

Product information

Product name: Nitrofuran (nitrofurantoin; AHD) ELISA-Test Kit

Product number: EN-4

General Description: Nitrofurans, which are effective against a wide range of bacteria, include semicarbazide, furazolidone, nitrofurazone, nitrofurantoin, and related compounds. The Food and Drug Administration has prohibited all uses of nitrofuran drugs in food-producing animals because they pose a public health risk. The rule went into effect on May 7, 2002 and is the result of evidence that the drugs may induce carcinogenic residues in animal tissues.

Principle: The GreenSpring™ Nitrofurantoin (AHD) ELISA test kit is based on the competitive enzyme immunoassay for the detection of Aminohydantoin (AHD) in the tissue (chicken, meat, fish and shrimp). The coupling antigen is pre-coated on the micro-well stripes. The Aminohydantoin (AHD) in the testing sample competes with the coupling antigen pre-coated on the micro-well stripes for the antibody against AHD. After the addition of the enzyme conjugate, the TMB substrate is added for coloration. The optical density (OD) value of the testing sample has a negative correlation with the content of AHD in it. This value is compared to the standard curve and the content of the corresponding AHD is subsequently obtained.

Specifications

Format: 96 wells/kit (12 strips with 8 removable wells each)

Sensitivity: 0.05 ppb

Detection limit: Tissue and honey - 0.1 ppb; shrimp and fish (some interference in shrimp and fish) - 0.15 ppb

Crossreaction rate: AHD - 100%, AMOZ - < 0.1%, AOZ - < 0.1%, SEM - < 0.1%

Sample processing time: fish, shrimp, honey, chicken (liver) – 16 h

Detection time: 80 min.