TPEN

Heavy metal chelator

A cell permeable and extremely high-affinity chelator of heavy metals, yet with low affinity for ${\rm Mg}^{2+}$ and ${\rm Ca}^{2+}$. Lipid-soluble, crossing both natural and artificial membranes. TPEN can be used in conjunction with QUIN 2 (Prod. No. ENZ-52013) or QUIN 2/AM to reduce heavy-metal quenching of QUIN 2 fluorescence in cells. Ion specificity: ${\rm Zn}^{2+}{\rm >Fe}^{2+}{\rm >Mn}^{2+}{\rm >Ca}^{2+}{\rm =Mg}^{2+}$. Complex with ${\rm Fe}^{2+}$ catalyzes superoxide dismutation. Induces DNA fragmentation when chelated with ${\rm Zn}^{2+}$ and induces apoptosis in T cells.

Citations: 12

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Ordering Information

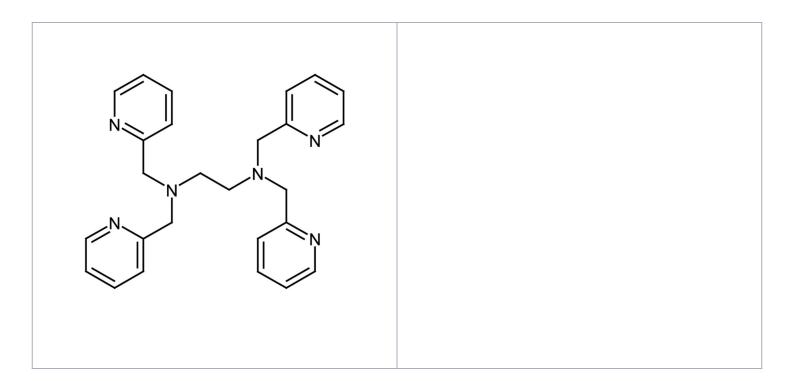
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ALX-450-011-M100

100mg

Manuals, SDS & CofA

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Handling & Storage

Use/Stability As indicated on product label or CoA when stored as recommended.

Long Term Storage +4°C

Shipping Ambient Temperature

Regulatory Status RUO - Research Use Only

Product Details

Alternative Name N,N,N',N'-Tetrakis-(2-pyridylmethyl)ethylenediamine

Appearance White to light yellow to brown solid.

CAS 16858-02-9

Formula $C_{26}H_{28}N_6$

MW 424.5

Purity ≥97% (Nonaqueous Titration)

Solubility Soluble in dimethyl formamide, DMSO, 100% ethanol or

methanol.

Last modified: May 29, 2024