescence (CD34-FITC) plot of CD34 expression on cells from ovine apheresis samples using two-colour flow cytometry. B) IgG control.



FITC Conjugation Kit labeling anti MUC1 SP antibodies FACS

Image from Kovjazin R et al., PLoS One, 9(1):e85400. Fig 3.; doi: 10.1371/journal.pone.0085400. Reproduced under the Creative Commons license https://creativecommons.org/licenses/by/4.0/

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