

## Monoclonal Antibody to Vitamin B12 - Purified

<b>Alternate names:</b>	6-Dimethylbenzimidazolyl Cyanocobamide, Alpha 5, Cyanocobalamin
<b>Catalog No.:</b>	AM05158PU-N
<b>Quantity:</b>	1 mg
<b>Concentration:</b>	1,0 mg/ml
<b>Background:</b>	Vitamin B12 is a member of the vitamin B complex. It contains cobalt, and so is also known as cobalamin. It is exclusively synthesised by bacteria and is found primarily in meat, eggs and dairy products. There has been considerable research into proposed plant sources of vitamin B12. Fermented soya products, seaweeds, and algae such as spirulina have all been suggested as containing significant B12. However, the present consensus is that any B12 present in plant foods is likely to be unavailable to humans and so these foods should not be relied upon as safe sources. Vitamin B12 is necessary for the synthesis of red blood cells, the maintenance of the nervous system, and growth and development in children. Deficiency can cause anaemia. Vitamin B12 neuropathy, involving the degeneration of nerve fibres and irreversible neurological damage, can also occur.
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Recommended Isotype Controls:</b>	AM03095PU-N
<b>Clone:</b>	10/41
<b>Immunogen:</b>	Vitamin B12 conjugated to Keyhole Limpet Haemocyanin.
<b>Format:</b>	<b>State:</b> Liquid purified Ig fraction. <b>Purification:</b> Protein A Chromatography. <b>Buffer System:</b> PBS containing 1 mg/ml BSA as stabilizer and 10mM Sodium Azide as preservative.
<b>Applications:</b>	Radioimmunoassay. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	This antibody reacts to Vitamin B12. Characterization by ELISA using solid phase antigen. Does not cross-react with the carrier molecule used for immunization (KLH). The table shows absorbance values from ELISA analysis for cross reactivity with selected antigens. The greater the absorbance value, the greater the relative affinity of the antibody for that metabolite: Vitamin B12: 0.69 Coenzyme B12: 1.78 Methyl B12: 1.62 Cobinamide Dicyanide: 0.19

**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.