

## Stem Cell Antibody Kits for Live Cell Imaging

Catalog numbers A24879, A24882, A25528, A25618

Table 1. Contents and storage

Material	Components	Part. no.	Concen.	Amount	Storage and handling
CD44 Rat anti-human/mouse mAb, AlexaFluor® 488 Conjugate Kit for Live Cell Imaging (Cat. no. A25528)	CD44 Rat anti-human/mouse, AlexaFluor® 488 Conjugate	A25527	50X	200 µL	<ul style="list-style-type: none"> <li>• Use aseptic technique</li> <li>• Store at 2°C–8°C for up to 6 months</li> <li>• Protect from light</li> <li>• Do not freeze</li> </ul>
	FluoroBrite™ DMEM	A1896701	1X	500 mL	
TRA-1-60 Mouse anti-human mAb, AlexaFluor® 488 Conjugate Kit for Live Cell Imaging (Cat. no. A25618)	TRA-1-60 Mouse anti-human mAb, AlexaFluor® 488 Conjugate	A25617	50X	200 µL	
	FluoroBrite™ DMEM	A1896701	1X	500 mL	
TRA-1-60 Mouse anti-human mAb, Alexa Fluor® 555 Conjugate Kit for Live Cell Imaging (Cat. no. A24879)	TRA-1-60 Mouse anti-human mAb, Alexa Fluor® 555 Conjugate	A24874	50X	200 µL	
	FluoroBrite™ DMEM	A1896701	1X	500 mL	
TRA-1-60 Mouse anti-human mAb, Alexa Fluor® 594 Conjugate Kit for Live Cell Imaging (Cat. no. A24882)	TRA-1-60 Mouse anti-human mAb, Alexa Fluor® 594 Conjugate	A24880	50X	200 µL	
	FluoroBrite™ DMEM	A1896701	1X	500 mL	
<b>Approximate fluorescence excitation/emission wavelength maxima:</b> Alexa Fluor® 488 Conjugate: Ex/Em 495/519 nm (Green, FITC filter-compatible) Alexa Fluor® 555 Conjugate: Ex/Em 555/565 nm (Orange, Cy®3 / TRITC filter-compatible) Alexa Fluor® 594 Conjugate: Ex/Em 590/617 nm (Red, Texas Red® filter-compatible)					

### Description

The Stem Cell Antibody Kits for Live Cell Imaging pair together Alexa Fluor® dye-conjugated antibodies against important cell surface stem cell markers with a superior imaging medium, FluoroBrite™ DMEM, which enhances fluorescence signals while preserving cell health during live-cell imaging workflows. These reagents are specially formulated and sterile-filtered to meet the demands of live-cell imaging applications: they contain no cytotoxic preservatives (e.g., no sodium azide) and are tested to ensure that endotoxin levels are low and that they are free of common microbial contaminants. TRA-1-60 is commonly used as a positive cell surface marker for pluripotent stem cell identification. Fibroblast marker CD44 can be used as a negative marker during reprogramming. The combination of both markers is useful for identifying fully reprogrammed iPSC colonies.

For Research Use Only. Not for use in diagnostic procedures.

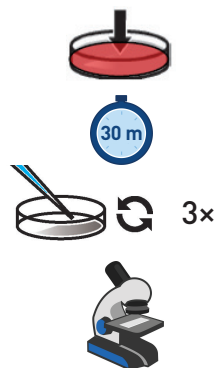
## Experimental protocol

See Table 2 for recommended volumes.

**Caution:** Use aseptic technique when handling live-cell imaging reagents to prevent contamination.

1. Centrifuge the dye-conjugated antibody solution (e.g., 2 minutes at  $10,000 \times g$ ) and only use the supernatant.

**Note:** This step minimizes transferring protein aggregates that may have formed during storage, thereby reducing non-specific background staining.



2. Add a 1:50 volume of the dye-conjugated antibody directly to the cell culture medium of the cells to be stained (see Table 2 for guidance). Mix by gentle swirling.
3. Incubate for 30 minutes at  $37^{\circ}\text{C}$ .
4. Remove the staining solution and gently wash the cells 2–3 times with FluoroBrite™ DMEM.
5. For optimal results, image the cells immediately (i.e., within 30 minutes).

**Note:** To continue culturing the cells, replace the FluoroBrite™ DMEM with fresh cell culture medium and return the cells to the  $37^{\circ}\text{C}$  incubator.

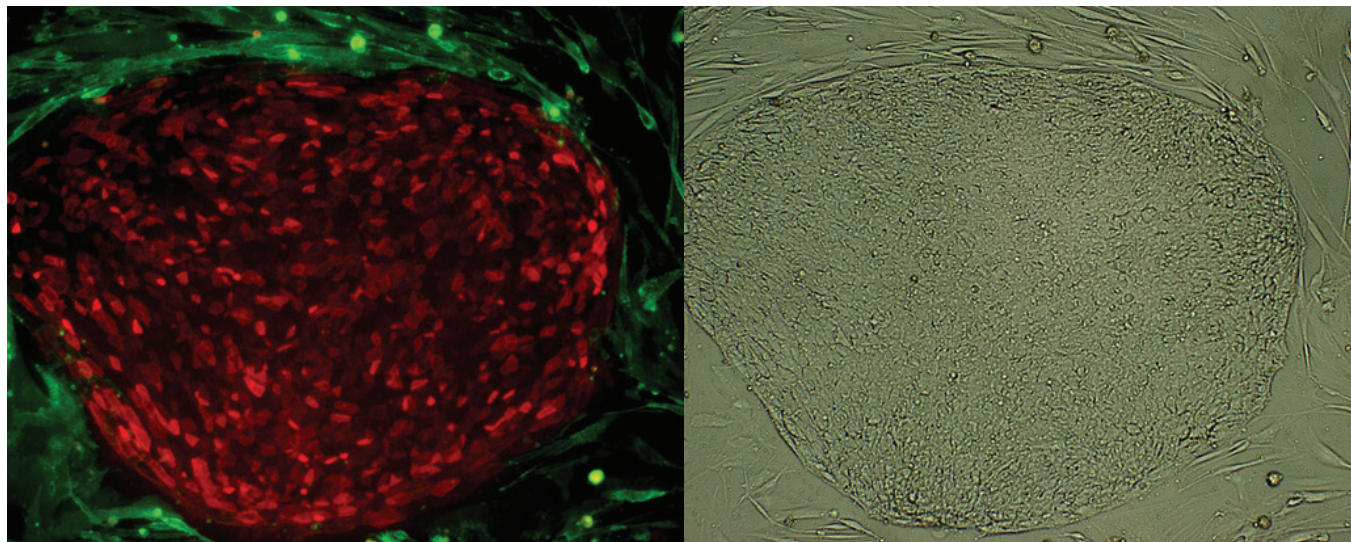
Table 2 Recommended volumes to use during the staining protocol.

Culture format	No. of tests*	Staining volume	Amount of 50X antibody to add
96-well plate	200	50 $\mu\text{L}$ /well	1 $\mu\text{L}$
48-well plate	100	100 $\mu\text{L}$ /well	2 $\mu\text{L}$
24-well plate	50	200 $\mu\text{L}$ /well	4 $\mu\text{L}$
12-well plate	25	400 $\mu\text{L}$ /well	8 $\mu\text{L}$
6-well plate	10	1 mL/well	20 $\mu\text{L}$
35-mm dish	10	1 mL/dish	20 $\mu\text{L}$
60-mm dish	5	2 mL/dish	40 $\mu\text{L}$
100-mm dish	2	5 mL/dish	100 $\mu\text{L}$
4-well chamber slide	25	400 $\mu\text{L}$ /well	8 $\mu\text{L}$
8-well chamber slide	50	200 $\mu\text{L}$ /well	4 $\mu\text{L}$

\* When using the suggested staining volume, this kit contains sufficient reagents for the indicated number of tests.

## Example data

**Figure 1** Induced pluripotent stem cells growing on a mouse fibroblast feeder layer were stained with dye-labeled antibodies for cell surface markers TRA-1-60 (Red, a positive pluripotency marker) and CD44 (Green, a fibroblast marker that also serves as a negative pluripotency marker).



## Product list

Current prices may be obtained from our website or from our Customer Service Department.

Cat. no.	Product name	Unit size
A25528	CD44 Rat anti-human/mouse mAb, AlexaFluor® 488 Conjugate Kit for Live Cell Imaging	1 kit
A25618	TRA-1-60 Mouse anti-human mAb, AlexaFluor® 488 Conjugate Kit for Live Cell Imaging	1 kit
A24879	TRA-1-60 Mouse anti-human mAb, Alexa Fluor® 555 Conjugate Kit for Live Cell Imaging	1 kit
A24882	TRA-1-60 Mouse anti-human mAb, Alexa Fluor® 594 Conjugate Kit for Live Cell Imaging	1 kit
<b>Related products</b>		
A24881	PSC 4-Marker Immunocytochemistry Kit	1 kit
A25526	PSC (OCT4, SSEA4) Immunocytochemistry Kit	1 kit
A25525	PSC (SOX2, TRA-1-60) Immunocytochemistry Kit	1 kit
A25538	3-Germ Layer Immunocytochemistry Kit	1 kit
A1896701	FluoroBrite™ DMEM	500 mL
A14353	Alkaline Phosphatase Live Stain	50 µL
A15871	TaqMan® hPSC Scorecard™ Kit, FAST 96 well	2 plates
A18945	Gibco® Human Episomal iPSC Line	1 vial
A16517	CytoTune®-iPS 2.0 Sendai Reprogramming Kit	1 pack
A14703	Episomal iPSC Reprogramming Vectors	1 kit
A15960	Epi5™ Episomal iPSC Reprogramming Kit	1 kit
A1517001	Essential 8® Medium	500 mL
A14700	Vitronectin (VTN-N) Recombinant Human Protein, Truncated	1 mL
A24354	Human Neural Stem Cell Immunocytochemistry Kit	20 tests
A1647801	PSC Neural Induction Medium	500 mL

## Purchaser notification

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These high-quality reagents and materials must be used by, or directly under the supervision of, a technically qualified individual experienced in handling potentially hazardous chemicals. Read the Safety Data Sheet provided for each product; other regulatory considerations may apply.

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