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Proteins

Product Data Sheet

EDTA-OH

Cat. No.: HY-W013851 CAS No.: 150-39-0 Molecular Formula: $C_{10}H_{18}N_{2}O_{7}$ Molecular Weight: 278.26 Others

Target: Pathway: Others

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description	iron, zinc and copper ^[1]	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. 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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