

Rat Vitamin B12 (VB12) ELISA Kit | VB12 elisa kit

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CATALOG #
AAA330152

REACTIVITY
Rat

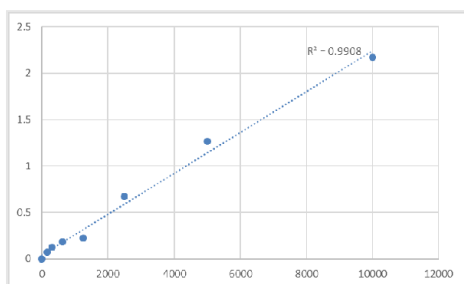
PRODUCT SYNONYMS

Vitamin B12 (VB12); Rat Vitamin B12 (VB12) ELISA Kit; VB12 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Rat
Specificity	Rat Vitamin B12 (VB12) ELISA Kit has high sensitivity and excellent specificity for detection of Rat VB12. No significant cross-reactivity or interference between Rat VB12 and analogues was observed.
Assay Type	Sandwich ELISA (Quantitative)
Samples	Cell Culture Supernatants, Serum, Plasma, Other Biological Fluids
Detection Method	Colorimetric
Usage Notes	* Do not mix components from different kit lots or use reagents beyond the kit expiration date. * Allow all reagents to warm to room temperature for at least 30 minutes before opening. * Pre-rinse the pipet tip with reagent, use fresh pipet tips for each sample, standard and reagent to avoid contamination. * Unused wells must be kept desiccated at 4 degree C in the sealed bag provided. * Mix Thoroughly is very important for the result. It is recommended using low frequency oscillator or slight hand shaking every 10 minutes. * It is recommended that all samples and standards be assayed in duplicate or triplicate.
Preparation and Storage	Store at 2-8 degree C.

IMAGES



Standard Curve (Sample)

Fig.1. Rat Vitamin B12 (VB12) Standard Curve.

ADDITIONAL INFORMATION

Related Product Information for VB12 elisa kit	Description: This Rat Vitamin B12 (VB12) ELISA Kit employs a two-site sandwich ELISA to quantitate VB12 in samples. An antibody specific for VB12 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any VB12 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for VB12 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of VB12 bound in the initial step. The color development is stopped and the intensity of the color is measured. Background: Vitamin B12, also called cobalamin, is a water-soluble vitamin that has a key role in the normal functioning of the brain and nervous system, and the formation of red blood cells. It is one of eight B vitamins. It is involved in the metabolism of every cell of the human body, especially affecting DNA synthesis, fatty acid and amino acid metabolism. No fungi, plants, or animals (including humans) are capable of producing vitamin B12. Only bacteria and archaea have the enzymes needed for its synthesis. Some substantial sources of B12 include animal products (shellfish, meat), fortified food products, and dietary supplements. B12 is the largest and most structurally complicated vitamin and can be produced industrially only through bacterial fermentation synthesis, typically used to manufacture B12 for fortified foods and supplements. Vitamin B12 consists of a class of chemically related compounds (vitamers), all of which show pharmacological activity. It contains the biochemically rare element cobalt (chemical symbol Co) positioned in the center of a planar tetra-pyrrole ring called a corrin ring. The vitamer is produced by bacteria as hydroxocobalamin, but conversion between different forms of the vitamin occurs in the body after consumption. Vitamin B12 was discovered as a result of its relationship to the disease pernicious anemia, an autoimmune disease in which parietal cells of the stomach responsible for secreting intrinsic factor are destroyed; these cells are also responsible for secreting acid in the stomach. Because intrinsic factor is crucial for the normal absorption of B12, its lack in the presence of pernicious anemia causes a vitamin B12 deficiency. Many other subtler kinds of vitamin B12 deficiency and their biochemical effects have since been elucidated. Due to impairment of vitamin B12 absorption during aging, people over age 60 are at risk of deficiency.
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For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/rat-elisa-kits/vitamin-b12-vb12/330152>