

PRODUCT INFORMATION



cis-ABCD

Item No. 32966

CAS Registry No.: 73550-55-7
Formal Name: cis-1-amino-1,3-cyclobutanedicarboxylic acid
Synonyms: cis-1-Aminocyclobutane-1,3-dicarboxylic Acid, CACB, cis-2,4-Methanoglutamate
MF: C₆H₉NO₄
FW: 159.1
Purity: ≥95%
Supplied as: A crystalline 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

cis-ABCD is supplied as a crystalline solid. A stock solution may be made by dissolving the cis-ABCD in the solvent of choice, which should be purged with an inert gas. cis-ABCD is soluble in DMSO.

Description

cis-ABCD is an NMDA receptor agonist.¹ It binds to NMDA receptors ($K_i = 0.052 \mu\text{M}$) and is selective for NMDA over kainate and AMPA receptors in radioligand binding assays (K_i s = $>300 \mu\text{M}$ for both). cis-ABCD induces inward currents in *Xenopus* oocytes expressing rat NMDA receptors ($EC_{50} = 1.26 \mu\text{M}$), an effect that can be blocked by the NMDA receptor antagonist D-2-amino-7-phosphonoheptanoate (D-AP7). *In vivo*, cis-ABCD (30 and 70 nmol/animal) induces contralateral turning in rats.²

References

1. Lanthorn, T.H., Hood, W.F., Watson, G.B., *et al.* cis-2,4-Methanoglutamate is a potent and selective N-methyl-D-aspartate receptor agonist. *Eur. J. Pharmacol.* **182(3)**, 397-404 (1990).
2. Black, M.D., Crossman, A.R., Hayes, A.G., *et al.* Acute and chronic behavioural sequelae resulting from intrastriatal injection of an NMDA agonist. *Pharmacol. Biochem. Behav.* **48(2)**, 441-446 (1994).

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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