D-Cycloserine

D-cycloserine, a partial agonist at the NMDA receptor, is used as an experimental model to investigate the effects of drugs on the nervous system. It is used in studies about learning, memory, and psychological conditions like PTSD and anxiety.

When D-cycloserine combined with other pharmacological agents, has been shown to enhance cognitive functions and to act as a matrix effect inhibitor in analytical methods.

D-cycloserine also shows activity against some bacterial infections by inhibiting the cell wall synthesis.

Cat. Number	AS-2039
CAS Number	68-41-7
MDL Number	MFCD00005353
PubChem	310270733
Molecular Weight	102.09 gr/mol
Molecular Formula	$C_3H_6N_2O_2$
Storage Temperature	-20°C
Form and Color	Powder, White to Off-White
Identification	According to USP
Solubility (5% in water)	Clear, Colorless to Faint Yellow Solution
pH (10% in water)	5.5 - 6.5
Specific Optical Rotation	+108 - +114 ° (c=5, 2M NaOH)
Absorptivity	≤ 0.80 (0.04% in 0.1M NaOH at 285nm)
Loss on Drying	≤ 1.0%
Residue on Ignition	≤ 0.5%
Potency	≥ 900µg/mg