



Melatonin [HRP] (DAG2997)

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

PRODUCT INFORMATION

Product Overview	Melatonin, HRP-Conjugated
Species	N/A
Conjugate	HRP
Applications	immunoassay development or other applications.
Format	Liquid
Concentration	1 mg/mL
Size	1 ml
Buffer	1:1 glycerol / 0.015 M phosphate, 0.15 M NaCl, pH 7.2
Preservative	None
Storage	Store at -20°C.

BACKGROUND

Introduction	Melatonin, the principal hormone of the pineal gland, is also produced by the retina, lens and GI tract. It is naturally synthesized from the amino acid tryptophan (via synthesis of serotonin) by the enzyme 5-hydroxyindole-O-methyltransferase. Production of melatonin by the pineal gland is under the influence of the suprachiasmatic nucleus of the hypothalamus (SCN -the site of a circadian clock) which receives information from the retina about the daily pattern of light and darkness. Melatonin can alter the timing of mammalian circadian rhythms, as well as regulate the reproductive alterations that occur in response to changes in day length in seasonally breeding mammals. Melatonin is also an extremely powerful antioxidant, with a particular role in the protection of nuclear and mitochondrial DNA. Therapeutically there may be many potential
--------------	--

uses for melatonin such as in the treatment of various forms of some forms of depression, cancer, HIV, plus other viral diseases. Currently, Melatonin is a popular therapy for jet-lag and disturbances of sleep.

Keywords

5 methoxy N acetyltryptamine; Melatonin; N acetyl6methoxytryptamine Melatonin
