MedChemExpress

## Product Data Sheet

## EDTA-OH

| Cat. No.: | $\mathrm{HY}-\mathrm{WO} 013851$ |
| :--- | :--- |
| CAS No.: | $150-39-0$ |
| Molecular Formula: | $\mathrm{C}_{10} \mathrm{H}_{18} \mathrm{~N}_{2} \mathrm{O}_{7}$ |
| Molecular Weight: | 278.26 |
| Target: | Others |
| Pathway: | Others |
| Storage: | Please store the product under the recommended conditions in the Certificate of |
|  | Analysis. |

## BIOLOGICAL ACTIVITY

## Description

In Vivo

EDTA-OH is a chelating agent, which forms thermodynamically stable chelates with metal ions like calcium, magnesium, iron, zinc and copper ${ }^{[1]}$. EDTA-OH exhibits ability of phytoremediation in heavy-metal-contaminated soils ${ }^{[2]}$. EDTA-OH is able to cross brain-blood barrier ${ }^{[3]}$.

EDTA-OH ( $50 \mathrm{mg} / \mathrm{kg}$, i.p. for 5 days) decreases the aluminium concentration in blood and brain and oxidative stress in brain. EDTA-OH is blood-brain barrier permeable, which could be an antidote for aluminium overload ${ }^{[3]}$.
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

| Animal Model: | Aluminium overload in wistar rats ${ }^{[3]}$ |
| :--- | :--- |


| Dosage: | $50 \mathrm{mg} / \mathrm{kg}$ |
| :--- | :--- |


| Administration: | i.p. for 5 days |
| :--- | :--- |

Result: $\quad$ Inhibited GST activity, reduced the concentration of aluminium in blood and brain.

## REFERENCES

[1]. Li X, Zhang Z, et al., Complexation of Light Trivalent Lanthanides with N-(2-Hydroxyethyl)ethylenediamine-N,N',N'-triacetic Acid in Aqueous Solutions: Thermodynamic Analysis and Coordination Modes. Inorg Chem. 2019 Nov 18;58(22):15618-15628.
[2]. Chen H, et al., EDTA and HEDTA effects on Cd, Cr, and Ni uptake by Helianthus annuus. Chemosphere. 2001 Oct;45(1):21-8.
[3]. Flora SJ, et al., Aluminum-induced oxidative stress in rat brain: response to combined administration of citric acid and HEDTA. Comp Biochem Physiol C Toxico Pharmacol. 2003 Mar;134(3):319-28

Caution: Product has not been fully validated for medical applications. For research use only.
Tel: 609-228-6898 Fax: 609-228-5909 E-mail:tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

