

Imaging compatible live-cell dyes

Green channel

Excitation: 452/45 nm

Emission: 512/23 nm

| <i>Cytoplasm staining</i> | <i>Peak excitation</i> | <i>Peak emission</i> |
|---|------------------------|----------------------|
| Cell Tracker Green | 492 nm | 517 nm |
| LuminiCell Tracker 540 | 423 nm | 540 nm |
| Cell tracking dye kit - Green - Cytopainter | 490 nm | 520 nm |
| Cell Explorer fixable live cell tracking kit - Green fluorescence | 490 nm | 520 nm |
| BioTracker 488 Green CSFE cell proliferation kit | 495 nm | 519 nm |
| BioTracker 488 Green Mitochondria Dye | 490 nm | 523 nm |

| <i>Organelle staining</i> | | <i>Peak excitation</i> | <i>Peak emission</i> |
|---------------------------|---|------------------------|----------------------|
| Nucleus | SYTO 13 | 488 nm | 509 nm |
| Nucleus | SYTO 45 | 452 nm | 484 nm |
| Nucleus | STYO 9 | 483 nm | 503 nm |
| Membrane | PKH67 Green fluorescent cell linker kit | 490 nm | 502 nm |
| Mitochondria | BioTracker 488 Green Mitochondria Dye | 490 nm | 523 nm |
| Mitochondria | MitoTracker Green FM | 490 nm | 516 nm |
| Lysosome | LysoSensor Green | 443 nm | 505 nm |

| <i>Functional staining</i> | | <i>Peak excitation</i> | <i>Peak emission</i> |
|----------------------------|---|------------------------|----------------------|
| Live cells | Calcein AM | 495 nm | 515 nm |
| Apoptosis | pSIVA-IANBD (binds to phosphatidylserine) | 488 nm | 530 nm |
| Apoptosis | Annexin V Green Dye (binds to phosphatidylserine) | 490 nm | 515 nm |
| Apoptosis | CellEvent Caspase-3/7 Green detection reagent | 503 nm | 530 nm |
| Reactive oxygen species | BioTracker 515 Green ONOO- dye | 490 nm | 515 nm |

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Red channel

Excitation: 561/14 nm

Emission: 630/90 nm

| <i>Cytoplasm staining</i> | <i>Peak excitation</i> | <i>Peak emission</i> |
|---|------------------------|----------------------|
| Cell Tracker Orange | 548 nm | 576 nm |
| Cell Tracker Red | 577 nm | 602 nm |
| Cell Explorer fixable live cell tracking kit - Red fluorescence | 570 nm | 600 nm |
| Cell Explorer live cell tracking kit - Red fluorescence | 570 nm | 600 nm |

| <i>Organelle staining</i> | | <i>Peak excitation</i> | <i>Peak emission</i> |
|---------------------------|--|------------------------|----------------------|
| Nucleus | SYTO 85 | 567 nm | 583 nm |
| Membrane | PHK26 Red fluorescent cell linker kit | 551 nm | 567 nm |
| Membrane | BioTracker 555 Orange Cytoplasmic membrane dye | 549 nm | 565 nm |
| Mitochondria | MitoTracker Orange CMTMRos & CM-H2 TMRos | 554 nm | 576 nm |
| Mitochondria | MitoTracker Red CHXROS & CM-H2Xros | 579 nm | 599 nm |
| Mitochondria | MitoTracker Red FM | 581 nm | 644 nm |
| Lysosome | LysoTracker Red FM | 581 nm | 644 nm |
| Lysosome | BioTracker 555 UV-Excitation red lysosome dye | 554 nm | 583 nm |

| <i>Functional staining</i> | | <i>Peak excitation</i> | <i>Peak emission</i> |
|----------------------------|---|------------------------|----------------------|
| Live cells | CellTrace Calcein Red-Orange AM | 577 nm | 590 nm |
| Dead cells | Propidium Iodide | 535 nm | 617 nm |
| Apoptosis | Annexin V Red Dye (binds to phosphatidylserine) | 593 nm | 614 nm |

Green and red channel

| <i>Functional staining kits</i> | | <i>Peak excitation</i> | <i>Peak emission</i> |
|---------------------------------|--|---------------------------|------------------------|
| Cell viability | LIVE/DEAD Cell Imaging Kit (488/570) | G: 504 nm R: 563 nm | G: 523 nm R: 587 nm |
| Apoptosis | Image-iT LIVE Red Poly Caspases Detection Kit | G: 504 nm R: 550 nm | G: 523 nm R: 595 nm |
| Apoptosis | Image-iT LIVE Red Caspase-3 and -7 Detection Kit | G: 504 nm R: 550 nm nm | G: 523 nm R: 595 nm |