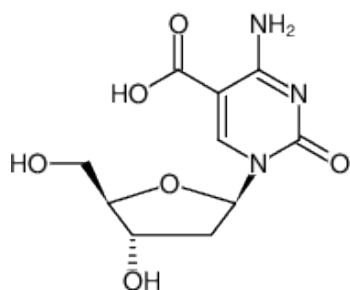


**5-Carboxy-dC**

cadC

5-Carboxy-2'-deoxycytidine, Sodium salt

| Cat. No. | Amount |
|----------|--------|
| N-1091-5 | 5 mg |



Structural formula of 5-Carboxy-dC

For general laboratory use.**Shipping:** shipped at ambient temperature**Storage Conditions:** store at -20 °C

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

Shelf Life: 24 months after date of delivery**Molecular Formula:** C₁₀H₁₃N₃O₆ (free acid)**Molecular Weight:** 271.23 g/mol (free acid)**Exact Mass:** 271.08 g/mol (free acid)**Purity:** ≥ 95 % (HPLC)**Form:** solid**Color:** white to off-white**Solubility:** water, methanol**Spectroscopic Properties:** λ_{max} 280 nm, ε 7.6 L mmol⁻¹ cm⁻¹ (Tris-HCl pH 7.5)**Applications:**Metabolism of dC substituted at position 5^[1]Incorporation into DNA^[2]functional and conformational influence of cytosine modifications^[3]**Selected References:**

[1] Schiesser (2013) Deamination, Oxidation, and C-C Bond Cleavage Reactivity of 5-Hydroxymethylcytosine, 5-Formylcytosine, and 5-Carboxycytosine. *J. Am. Chem. Soc.* **135**:14593.

[2] Schroeder (2014) Synthesis of a DNA promoter segment containing all four epigenetic nucleosides: 5-Methyl-, 5-hydroxymethyl-, 5-formyl-, and 5-carboxy-2'-deoxycytidine. *Angew. Chem. Int. Ed.* **53**: 315.

[3] Sumino (2008) Synthesis and properties of oligodeoxynucleotides containing 5-carboxy-2'-deoxycytidines. *Bioorg. Med. Chem. Lett.* **18**:274.