Product Data Sheet

EDTA-OH

Cat. No.: HY-W013851 CAS No.: 150-39-0 Molecular Formula: $C_{10}H_{18}N_2O_7$ 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 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].

In Vivo EDTA-OH (50 mg/kg, i.p. for 5 days) decreases the aluminium concentration in blood and brain and oxidative stress in brain.

 ${\tt EDTA-OH}\ is\ blood-brain\ barrier\ permeable,\ which\ could\ be\ an\ antidote\ for\ aluminium\ overload\ [3].$

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 mg/kg
Administration:	i.p. for 5 days
Result:	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 Toxicol Pharmacol. 2003 Mar;134(3):319-28.

Caution: Product has not been fully validated for medical applications. For research use only.

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