

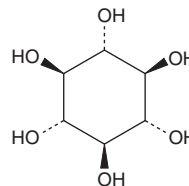
PRODUCT INFORMATION



scyllo-Inositol

Item No. 31214

CAS Registry No.: 488-59-5
Formal Name: (1r,2r,3r,4r,5r,6r)-cyclohexane-1,2,3,4,5,6-hexaol
Synonyms: ELND 005, scyllo-Cyclohexanehexol
MF: C₆H₁₂O₆
FW: 180.2
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

scyllo-Inositol is supplied as a solid. Aqueous solutions of scyllo-inositol can be prepared by directly dissolving the solid in aqueous buffers. The solubility of scyllo-inositol in PBS, pH 7.2, is approximately 0.25 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

scyllo-Inositol is a stereoisomer of inositol. It induces a structural transition in amyloid- β (1-42) (A β 42), but not A β 40, from a random coil to β -sheet structure but prevents A β 42 fibril formation in cell-free assays.¹ scyllo-Inositol reduces A β 40- and A β 42-induced decreases in the survival of PC12 cells. It reduces increases in soluble and insoluble brain A β 40 and A β 42 levels in four- and six-month-old mice in the TgCRND8 model of Alzheimer's disease when administered starting at six weeks of age, which is prior to the onset of increased A β levels and spatial learning deficits.² It also reduces increases in insoluble brain A β 40 and A β 42 levels in six-month-old mice when administered starting at five months of age when the neuropathological and learning deficits are already established. scyllo-Inositol improves established spatial learning and memory deficits in the Morris water maze when compared with TgCRND8 control and non-transgenic littermate control mice. It also improves survival of TgCRND8 mice.

References

1. McLaurin, J., Golomb, R., Jurewicz, A., *et al.* Inositol stereoisomers stabilize an oligomeric aggregate of Alzheimer amyloid β peptide and inhibit A β -induced toxicity. *J. Biol. Chem.* **275**(24), 18495-18502 (2000).
2. McLaurin, J., Kierstead, M.E., Brown, M.E., *et al.* Cyclohexanehexol inhibitors of A β aggregation prevent and reverse Alzheimer phenotype in a mouse model. *Nat. Med.* **12**(7), 801-808 (2006).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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