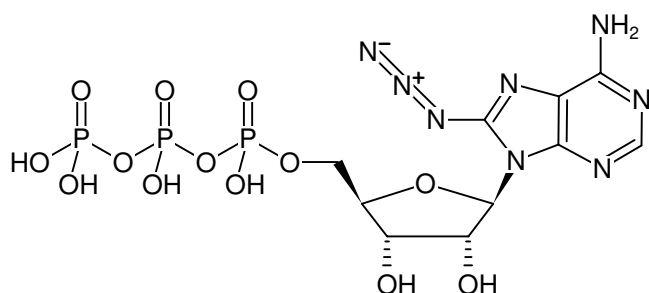


**8-Azido-ATP**

8-Azido-adenosine-5'-triphosphate, Sodium salt

Cat. No.	Amount
NU-155S	500 µl (10 mM)
NU-155L	5 x 500 µl (10 mM)



Structural formula of 8-Azido-ATP

**For research use only!****Shipping:** shipped on blue ice**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>10</sub>H<sub>15</sub>N<sub>8</sub>O<sub>13</sub>P<sub>3</sub> (free acid)**Molecular Weight:** 548.19 g/mol (free acid)**Exact Mass:** 548.00 g/mol (free acid)**Purity:** ≥ 95 % (HPLC)**Form:** clear aqueous solution**Concentration:** 10 mM - 11 mM**pH:** 7.5 ± 0.5**Spectroscopic Properties:** λ<sub>max</sub> 281 nm, ε 13.3 L mmol<sup>-1</sup> cm<sup>-1</sup> (Tris-HCl pH 7.5)**Applications:**Incorporation into RNA by **3'-End Labeling** with yeast Poly(A) Polymerase(yPAP)<sup>[1]</sup>Identification of protein ATP-binding sites<sup>[2]</sup>

The resulting azide-functionalized RNA can subsequently be processed via Cu(I)-free (azide-DBCO) or Cu(I)-catalyzed (azide-alkyne) click chemistry that offers the choice

- to introduce a Biotin group for subsequent purification tasks (via DBCO-functionalized Biotin or Alkynes of Biotin, respectively)
- to introduce fluorescent group for subsequent microscopic imaging (DBCO-functionalized fluorescent dyes or Alkynes of fluorescent dyes, respectively)
- to crosslink the RNA to azide- or alkyne functionalized biomolecules e.g. proteins

**Selected References:**

[1] Chen *et al.* (2004) Chain Termination and Inhibition of *Saccharomyces cerevisiae* Poly (A) Polymerase by C-8-modified ATP analogs. *J. Biol. Chem.* **279** (39):40405.

[2] Olcott *et al.* (1998) Localization and Characterization of Two Nucleotide-binding Sites on the Anaerobic Ribonucleotide Reductase from Bacteriophage T4. *J. Biol. Chem.* **273** (38):24853.