

ABP Biosciences



**Cell Structure Probes**



# Cell Structure Probes

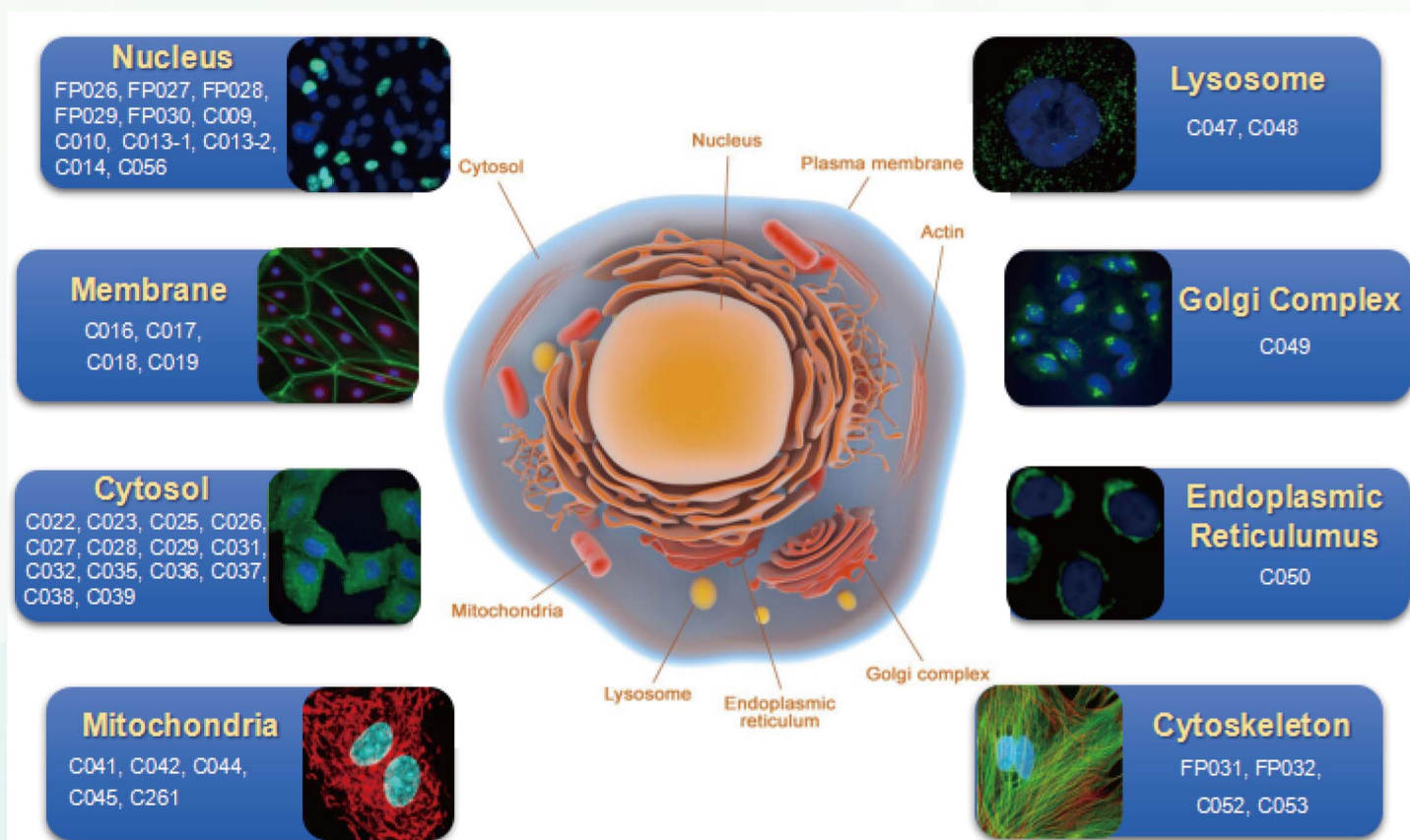
*Multiple selections of high-quality probes for organelle and membrane specific stains*

**ABP Biosciences** offers a diverse selection of cell structure probes to specifically stain from organelle and membrane to whole cell. These small organic stains have been widely used as counterstains to help identify the location of specific proteins and targets of interest within the cell while detection of antibodies against proteins associated with specific organelles can lead to a better understanding of cellular function. Our cell structure probes are designed for organelle-specific stains for live-cell or fixed-cell labeling.

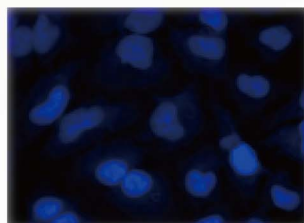
## FEATURES

- ◆ Bright fluorescence
- ◆ Multicolor selection
- ◆ Compatible for cell imaging and flow cytometry
- ◆ Validated protocol

## Cell Structure Probes Selection Guide



## Nuclear Counterstains

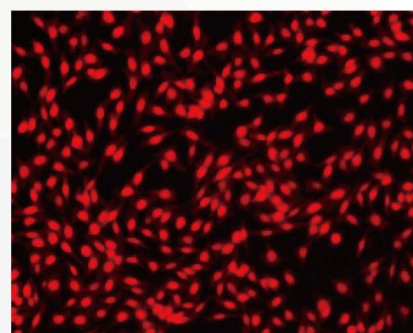
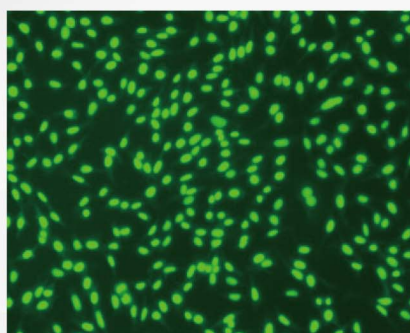
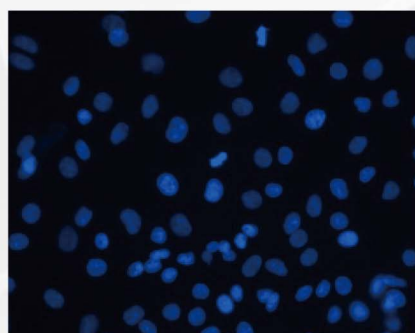
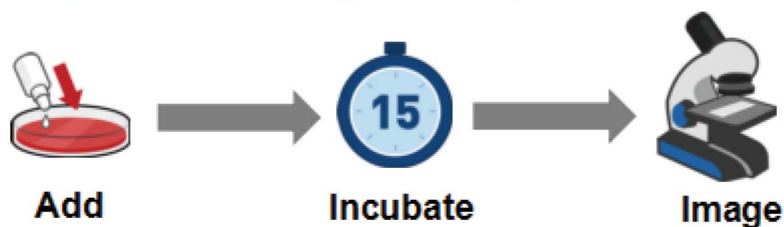


The nucleus of the cell is a membrane-bound organelle that includes the nuclear envelope, nucleoli, and nuclear lamina and is the site of gene expression. Nuclear structure can be selectively visualized using nuclear counterstains.

**ABP Biosciences** offers a selection of nuclear counterstains to stain live or dead cells/tissues, providing a means to locate the nucleus and follow nuclear changes throughout cellular processes, from mitosis to apoptosis.

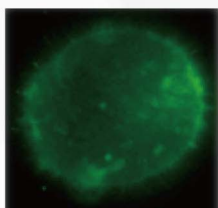
| Cat. No. | Product Name                                | Ex/Em (nm)                     | Unit Size | Price     |
|----------|---|--------------------------------|-----------|-----------|
| FP026    | EasyProbe™ DAPI Fixed Cell Stain            | 358/461                        | 10 mL     | \$60.00   |
| FP027    | EasyProbe™ Hoechst 33342 Live Cell Stain    | 350/461                        | 10 mL     | \$60.00   |
| FP028    | EasyProbe™ Propidium Iodide Dead Cell Stain | 535/617                        | 10 mL     | \$60.00   |
| FP029    | EasyProbe™ Green 488 Live Cell Stain        | 500/530                        | 10 mL     | \$60.00   |
| FP030    | EasyProbe™ Green 488 Dead Cell Stain        | 500/530                        | 10 mL     | \$60.00   |
| C009     | EMA (Ethidium monoazide)                    | 504/600                        | 5 mg      | \$120.00  |
| C010     | EthD-1 (Ethidium Homodimer-1)               | 528/617                        | 1 mg      | \$220.00  |
| C013-1   | NucGreen™ Live-cell nucleic acid stain      | 500/530                        | 1 mL      | \$100.00  |
| C013-2   | NucGreen™ Dead-cell nucleic acid stain      | 500/530                        | 1 mL      | \$100.00  |
| C014     | Acridine orange, 10 mg/mL                   | 500/526 (DNA)<br>460/650 (RNA) | 1 mL      | \$25.00   |
| C056A    | DRAQ5™ Fluorescent Probe                    | 647/680                        | 50 µL     | \$180.00  |
| C056B    | DRAQ5™ Fluorescent Probe                    | 647/680                        | 200 µL    | \$350.00  |
| C056C    | DRAQ5™ Fluorescent Probe                    | 647/680                        | 1 mL      | \$1200.00 |

### EasyProbe™ Reagent Simple Workflow





## Membrane Stains

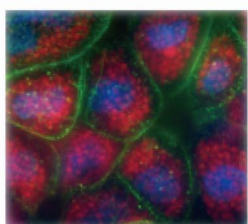


The cell membrane separates the cell from the extracellular environment, and play important roles in cell signaling pathways as well as ionic homeostasis. The membrane stains are useful markers for cell boundaries.

ABP Biosciences offers a selection of lipophilic dyes used as plasma membrane stains.

| Cat. No. | Product Name                       | Ex/Em (nm) | Unit Size | Price    |
|----------|------------------------------------|------------|-----------|----------|
| C016     | DiO perchlorate                    | 485/502    | 25 mg     | \$100.00 |
| C017     | Dil perchlorate                    | 550/565    | 25 mg     | \$100.00 |
| C018     | DiD perchlorate                    | 645/665    | 25 mg     | \$120.00 |
| C019     | DiR iodide                         | 750/778    | 10 mg     | \$120.00 |
| C020     | Pluronic F-127®                    | -          | 2 g       | \$25.00  |
| C021     | Pluronic F-127®, 20% (w/v) in DMSO | -          | 1 mL      | \$20.00  |

## Cytosol Stains



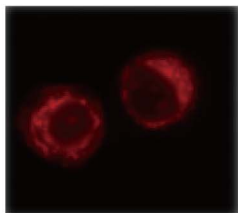
The cytosol is the liquid found inside cells. Cytosol stains are useful probes to monitor cell morphology and location for cell proliferation and viability studies.

ABP Biosciences offers a selection of cell tracer dyes, which can freely diffuse through the membranes of live cells, and become membrane-impermeant after loading.

Our cell tracer dyes are stable and nontoxic at working concentrations, well retained in cells, and fluoresce brightly at physiological pH. These dyes are available in a wide range of emission spectra for multicolor imaging.

| Cat. No. | Product Name              | Ex/Em (nm) | Unit Size | Price    |
|----------|---------------------------|------------|-----------|----------|
| C022     | Calcein blue, AM          | 360/449    | 1 mg      | \$85.00  |
| C023     | Calcein blue, AM, 1 mg/mL | 360/449    | 500 µL    | \$50.00  |
| C025     | Calcein, AM               | 494/515    | 1 mg      | \$140.00 |
| C026     | Calcein, AM, 1 mg/mL      | 494/515    | 500 µL    | \$80.00  |
| C027     | BCECF                     | 490/535    | 5 mg      | \$140.00 |
| C028     | BCECF, AM                 | 490/535    | 1 mg      | \$140.00 |
| C029     | BCECF, AM, 1 mg/mL        | 490/535    | 500 µL    | \$80.00  |
| C031     | CFDA                      | 490/520    | 100 mg    | \$100.00 |
| C032     | CFDA, SE                  | 490/520    | 25 mg     | \$100.00 |
| C035     | CDCFDA                    | 504/529    | 100 mg    | \$100.00 |
| C036     | CDCFDA, SE                | 504/529    | 25 mg     | \$100.00 |
| C037     | CellView Blue CMAC        | 353/466    | 5 mg      | \$100.00 |
| C038     | Monobromobimane (mBBr)    | 385/463    | 25 mg     | \$100.00 |
| C039     | CellView Green CMFDA      | 492/517    | 1 mg      | \$120.00 |

## Mitochondria Stains

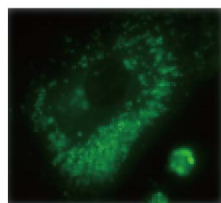


The mitochondria are membrane-bound organelles found in most eukaryotic cells, where they make up as much as 10% of the cell volume. The number of mitochondria in a cell can vary widely between organism, tissue, and cell type. The key function of mitochondria is energy production through oxidative phosphorylation and lipid oxidation.

**ABP Biosciences** developed a series of mito-tracker probes, which can be selectively sequestered by mitochondria in live cells based on the mitochondria membrane potential for loading. Our mito-tracker probes have a wide range of emission spectra for multicolor imaging.

| Cat. No. | Product Name                   | Ex/Em (nm)      | Unit Size | Price    |
|----------|--------------------------------|-----------------|-----------|----------|
| C041     | MitoOrange™ CMTMRos            | 554/575         | 1 mL      | \$120.00 |
| C042     | MitoRed™ CMXRos                | 580/600         | 1 mL      | \$120.00 |
| C044     | Rhodamine 123                  | 505/534         | 25 mg     | \$120.00 |
| C045     | JC-1                           | 514/529;585/590 | 1 mg      | \$100.00 |
| C261     | DHR 123 [Dihydrorhodamine 123] | -               | 10 mg     | \$150.00 |

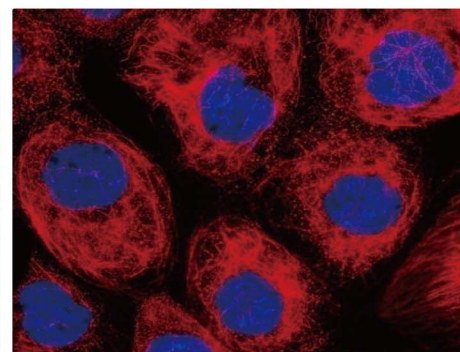
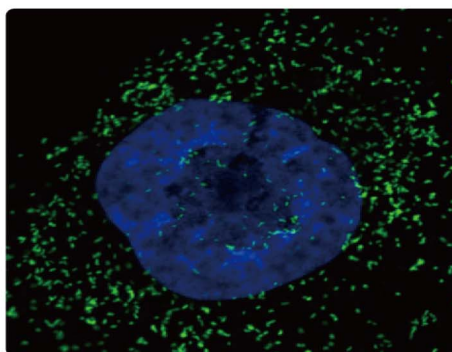
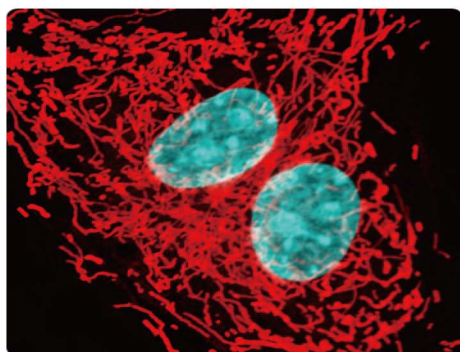
## Lysosome Stains



Lysosomes are membrane-bound cell organelles found in most animal cells. Lysosomes maintain an acidic environment of about pH 4.5, and contain acid hydrolase enzymes that break down waste materials and cellular debris.

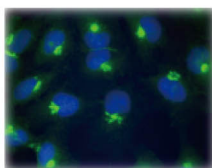
**ABP Biosciences** offers LysoView probes that accumulate in acidic organelles. Our LysoView probes exhibit a pH-dependent increase in fluorescence intensity upon acidification.

| Cat. No. | Product Name   | Ex/Em (nm) | Unit Size | Price    |
|----------|----------------|------------|-----------|----------|
| C047     | LysoView Blue  | 370/425    | 1 mL      | \$100.00 |
| C048     | LysoView Green | 443/505    | 1 mL      | \$100.00 |





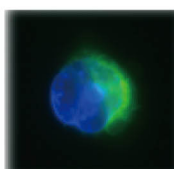
## Golgi Stain



The Golgi is an organelle found in most eukaryotic cells, where proteins, lipids, and carbohydrates, are prepared for either secretion from the cell or use by other organelles within the cell. ABP Biosciences offers probes that selectively stains the Golgi complex for lipid metabolism and trafficking studies.

| Cat. No. | Product Name    | Ex/Em (nm) | Unit Size | Price    |
|----------|-----------------|------------|-----------|----------|
| C049     | NBD C6-Ceramide | 466/536    | 1 mg      | \$120.00 |

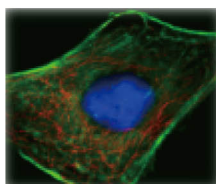
## Endoplasmic Reticulum Stains



The endoplasmic reticulum (ER) is an organelle found in most eukaryotic cells, that forms an interconnected network of flattened, membrane-enclosed sacs or tubes. ABP Biosciences offers a cell-permeant probe that selectively stain the ER in live cells based on the probe concentration.

| Cat. No. | Product Name | Ex/Em (nm) | Unit Size | Price    |
|----------|--------------|------------|-----------|----------|
| C050     | DiOC6(3)     | 485/500    | 25 mg     | \$100.00 |

## Cytoskeleton Stains



The cytoskeleton is an intracellular matrix that supports cell shape and function. The cytoskeleton plays important roles in organelle transport, cell division, motility, and signaling, making it central to both cell health and disease processes. ABP Biosciences offers a selection of phalloidin conjugates to label actin in fixed and permeabilized cells.

| Cat. No. | Product Name                     | Ex/Em (nm) | Unit Size | Price    |
|----------|----------------------------------|------------|-----------|----------|
| FP031    | EasyProbes™ ActinGreen 488 Stain | 500/525    | 5 mL      | \$150.00 |
| FP032    | EasyProbes™ ActinRed 555 Stain   | 555/575    | 5 mL      | \$150.00 |
| C052     | ActinGreen™ 488 stain            | 500/525    | 300 unit  | \$200.00 |
| C053     | ActinRed™ 555 stain              | 555/575    | 300 unit  | \$200.00 |

