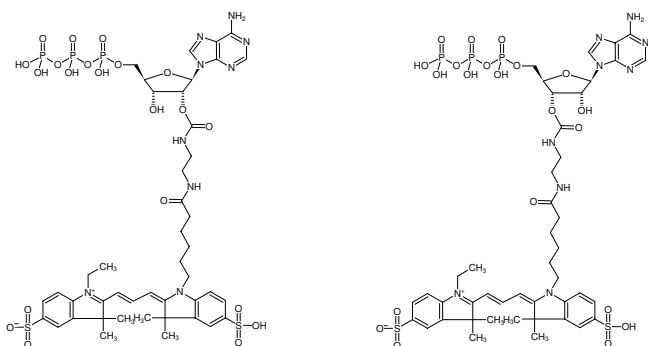




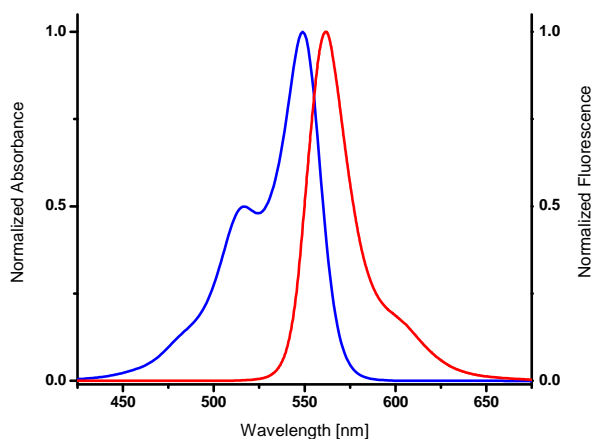
### EDA-ATP-Cy3

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:** C<sub>44</sub>H<sub>58</sub>N<sub>9</sub>O<sub>21</sub>P<sub>3</sub>S<sub>2</sub> (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<sub>exc</sub> 550 nm, λ<sub>em</sub> 570 nm, ε 150.0 L mmol<sup>-1</sup> cm<sup>-1</sup> (Tris-HCl pH 7.5)

**Applications:**

Fluorescence polarization<sup>[1]</sup>

Stopped-flow studies<sup>[1]</sup>

Kinetics of nucleotide exchange<sup>[2-4]</sup>

Fluorescence correlation spectroscopy<sup>[5]</sup>

Crossbridging by flash photolysis<sup>[6]</sup>

**Specific Ligands:**

Myosin/actomyosin-ATPase<sup>[1]</sup>

Myofibrils<sup>[2]</sup>

**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

**EDA-ATP-Cy3**

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

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.