



6197 Cornerstone Court E, Ste 102  
San Diego, CA 92121

## 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 fluorors.

### 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 <sup>-1</sup> cm <sup>-1</sup> )
<b>FITC (FAM)</b>	JFAM-001	495	520	75,000
<b>JCL-405</b>	JC405-001	400	423	32,000
<b>JCL-490</b>	JC490-001	491	515	73,000
<b>JCL-550</b>	JC550-001	550	575	150,000
<b>JCL-650</b>	JC650-001	655	676	250,000
<b>JCL-750</b>	JC750-001	759	780	240,000
<b>Biotin-Peg4</b>	JBP4-001			
<b>HRP</b>	JHRP-001			

### Kit Contents

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

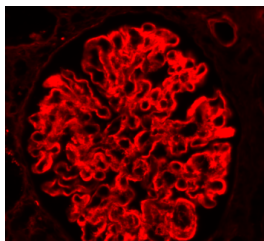
### Fluor Labeling

- 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

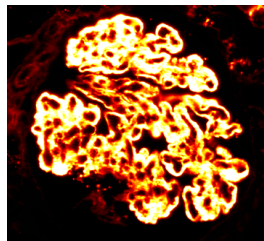
- 1) PBS/azide desalting column preparation X 2- Break off bottom of 2 RED-capped columns and untighten the RED caps, place column(s) in collection tubes, then place in microcentrifuge and spin for 2 minutes @1500 g. Discard flow through and collection tubes.
- 2) Transfer fluor, HRP or biotin labeling 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°C and protected from light.

JIT CL-550 Kit



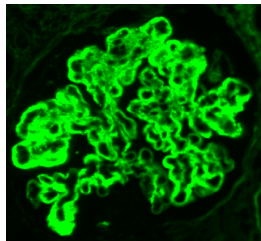
Kidney glomeruli stained with anti-human IgG labeled with FITC-550 labeling kit

JIT CL-650 Kit



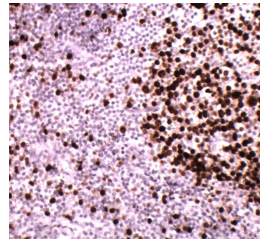
Kidney glomeruli stained with anti-human IgG labeled with FITC-650 labeling kit

JIT PEG4-biotin Kit



Kidney glomeruli stained with anti-human IgG labeled with FITC-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 HRP labeling kit

### Disclaimer

For Research Use Only