



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

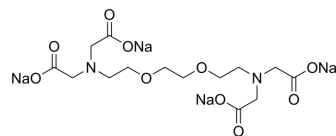
mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

EGTA tetrasodium

Cat. No.:	HY-D0861A
CAS No.:	13368-13-3
Molecular Formula:	C ₁₄ H ₂₀ N ₂ Na ₄ O ₁₀
Molecular Weight:	468.28
Target:	Biochemical Assay Reagents
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	EGTA tetrasodium is a specific calcium ion chelator. EGTA tetrasodium has an apparent calcium dissociation constant (K_d) of 60.5 nM at physiological pH (7.4) and has very high specificity for Ca^{2+} over Mg^{2+} ($Mg^{2+} K_d$ 1-10 mM). EGTA tetrasodium significantly inhibits the substrate adherence capacity of inflammatory macrophages ^{[1][2]} .
In Vitro	EGTA tetrasodium, proposed as endodontic irrigant, decreases substrate adherence capacity of inflammatory macrophages in a time- and dose-dependent manner. The EGTA tetrasodium concentration that causes an IC_{50} is 202 mM. Chelators react with calcium ions in the hydroxyapatite crystals to produce a metallic chelate. Removal of calcium ions from the dentine makes the dentinal tissue softer, especially the hydroxyapatite-rich peritubular dentin and increases the diameter of exposed dentinal tubules ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Theranostics. 2021 Mar 24;11(12):5650-5674.
- Front Immunol. 2021 Aug 31;12:701671.
- Food Funct. 05 Aug 2021.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Harris RA, Hanrahan JW. Effects of EGTA on calcium signaling in airway epithelial cells. Am J Physiol. 1994;267(5 Pt 1):C1426-C1434. doi:10.1152/ajpcell.1994.267.5.C1426.

[2]. Segura-Egea JJ, Jiménez-Rubio A, Rios-Santos JV, Velasco-Ortega E, Calvo-Gutierrez JR. In vitro inhibitory effect of EGTA on macrophage adhesion: endodontic implications. J Endod. 2003;29(3):211-213.

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