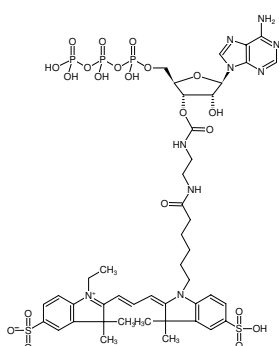
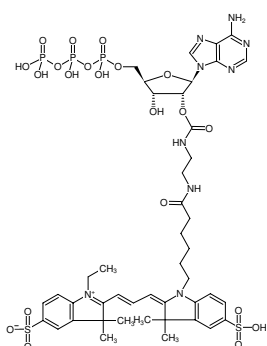




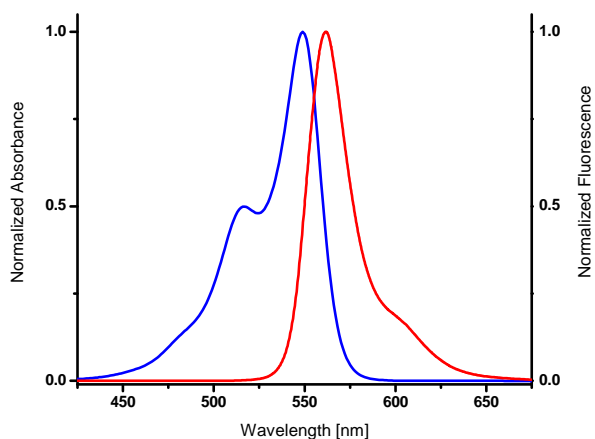
EDA-ATP-Cy3

2'/3'-O-(2-Aminoethyl-carbamoyl)-Adenosine-5'-triphosphate, labeled with Cy3, Triethylammonium salt

Cat. No.	Amount
NU-808-CY3	160 µl (1 mM)



Structural formula of EDA-ATP-Cy3



excitation and emission spectrum of Cy3

For general laboratory use.

Shipping: shipped on gel packs

Storage Conditions: store at -20 °C

Short term exposure (up to 1 week cumulative) to ambient temperature possible.

Shelf Life: 12 months after date of delivery

Molecular Formula: C₄₄H₅₈N₉O₂₁P₃S₂ (free acid)

Molecular Weight: 1206.03 g/mol (free acid)

Exact Mass: 1205.24 g/mol (free acid)

Purity: ≥ 95 % (HPLC)

Form: solution in water

Color: pink

Concentration: 1.0 mM - 1.1 mM

pH: 7.5 ± 0.5

Spectroscopic Properties: λ_{exc} 550 nm, λ_{em} 570 nm, ε 150.0 L mmol⁻¹ cm⁻¹ (Tris-HCl pH 7.5)

Applications:

Fluorescence polarization^[1]

Stopped-flow studies^[1]

Kinetics of nucleotide exchange^[2-4]

Fluorescence correlation spectroscopy^[5]

Crossbridging by flash photolysis^[6]

Specific Ligands:

Myosin/actomyosin-ATPase^[1]

Myofibrils^[2]

Selected References:

[1] Oiwa *et al.* (2003) The 2-O- and 3-O-Cy3-EDA-ATP (ADP) complexes with myosin subfragment-1 are spectroscopically distinct. *Bioph. J.* **84**:634.

[2] Chaen *et al.* (1998) Measurement of ATP turnover during shortening and lengthening of rabbit psoas myofibrils using fluorescent ATP analog. *Adv. Experim. Medicine and Biology* **453**:569.

[3] Shirakawa *et al.* (2000) Measurements of nucleotide exchange rate constants in single rabbit soleus myofibrils during shortening and lengthening

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using a fluorescent ATP analog. *Biophysical J.* **78**:918.

[4] Oiwa *et al.* (1998) Direct observation of a central bare zone in a native thick filament isolated from the anterior byssus retractor muscle of *Mytilus edulis*, using fluorescent ATP analog. *J. Biochem.* **123**:614.

[5] Kuhlmann *et al.* (1998) ATPase kinetics of *Dictostelium discoideum* myosin II motor domain. *J. Muscle Res. and Cell Motility* **19**:491.

[6] Chaen *et al.* (1998) Measurement of ATP turnover during shortening and lengthening of rabbit psoas myofibrils using fluorescent ATP analog. *Adv. Experm. Medicine and Biology* **453**:569.

Nishizaka *et al.* (2011) Simultaneous observation of chemomechanical coupling of a molecular motor. *Methods Mol Biol.* **778**:259.

Yanagida *et al.* (2011) Single-molecule measurements using microneedles. *Methods Mol Biol.* **778**:143.