

Polyclonal Antibody to Melatonin - Ig Fraction

Catalog No.:	BP080
Quantity:	1 ml
Concentration:	5.0 mg/ml
Background:	<p>Melatonin is a serotonin derivative produced by the pineal gland that is thought to be involved with the regulation of circadian rhythm.</p> <p>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.</p> <p>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.</p>
Host:	Rabbit
Immunogen:	BSA conjugate of 5-Methoxy-DL-tryptophan
Format:	State: Liquid purified IgG Purification: Protein G affinity chromatography Buffer System: PBS, pH 7.2, containing 0.09% Sodium Azide as preservative
Applications:	ELISA, Immunofluorescence, Immunoprecipitation. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	Specific for Melatonin and exhibits the following Cross reactivities: Melatonin: 100% 5-Methoxy-DL-Tryptophan: 25% N-acetyl-Tryptamine: < 0.1% 6-Hydroxy-Melatonin: < 0.001% N-acetyl-Tryptophan: < 0.1% N-acetyl-Serotonin: < 0.01%
Species Reactivity:	Tested: Human, Turkey Expected from sequence similarity: Broad

Storage:

Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.