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Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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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

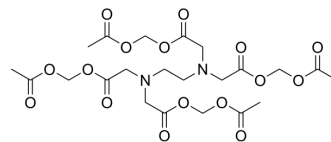
mail@szabo-scandic.com

www.szabo-scandic.com

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

EDTA-AM

Cat. No.:	HY-D1746
CAS No.:	162303-59-5
Molecular Formula:	C ₂₂ H ₃₂ N ₂ O ₁₆
Molecular Weight:	580.49
Target:	Biochemical Assay Reagents
Pathway:	Others
Storage:	-20°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (172.27 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	1.7227 mL	8.6134 mL	17.2268 mL
5 mM	0.3445 mL	1.7227 mL	3.4454 mL
10 mM	0.1723 mL	0.8613 mL	1.7227 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

EDTA-AM (ethylenediaminetetraacetic acid, acetoxymethyl ester) is the membrane-permeant form of the metal chelator EDTA (HY-Y0682). Live cells passively load EDTA-AM by incubating with EDTA-AM. Once internalized, cytoplasmic esterase decomposes AM esters, releasing the active ligand EDTA, which isolates metal ions within the cell. EDTA-AM induces an arrest of mitotic progression and chromosome decondensation^{[1][2]}.

In Vitro

EDTA-AM treatment of mitotic cells

- Mitotic cells were collected and seeded onto a 12-well culture plate with poly lysine-coated coverslips and DMEM supplemented with 10% FBS.
- EDTA-AM was dissolved in 100 mM DMSO, EDTA-AM was added to the culture medium at a final concentration of 20 mM with 0.02% Pluronic F-127 (Invitrogen), and the cells were further incubated at 37C for 100 min.
- After incubation, the numbers of mitotic cells and interphase cells were counted. The cells on the coverslips were fixed, stained with DAPI, and mounted with para-phenylene diamine (PPDI) solution (20 mM HEPES, pH 7.4, 1 mM MgCl₂, 100 mM KCl, 78% glycerol, 1 mg/mL PPDI).

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Watkins CS, et.al. Effects on K⁺ currents in rat cerebellar granule neurones of a membrane-permeable analogue of the calcium chelator BAPTA. Br J Pharmacol. 1996 Aug;118(7):1772-8.

[2]. Maeshima K, et.al. A Transient Rise in Free Mg²⁺Ions Released from ATP-Mg Hydrolysis Contributes to Mitotic Chromosome Condensation. Curr Biol. 2018 Feb 5;28(3):444-451.e6.

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