

BioTracker ATP-Red Live Cell Dye Live cell imaging dye for cellular adenosine triphosphate (ATP) localized to mitochondria used to detect metabolic activity, cell proliferation and overall cell health.

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Unit	EA
Delivery details	No Dangerous Good

Description

Adenosine triphosphate (ATP) is the primary energy source for all cellular processes. ATP also functions as a signaling molecule for regulating cell movement, neurotransmission and ion channel functions. ATP is localized in mitochondria, where cellular respiration occurs. ATP levels can be used to measure cell proliferation and cell cycle dynamics. The BioTracker ATP-Red dye is a live cell red fluorescent imaging probe for adenosine triphosphate (ATP). The probe targets ATP specifically in the mitochondria of living cells. The probe shows no cross reactivity to numerous analytes including: Zn²⁺, Mg²⁺, Ca²⁺, Na²⁺, K⁺, GSH, HOCL, H₂O₂, arabinose, galactose, glucose, fructose, ribose, sorbose, sucrose, xylose, heparin, AMP, ADP, CMP, CDP, CTP, UMP, UDP, UTP, GMP, GDP or GTP. The probe is non-fluorescent when forming a closed ring structure. In the presence of the negatively charged ATP, the covalent bonds between boron and ribose is broken and the ring opens producing fluorescence. Spectral Properties Absorbance: 510nm Emission: 570nm