

## Uricase from *E. coli*, Recombinant

### Product Information

<b>Cat#</b>	DIA-415
<b>Similar</b>	UO
<b>Source</b>	<i>E. coli</i>
<b>Description</b>	The enzyme urate oxidase (UO), or uricase or factor-independent urate hydroxylase, absent in humans, catalyzes the oxidation of uric acid to 5-hydroxyisourate: Uric acid + O <sub>2</sub> + H <sub>2</sub> O → 5-hydroxyisourate + H <sub>2</sub> O <sub>2</sub> → allantoin + CO <sub>2</sub>
<b>Activity</b>	> 4 U/mg lyophilizate
<b>CAS No.</b>	9002-12-4
<b>Unit Definition</b>	One unit (U) is defined as the amount of enzyme which oxidizes 1 μmol of uric acid per min at 25°C and pH 8.5.
<b>Storage</b>	at -20°C
<b>Synonyms</b>	urate oxidase; uric acid oxidase; uricase; uricase; urate: oxygen oxidoreductase; EC 1.7.3.3; uricase II
<b>Enzyme Commission Number</b>	EC 1.7.3.3
<b>pH Stability</b>	7.0–11.0
<b>Michaelis Constant</b>	1.1 x 10 <sup>-5</sup> M (uric acid)
<b>Optimum pH</b>	8.5
<b>Optimum temperature</b>	45°C
<b>Thermal stability</b>	below 55°C
<b>Stability</b>	Stability (liquid form) stable at 37°C for at least ten days Stability (powder form) stable at 30°C at least three weeks



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<b>Stabilizers</b>	Citrate, sucrose
<b>Inhibitors</b>	Hg <sup>2+</sup> , Ag <sup>+</sup>
<b>Contaminants</b>	catalase < 1.0%
<b>Abbr</b>	UO, Recombinant ( <i>E. coli</i> )
<b>Alias</b>	UO
<b>Appearance</b>	Light brownish lyophilizate
<b>Structure</b>	2 subunits of 35 kDa (SDS-PAGE)
<b>Molecular Weight</b>	ca. 90 kDa
<b>Species</b>	<i>E. coli</i>

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