

1,2-Diaminoanthraquinone *CAS 1758-68-5*

Catalog number: 15220

Unit size: 25 mg

Product Details

Storage Conditions Freeze (<-15 °C), Minimize light exposure

Expiration Date 12 months upon receiving

Chemical Properties

Appearance Blue solid

Molecular Weight 238.24

Soluble In DMSO

Chemical Structure

Applications

The role of nitric oxide (NO) as a putative mediator of neuronal death can be understood best if NO is detected directly.

1,2-Diaminoanthraquinone (DAQ) is a red fluorescent probe that is used to detect nitric oxide (NO) productions in live cell and animals. DAQ has minimal neurotoxic effects and it neither influences normal evoked field potential amplitudes nor does it affect induction of long-term potentiation (LTP) in comparison to controls. DAQ is used to directly capture released NO during neurodegeneration in vivo and at the cellular site of its generation. The non-fluorescent 1,2-diaminoanthraquinone (DAQ) is injected into the eyes of rats whose optic nerve is injured to induce retrograde degeneration of the ganglion cells. The reaction product of DAQ with NO is a triazole with red fluorescence. The DAQ-based methodology of NO assessment is convenient and applicable to numerous living systems both in vivo and in vitro.