

## Polyclonal Antibody to Melatonin - Purified

<b>Catalog No.:</b>	BP621
<b>Quantity:</b>	1000 Tests
<b>Background:</b>	<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.</p> <p>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>
<b>Host:</b>	Sheep
<b>Immunogen:</b>	N-acetyl-5-methoxy-tryptophan-Thyroglobulin.
<b>Format:</b>	<p><b>State:</b> Lyophilized purified Ig fraction.</p> <p><b>Purification:</b> Blue Sepharose Chromatography.</p> <p><b>Buffer System:</b> PBS, pH 7.2 containing 1% BSA as stabilizer and 0.09% Sodium Azide as preservative.</p> <p><b>Reconstitution:</b> Restore with 1.0 ml sterile water.</p>
<b>Applications:</b>	<p>Radioimmunoassay (3H RIA): 1000 TT/vial.</p> <p><b>Dilution:</b> Dilute aliquots <math>\geq</math> 1/100 with assay buffer to obtain a suitable assay curve. Vial is normally sufficient for <math>\geq</math> 1000 TT using 100 <math>\mu</math>l/TT.</p> <p><b>Protocol:</b> Extraction of plasma/serum is not necessary. Competition with 3H-Melatonin (100 <math>\mu</math>l, 10,000 cpm) and separation by DCC.</p> <p>Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.</p>
<b>Specificity:</b>	<p>Cross-Reactivity:</p> <p>Melatonin 100%</p> <p>N-Acetyl-Tryptamine &lt; 1%</p> <p>6-Hydroxy-Melatonin &lt; 1%</p> <p>N-Acetyl-Tryptophan &lt; 1%</p> <p>N-Acetyl-Serotonin &lt; 0.05%</p>

**Storage:**

Store Lyophilised at 2-8°C and reconstituted (in aliquots) at -20°C.  
Avoid repeated freezing and thawing.  
Shelf life: one year from despatch.