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Just-in-Time Labeling Kits

Cell IDx's Just-In-Time (JIT) labeling kits allow you to rapidly produce a purified labeled antibody with >90% yield incorporating the optimal number of HRP, biotin or Cell-Light fluors.

Overview

- *Label 90-110 ug of antibody at 0.9 -1.1 mg/mL requiring only 15 min hands on time*
- *All components are included in each kit*
- *90-95% yield of labeled antibody*
- *Pure product is produced - all excess label is removed*
- *Protocol optimized to incorporate optimal amount of fluor, HRP or biotin*
- *Available labels include: HRP, biotin, FITC (FAM), CL-405, CL-490, CL-550, CL-650 and CL-750*
- *The only equipment needed are a microcentrifuge and a Nanodrop or UV spectrophotometer*

Labels

Labels	Cat#	Absorbance (nm)	Emission (nm)	Extinction Coefficient ($M^{-1}cm^{-1}$)
FITC (FAM)	JFAM-001	495	520	75,000
JCL-405	JC405-001	400	423	32,000
JCL-490	JC490-001	491	515	73,000
JCL-550	JC550-001	550	575	150,000
JCL-650	JC650-001	655	676	250,000
JCL-750	JC750-001	759	780	240,000
Biotin-Peg4	JBP4-001			
HRP	JHRP-001			

Kit Contents

Kit Part	Quantity	Description
A	1	Blue-capped desalting column to buffer exchange antibody into Modification Buffer **NOTE: Store columns @4^{O}C**
B	2	Red-capped desalting column to buffer exchange antibody into PBS + 15 mM sodium azide **NOTE: Store columns @4^{O}C**
C	1	CellLight labeling reagent with lyophilized dye, HRP or biotin for modification of 90-110 ug protein at 0.9-1.1 mg/mL **NOTE: IMMEDIATELY place and store dye @<-20^{O}C**
D	5	Collection tubes

Antibody Preparation

1) Antibody preparation- Prepare a solution of 90-110 ug antibody at 0.9-1.1 mg/mL- Nanodrop absorbance 0.126-0.150 au (1.0 cm^{-1} path) or plate reader.
2) Desalting column preparation- Break off bottom of BLUE-capped column and untighten the BLUE cap and place column(s) in collection tubes, then place in microcentrifuge and spin for 2 minutes @1500 g. Discard flow-through and collection tube.

Antibody Desalting

1) Add antibody solution to BLUE-capped column, replace BLUE cap lightly on column, insert in a new collection tube and centrifuge for 2 minutes @1500 g.

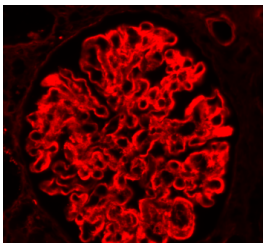
Fluor Labeling

1) Add flow-through from BLUE-capped column collection tube to labeling reagent tube, pipette several times to mix, lightly vortex and incubate for 1 hour in the dark @ room temperature.

Purification

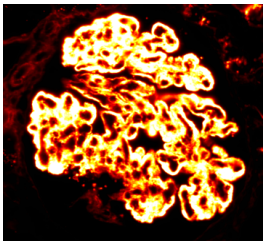
1) PBS/azide desalting column preparation X 2- Break off bottom of 2 RED-capped columns and untighten the RED caps, place column(s) in collection tubes, then place in microcentrifuge and spin for 2 minutes @1500 g. Discard flow through and collection tubes.
2) Transfer fluor, HRP or biotin labeling mixture to one RED-capped tube, place column in a new collection tube and centrifuge for 2 minutes @1500 g.
3) Repeat Step 6 with second RED-capped column- flow through is purified labeled antibody! Store modified antibody at $4^{O}C$ and protected from light.

JIT CL-550 Kit



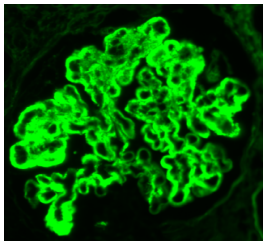
Kidney glomeruli stained with anti-human IgG labeled with JIT CL-550 labeling kit

JIT CL-650 Kit



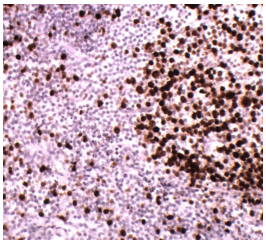
Kidney glomeruli stained with anti-human IgG labeled with JIT CL-650 labeling kit

JIT PEG4-biotin Kit



Kidney glomeruli stained with anti-human IgG labeled with JIT PEG4-biotin labeling kit and detected using StAv-CL-490

JIT HRP Labeling Kit



Human tonsil stained with anti-Ki-67, followed by goat anti-mouse IgG labeled with JIT HRP labeling kit

Disclaimer

For Research Use Only

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