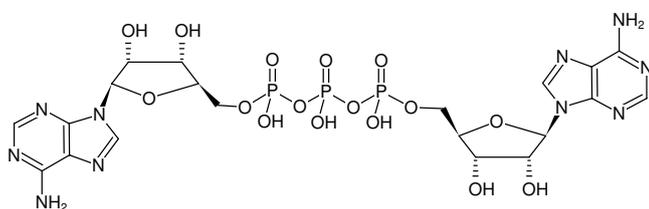


**AP<sub>3</sub>A - Solid**

(ApppA)

P<sup>1</sup>-(5'-Adenosyl) P<sup>3</sup>-(5'-adenosyl) triphosphate, Sodium salt

| Cat. No.  | Amount |
|-----------|--------|
| NU-506-5  | 5 mg   |
| NU-506-25 | 25 mg  |

Structural formula of AP<sub>3</sub>A - Solid**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>20</sub>H<sub>27</sub>N<sub>10</sub>O<sub>16</sub>P<sub>3</sub> (free acid)**Molecular Weight:** 756.41 g/mol (free acid)**Exact Mass:** 756.08 g/mol (free acid)**CAS#:** 5959-90-0**Purity:** ≥ 95 % (HPLC)**Form:** solid**Color:** white to off-white**Spectroscopic Properties:** λ<sub>max</sub> 259 nm, ε 27.0 L mmol<sup>-1</sup> cm<sup>-1</sup> (Tris-HCl pH 7.5)**Specific Ligands:**Ligand for P2X and P2Y receptors:Agonist at P2Y<sub>1</sub> receptor<sup>[1,2,3]</sup>, at P2Y<sub>12</sub> and P2Y<sub>13</sub> receptors<sup>[4]</sup> and for P2X<sub>1</sub> - P2X<sub>4</sub> purinoreceptors<sup>[5]</sup>**Selected References:**[1] Szczepanska-Konkel *et al.* (2005) Effects of diadenosine polyphosphates on glomerular volume. *Br. J. Pharmacol.* **144** (8):1109.[2] Yerxa *et al.* (2001) P1-(uridine 5')-P4-(2'-deoxycytidine 5')tetraphosphate tetrasodiumsalt a next generation P2Y2 receptor agonist for treatment of cystic fibrosis. *J. Pharmacol. Exp. Ther.* **302**:871.[3] Ralevic *et al.* (2001) Structure-activity relationships of diadenosine polyphosphates (ApnAs), adenosine polyphospho guanosines (ApnGs) and guanosine polyphospho guanosines (GpnGs) at P2 receptors in the rat mesenteric arterial bed. *Br. J. Pharmacol.* **134** (5):1073.[4] Zhang *et al.* (2002) Identification and characterization of a novel Gai-coupled ADP receptor from human and mouse. *J. Pharmacol. Exp. Ther.* **301** (2):705.[5] Gualix *et al.* (2014) Presence of diadenosine polyphosphates in microdialysis samples from rat cerebellum in vivo: effect of mild hyperammonemia on their receptors. *Purinergic Signal.* **10** (2):349.Guranowski *et al.* (2000) Selective degradation of 2'-adenylated diadenosine tri- and tetraphosphates, Ap (3)A and Ap (4)A, by two specific human dinucleoside polyphosphate hydrolases. *Arch. Biochem. Biophys.* **373**:218.Luo *et al.* (1999) Identification and characterization of diadenosine 5',5'-P1,P2-diphosphate and diadenosine 5',5'-P1,P3-triphosphate in human myocardial tissue. *FASEB J.* **13**:695.Luthje *et al.* (1988) Catabolism of Ap4A and Ap3A in whole blood. The dinucleotides are long-lived signal molecules in the blood ending up as intracellular ATP in the erythrocytes. *Eur. J. Biochem.* **173**:241.Luthje *et al.* (1987) Catabolism of Ap4A and Ap3A in human serum. Identification of isoenzymes and their partial characterization. *Eur. J. Biochem.* **169**:385.Luthje *et al.* (1985) Catabolism of Ap3A and Ap4A in human plasma. Purification and characterization of a glycoprotein complex with 5'-nucleotide phosphodiesterase activity. *Eur. J. Biochem.* **149**:119.Bochner *et al.* (1984) AppppA and related adenylylated nucleotides are synthesized as a consequence of oxidation stress. *Cell* **37** (1):225.