



Dehydronorketamine HCl Standard solution (DWT09)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview 100 µg/mL analytical Dehydronorketamine Standard

Conjugate N/A

Cas.No 1435934-26-1

Molecular Weight 258.14g/mol

Format Liquid

Concentration 100 µg/mL

Size 1 ml

Buffer Acetonitrile

Storage Store unopened in freezer(-10°C to 25°C)

BACKGROUND

Introduction

Dehydronorketamine (DHNK), or 5,6-dehydronorketamine, is a minor metabolite of ketamine which is formed by dehydrogenation of its metabolite norketamine. Though originally considered to be inactive, DHNK has been found to act as a potent and selective negative allosteric modulator of the $\alpha 7$ -nicotinic acetylcholine receptor ($IC_{50} = 55$ nM). For this reason, similarly to hydroxynorketamine (HNK), it has been hypothesized that DHNK may have the capacity to produce rapid antidepressant effects. However, unlike ketamine, norketamine, and HNK, DHNK has been found to be inactive in the forced swim test (FST) in mice at doses up to 50 mg/kg. DHNK is inactive at the $\alpha 3\beta 4$ -nicotinic acetylcholine receptor ($IC_{50} > 100$ µM) and is only very weakly active at the NMDA receptor ($K_i = 38.95$ µM for (S)-(+)-DHNK). It can be

detected 7–10 days after a modest dose of ketamine, and because of this, is useful in drug detection assays.

Keywords

Dehydronorketamine; DHNK; 5,6-dehydronorketamine; 6-Amino-6-(2-chlorophenyl)cyclohex-2-en-1-one
