



Dehydronorketamine [HRP] (DAGB344)

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

PRODUCT INFORMATION

Specificity	Each conjugate comprises antigen covalently bound to horseradish peroxide and is suitable as a tracer in immunoassay development.
Species	N/A
Conjugate	HRP
Applications	IA
Format	The conjugate is supplied as a concentrate. Dilute as required and use working strength conjugate immediately after dilution
Preservative	None
Storage	2 - 8°C for up to 3 months / -20°C for long term storage

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 α 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 α 3 β 4-nicotinic acetylcholine receptor ($IC_{50} > 100$ μ M) and is only very weakly active at the NMDA receptor ($K_i = 38.95$ μ M 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.
---------------------	---