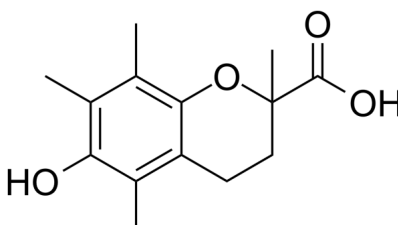


## Certificate of Analysis

Catalog Number	BP22551
Product Name	Trolox

## Physical and Chemical Properties

CAS No.	53188-07-1
Chemical Formula	C <sub>14</sub> H <sub>18</sub> O <sub>4</sub>
Molecular Weight	250.29
Solubility	DMSO: ≥ 100 mg/mL (399.54 mM)
Storage	Powder: -20°C for 2 years In solvent: -80°C for 1 year
Chemical Structure OR Tested Image	

## Product Information

Description	Trolox is an analogue of vitamin E with a powerful antioxidant effect. Trolox is also a powerful inhibitor of membrane damage.
-------------	--

In vitro	Trolox has shown to protect mammalian cells from oxidative damage. Trolox is effective in preventing myocyte necrosis in cell culture studies and in a canine model of two hours of left anterior descending coronary artery (LAD) occlusion followed by four hours of reperfusion. Trolox could prevent oxidative stress-induced apoptosis in thymocytes. Pre- or posttreatment of cells with Trolox reduced H2O2-induced DNA fragmentation to control levels and below. Trolox is a hydrophilic analogue of alpha-tocopherol and reported to scavenge peroxy radicals better than vitamin E in sodium dodecyl sulfate micelles and in liposomes. Trolox prolongs substantially the survival of human ventricular myocytes and hepatocyte against oxyradicals generated with xanthine oxidase plus hypoxanthine, and prevented lysis of red cells exposed to an azo-initiator.
----------	---

## Analytical Data

HPLC	Shows Min >99% purity
H-NMR	Consistent with structure
Stability and Solubility Advice	Information on product stability, especially in solution, has rarely been reported and in most cases we can only provide a general guideline. We recommend that once the stock solution has been prepared, it be stored in equal quantities in sealed vials and used within 1 month. Avoid repeated freezing and thawing cycles. Storage conditions for some special products should be referred to their storage details.

Purdue Bioscience Inc.

750 50th St, Brooklyn, NY 11220, USA

<https://www.purduebio.com>

1-877.618.7311

info@purduebio.com

v2 Revision on 12/28/2022