

Fluorophore selection guide for the Attune[®] NxT Acoustic Focusing Cytometer



| Excitation laser | Emission filter (nm) | Channel | Recommended dyes | Viability dyes (compatible with fixation) | Viability dyes (non-fixed cells) | DNA content/cell cycle dyes (live cells) | DNA content/cell cycle dyes (fixed cells) | Apoptosis dyes | Cell proliferation dyes | ROS detection dyes | Phagocytosis dyes | Fluorescent proteins | Other dyes |
|------------------|----------------------|---|--|---|--|--|---|--|--|----------------------------------|--|---|--|
| Violet (405 nm) | 440/50 | VL1 | Alexa Fluor [®] 405 Pacific Blue [™] | LIVE/DEAD [®] Fixable Violet | DAPI SYTOX [®] Blue | Vybrant [®] DyeCycle [™] Violet | FxCycle [™] Violet | Annexin V Pacific Blue [™] PO-PRO [™] -1 | CellTrace [™] Violet Click-iT [®] Plus Edu Pacific Blue [™] | | | Azurite Cerulean eBFP eCFP mTurquoise Sirius | BV421 eFluor [®] 450 Horizon [™] V450 VioBlue [®] |
| | 512/25 | VL2 | Pacific Green [™] | LIVE/DEAD [®] Fixable Aqua | | | | Violet Ratiometric Probe (F2N12S) | | | | vGFP | AmCyan BV510 Horizon [™] V500 VioGreen [™] |
| | 603/48 | VL3 | Pacific Orange [™] Qdot [®] 605 | LIVE/DEAD [®] Fixable Yellow | | | | | Violet Ratiometric Probe (F2N12S) | | | | BV570 BV605 BV650 eFluor [®] 605NC |
| | 710/50 | VL4 | Qdot [®] 705 | | | | | | | | | | BV650 BV711 |
| Blue (488 nm) | 530/30 | BL1 | Alexa Fluor [®] 488 FITC | LIVE/DEAD [®] Fixable Green | SYTOX [®] Green | Vybrant [®] DyeCycle [™] Green | | Annexin V Alexa Fluor [®] 488 Annexin V FITC Anti-PARP-FITC APO-BrdU TUNEL-Alexa Fluor [®] 488 CellEvent [®] Caspase-3/7 Green MitoProbe [™] DiOC ₂ [3] MitoProbe [™] JC-1 YO-PRO [®] -1 Iodide | CellTrace [™] CFSE Click-iT [®] Plus Edu Alexa Fluor [®] 488 | CellROX [®] Green | pHrodo [™] Green <i>E. coli</i> BioParticles [®] conjugate pHrodo [®] Green <i>S. aureus</i> BioParticles [®] conjugate | eGFP Emerald eYFP | BB515 |
| | 574/26 | BL2 (without yellow laser present) | PE | | PI SYTOX [®] Orange | Vybrant [®] DyeCycle [™] Orange | | Annexin V PE MitoProbe [™] JC-1 TMRE TMRM | | | pHrodo [®] Red <i>E. coli</i> BioParticles [®] conjugate pHrodo [®] Red Phagocytosis Kit | eYFP mCitrine Venus | |
| | 590/40 | BL2 (with yellow laser present) | PE PE-Alexa Fluor [®] 610 PE-Texas Red [®] | LIVE/DEAD [®] Fixable Red | 7-AAD PI SYTOX [®] AADvanced [™] SYTOX [®] Orange | | FxCycle [™] PI/ RNase | Annexin V PE TMRE TMRM | | | | | PE-eFluor [®] 610 |
| | 695/40 | BL3 | PE-Alexa Fluor [®] 700 PE-Cy [®] 5.5 PerCP PerCP-Cy [®] 5.5 Qdot [®] 705 TRI-COLOR [®] | | 7-AAD PI SYTOX [®] AADvanced [™] | | | | | | | | PE-CF594 PE/Dazzle [™] 594 PerCP-eFluor [®] 710 PerCP-Vio700 [™] VioGreen [™] Vio770 [™] |
| Yellow (561 nm) | 780/60 | BL4 | PE-Cy [®] 7 Qdot [®] 800 | | | Vybrant [®] DyeCycle [™] Ruby | | | | | | | PE-Vio770 [™] VioGreen [™] |
| | 585/16 | YL1 | PE | | PI SYTOX [®] Orange | Vybrant [®] DyeCycle [™] Orange | | Annexin V Alexa Fluor [®] 568 Annexin V Alexa Fluor [®] 594 MitoTracker [®] Orange CMTMRos MitoTracker [®] Red CMXRos TMRE TMRM | | CellROX [®] Orange | | dTomato mOrange RFP | |
| | 620/15 | YL2 | PE-Alexa Fluor [®] 610 PE-Texas Red [®] | | 7-AAD PI SYTOX [®] AADvanced [™] SYTOX [®] Orange | | FxCycle [™] PI/RNase | | | | | DsRed mCherry mKate mStrawberry | ECD PE-CF594 PE-Dazzle [™] 594 PE-eFluor [®] 610 PE-Vio [®] 610 Texas Red [®] |
| | 695/40 | YL3 | PE-Alexa Fluor [®] 700 PE-Cy [®] 5.5 Qdot [®] 705 TRI-COLOR [®] | | 7-AAD PI SYTOX [®] AADvanced [™] | | | | | | | | PE-Vio770 [™] |
| Red (638 nm) | 780/60 | YL4 | PE-Cy [®] 7 Qdot [®] 800 | | | Vybrant [®] DyeCycle [™] Ruby | | | | | | | PE-Vio770 [™] |
| | 670/14 | RL1 | Alexa Fluor [®] 647 APC Qdot [®] 655 | LIVE/DEAD [®] Fixable Far Red | SYTOX [®] Red | | FxCycle [™] Far Red | Annexin V Alexa Fluor [®] 647 Annexin V Alexa Fluor [®] 680 Annexin V APC MitoProbe [™] DiI _C (5) TO-PRO [®] -3 | CellTrace [™] Far Red Click-iT [®] Plus Edu Alexa Fluor [®] 647 | CellROX [®] Deep Red | | eFluor [®] 660 | |
| | 720/30 | RL2 | Alexa Fluor [®] 680 Alexa Fluor [®] 700 APC-Alexa Fluor [®] 700 Qdot [®] 705 | | | | | | | | | | |
| 780/60 | RL3 | APC-Alexa Fluor [®] 750 APC-Cy [®] 7 | LIVE/DEAD [®] Fixable Near-IR | | Vybrant [®] DyeCycle [™] Ruby | | | | | | | APC-H7 APC-eFluor [®] 750 APC-eFluor [®] 780 APC-Vio770 [™] | |

Find out more at lifetechnologies.com/attune

