

## Nucleotide catabolism

---

Sections/problems listed with an asterisk (\*) do not discuss the exact reaction indicated, but do discuss a closely related reaction.

### Cytidine (to uridine)

- Cytidine deaminase (EC 3.5.4.5) [P11.4](#)

### Uridine

- Uridine phosphorylase (EC 2.4.2.3) [Section 9.2\\*](#), [Section 11.5](#); [P9.1](#)
- Dihydropyrimidine dehydrogenase (EC 1.3.1.2) [Section 16.5D](#)
- Dihydropyrimidase (EC 3.5.2.2) [Section 12.5\\*](#); [P12.11a](#)
- *beta*-ureidopropionase (EC 3.5.1.6) [P13.11](#)

### Thymidine

- Thymidine phosphorylase (EC 2.4.2.4) [Section 9.2\\*](#)
- Dihydropyrimidine dehydrogenase (EC 1.3.1.2) [Section 16.5D](#)
- Dihydropyrimidase (EC 3.5.2.2) [Section 12.5\\*](#); [P12.11a](#)
- *beta*-ureidopropionase ([EC 3.5.1.6](#)) [P13.11](#)

### Adenosine (to uric acid via xanthine)

- Adenosine deaminase ([EC 3.5.4.4](#)) [P11.5](#)
- Purine nucleoside phosphorylase (EC 2.4.2.1) [Section 9.2\\*](#)
- Xanthine oxidase (EC 1.17.1.4; EC 1.17.3.2) *not discussed*

### Guanosine (to uric acid via xanthine)

- Purine nucleoside phosphorylase ([EC 2.4.2.1](#)) [Section 9.2\\*](#)
- Guanine deaminase ([EC 3.5.4.3](#)) [P11.5\\*](#)
- Xanthine oxidase ([EC 1.17.1.4](#); [EC 1.17.3.2](#)) *not discussed*

Organic Chemistry With a Biological Emphasis by [Tim Soderberg](#) (University of Minnesota, Morris)

---

This page titled [Nucleotide catabolism](#) is shared under a [CC BY-NC-SA 4.0](#) license and was authored, remixed, and/or curated by via [source content](#) that was edited to the style and standards of the LibreTexts platform.

---

This page titled [Nucleotide catabolism](#) is shared under a [CC BY-NC-SA 4.0](#) license and was authored, remixed, and/or curated by [Tim Soderberg](#) via [source content](#) that was edited to the style and standards of the LibreTexts platform.

File failed to load: <https://cdnjs.cloudflare.com/ajax/libs/mathjax/2.7.3/jax/output/HTML-CSS/jax.js>