

Catalog Number: 101469, 150774

## Cytosine

### Structure (free base):



<b>Molecular Formula:</b>	<i>Free Base</i> C <sub>4</sub> H <sub>5</sub> N <sub>3</sub> O	<i>Hydrochloride</i> C <sub>4</sub> H <sub>5</sub> N <sub>3</sub> O·HCl
<b>Molecular Weight:</b>	111.1	147.6
<b>CAS #</b>	71-30-7	Not Available

**Synonym:** 4-Amino-2-hydroxypyrimidine**Physical Description:** White to off-white powder

### Solubility:

*Free Base:* Soluble in water (1 g/130 ml) or 0.1 N HCl (50 mg/ml - clear to very slightly hazy, colorless to faint yellow solution); slightly soluble in ethanol; insoluble in ether.<sup>1</sup> Gives a red color when dissolved in solutions of sodium hypochlorite to which a drop of ammonium hydroxide is added.<sup>1</sup> Forms salts with acids.<sup>1</sup>

*Hydrochloride:* Soluble in water or 1 N HCl (60 mg/ml - clear, colorless solution).

**Description:** A constituent of nucleic acids.

### Availability:

Catalog Number	Description	Size
101469	Cytosine	1 g 5 g 10 g
150774	Cytosine Hydrochloride	1 g 5 g 25 g

### Reference:

1. *Merck Index*, **12th Ed.**, No. 2864