

Vitamin B6 ELISA Kit, 96 tests Cat# 0360-B06

The vitamin B6 ELISA kit is intended for the quantitative determination of vitamin B6 (VB6) in Serum, Plasma, and Biological Fluids (culture supernatant). *For research use only.*

Kit Components	ELISA Kit Features
<ol style="list-style-type: none"> 1. VB6 coated Microtiter plate (96 wells) 2. Reference Standard: 2 vials 3. Reference Standard & Sample Diluent: 1 x 20 ml 4. Biotinylated Detection Ab: 1 x 20 ul 5. Biotinylated Detection Ab diluent: 1 x 10 ml 6. HRP Conjugate: 1 x 120 ul 7. Substrate : 1 x 10 ml 8. Sample diluent: 1 x 60 ml 9 wash buffer (25x): 1x 30 ml 10. Stop solution: 1 x 10 ml 	<ul style="list-style-type: none"> • Vitamin B6 Pre-coated, stabilized, ready-to-use 96-well strip plate, suitable for multiple runs over 6-9 months. • VB6 Standards (4.688, 9.375, 18.75, 37.5, 75, 150-300 ng/ml). • Sensitivity: 2.813 ng/ml sample size: 50 ul • 1 hr 30 min assay, 3 incubation steps at 37°C. • Contains all necessary reagents. Stability ~12 months • For in vitro research use only.

Assay Procedure: Allow all reagents to reach room temperature

- Step 1. Pipet **50 ul** each of pre-diluted controls, standards, samples (diluted 1:100 or more) into precoated wells.
- Step 2. Add 50 ul of **Biotinylated Ab** to each well. Incubate for **45 mins at 37°C.**
- Step 3. Aspirate and wash 3X. Add **100 ul** of **HRP conjugate** to all wells. Incubate at **30 mins at 37°C.**
- Step 3. Aspirate and wash 5X. Add **90 ul** of **TMB substrate** to all wells. Incubate for **15 mins at 37°C.**
- Step 4. Add **50 ul** of **stop** solution into each well and mix gently (blue color turns yellow). Measure absorbance at 450 nm. Determine Antibody conc. in each sample using the standards

Interpretation of results

The mean values for the measured absorptions are calculated after subtraction of the blank values from the controls and standards.

Specificity: This kit recognizes natural and recombinant VB6. No significant cross-reactivity or interference between VB6 and analogues was observed

Reproducibility: Coefficient of variation <10%.

General Information

Vitamin B6 refers to a group of chemically very similar compounds which can be interconverted in biological systems. Vitamin B6 is part of the vitamin B complex group, and its active form, Pyridoxal 5'-phosphate (PLP) serves as a cofactor in many enzyme reactions in amino acid, glucose, and lipid metabolism. Vitamin B6 is also called pyridoxine. It is involved in the process of making serotonin and norepinephrine, which are chemicals that transmit signals in the brain. Vitamin B6 is also involved in the formation of myelin, a protein layer that forms around nerve cells.

Vitamin B6 deficiency in adults may cause health problems affecting the nerves, skin, mucous membranes, and circulatory system. In children, the central nervous system is also affected. Deficiency can occur in people with kidney failure complications, alcoholism, liver scarring, overactive thyroid, problems with absorbing nutrients, and heart failure, as well as those taking certain medications. Mild deficiency of vitamin B6 is common. Major sources of vitamin B6 include cereal grains, legumes, vegetables (carrots, spinach, peas, and potatoes), milk, cheese, eggs, fish, liver, meat, and flour. Vitamin B6 is often used with other B vitamins in vitamin B complex formulas.

High blood levels of the amino acid homocysteine may be a risk factor for heart disease. Taking vitamin B6 supplements with other B vitamins (folic acid and vitamin B12) has been shown to be effective for lowering homocysteine levels. Vitamin B6 has been studied for the treatment of many conditions, including anemia (low amounts of healthy red blood cells), vitamin B6 deficiency, certain seizures in newborns, and side effects of the drug cycloserine.

ADI's Vitamin B6 ELISA kit is used for the quantitative detection of vitamin B6 in serum, plasma and other biological fluids (culture supernatant). For research use only. Kits for the detection of other Vitamins are also available.

Related ELISA kits

Catalog#	Product Description
0340-B12	Vitamin B12 ELISA kit, 96 tests, Quantitative
0345-VID	Vitamin D total (25OH) ELISA kit, 96 tests, Quantitative
0360-B06	Vitamin B6 ELISA kit, 96 tests, Quantitative