



# SZABO SCANDIC

Part of Europa Biosite

## 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

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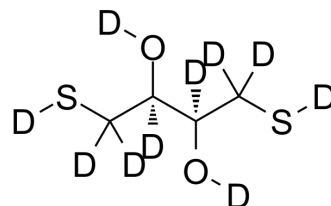
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## DL-dithiothreitol-d<sub>10</sub>-1

|                    |                                                                                           |
|--------------------|-------------------------------------------------------------------------------------------|
| Cat. No.:          | HY-15917S1                                                                                |
| CAS No.:           | 203633-21-0                                                                               |
| Molecular Formula: | C <sub>4</sub> D <sub>10</sub> O <sub>2</sub> S <sub>2</sub>                              |
| Molecular Weight:  | 164.31                                                                                    |
| Target:            | Isotope-Labeled Compounds                                                                 |
| Pathway:           | Others                                                                                    |
| Storage:           | Please store the product under the recommended conditions in the Certificate of Analysis. |



### BIOLOGICAL ACTIVITY

|             |                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Description | DL-dithiothreitol-d <sub>10</sub> -1 is the deuterated form of DL-dithiothreitol. DL-dithiothreitol (DTT) is a strong reducing agent with anti-disulfide activity. DL-dithiothreitol is oxidized to form a stable six-membered ring with an internal disulfide bond <sup>[1][2]</sup> .                                                                                                                                        |
| In Vitro    | Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs <sup>[1]</sup> .<br>MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

### REFERENCES

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother*. 2019 Feb;53(2):211-216.
- [2]. Yao H, et al. Establishment of disulfidptosis-related LncRNA signature as biomarkers in colon adenocarcinoma[J]. *Cancer Cell International*, 2024, 24(1): 183.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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