www.neobiolab.com info@neobiolab.com 888.754.5670, +1 617.500.7103 United States 0800.088.5164, +44 020.8123.1558 United Kingdom

# SCIENTIFIC

### Uricase

**Description:**Urate Oxidase Recombinant produced in E.Coli is a tetrameric, non-glycosylated polypeptide chain containing 302 amino acids, having a molecular formula of C1523H2383N417O462S7 and a molecular mass of 34,247 Dalton.The cDNA coding for urate-oxidase was cloned from a strain of Aspergillus flavus. The monomer protein has no intraor inter-disulfide bridges.

Synonyms: Urate Oxidase, Uricase, Urate Oxygen, Oxidoreductase, UOX, UO, EC 1.7.3.

Source: Escherichia Coli.

Physical Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Amino Acid Sequence:msavkaaryg kdnvrvykvh kdektgvqtv yemtvcvlle geietsytka dnsvivatds ikntiyitak qnpvtppelf gsilgthfie kynhihaahv nivchrwtrm didgkphphs firdseekrn vqvdvvegkg idiksslsgl tvlkstnsqf wgflrdeytt lketwdrils tdvdatwqwk nfsglqevrs hvpkfdatwa tarevtlktf aednsasvqa tm

**Purity:**Greater than 96.0% as determined by(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.

#### Formulation:

Each 1.5mg Uricase contains 5mg sucrose, 25mg glycine, 0.1mg Tween-80, 13.6 mg Na2HPO4\*12H20 and 0.33 mg NaH2PO4\*2H20.

## Stability:

Lyophilized Urate Oxidase although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Uricase should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.

#### Usage:

NeoBiolab's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

## Solubility:

We highly recommend reconstituting the lyophilized Uricase in 50mM borate buffer containing 0.001%Triton X-100 and 1.0mM EDTA, pH 8.5 for activity assay.

#### Introduction:

Urate oxidase catalyzes the enzymatic oxidation (degrades) of uric acid into allantoin, an inactive and soluble metabolite, which is 5 to 10 fold more soluble than uric acid. Urate oxidase is an enzyme of the purine breakdown pathway that catalyses the oxidation of uric acid to allantoin. Uricase is present in numerous diverse organisms, but not in higher primates including human. Hyperuricaemia is most commonly associated with gout and also occurs in mammalians with malignancy, especially those with lymphoid malignancies due to rapid cell turnover and an increased rate of purine metabolism. Uricase is effective in the prevention and treatment of hyperuricaemia in mammalians with malignancy and in those who have undergone transplantation. It appears to act rapidly, safely and induces a more dramatic decrease in plasma levels of uric acid.







www.neobiolab.com info@neobiolab.com 888.754.5670, +1 617.500.7103 United States 0800.088.5164, +44 020.8123.1558 United Kingdom

# **Biological Activity:**

The specific activity was found to be 10U/mg. One Unit oxidizes one micromole of uric acid per

minute at 25°C, at pH 8.5.

To place an order, please Click HERE.



Catalog #:ENPS-319

For research use only.





