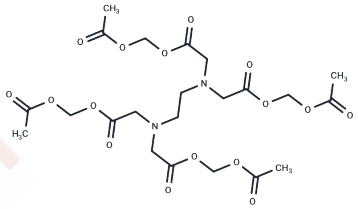
Data Sheet (Cat.No.T86339)

TargetMol

EDTA-AM

Chemical Properties



CAS No. : 162303-59-5

Formula: C22H32N2O16

Molecular Weight: 580.49

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	EDTA-AM (ethylenediaminetetraacetic acid, acetoxymethyl ester) represents the membrane-permeable version of the metal chelator EDTA. By incubating live cells with EDTA-AM, they passively absorb this compound. After entering the cell, cytoplasmic esterases break down the AM esters, liberating the active chelating agent EDTA that sequesters metal ions internally. The presence of EDTA-AM in cells leads to the cessation of mitotic progression and the decondensation of chromosomes [1] [2].
Targets(IC50)	Others
In vitro	EDTA-AM treatment of mitotic cells involves several steps: First, collect mitotic cells and seed them onto a 12-well culture plate containing poly-L-lysine-coated coverslips, using DMEM supplemented with 10% FBS. Dissolve EDTA-AM in 100 mM DMSO and add it to the medium containing 0.02% Pluronic F-127 to a final concentration of 20 μM, then incubate the cells at 37°C for 100 minutes. After incubation, count the number of mitotic and interphase cells. Fix the cells on coverslips, stain them with DAPI, and mount using p-phenylenediamine (PPDI) solution [20 mM HEPES: pH 7.4, 1 mM MgCl2, 100 mM KCl, 78% glycerol, 1 mg/mL PPDI]. The above information is based on published literature. Experimental procedures should be appropriately modified to meet specific research demands.

Preparing Stock Solutions

	1mg	5mg	10mg
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
50 mM	0.0345 mL	0.1723 mL	0.3445 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.