



### Nitrofuran (AMOZ) ELISA Kit Features

- Pre-coated, stabilized, ready-to-use 96-well strip plate, suitable for multiple runs over 12 months.
- Convenient liquid Standards, containing AHD Coupling Antibody standards: 0-8.1 ppb.
- AMOZ reactivity 100% (< 0.1% with AHD, AOZ and SEM).
- Sensitivity 0.1 ppb; 50ul samples.
- 80 minute, 3 incubation steps at room temperature.
- Easy procedure for sample preparation.

**This kit is for measuring AMOZ in fish, shrimp, honey, and chicken liver.** All tissue samples must be homogenized and samples prepared for the assay using the suggested protocol. For in vitro research use only.

**Assay Procedure:** Allow all reagents to reach room temperature. Arrange and label required number of strips.

- Step 1.** Pipet duplicates of **50 ul each of pre-diluted standards** and samples containing AMOZ (diluted as required) into all wells. Then add **50 ul of Enzyme Conjugate** solution and **50 ul of Working Antibody** solution into all wells. Seal the plate, mix gently and incubate at **25 °C for 1 hr**.
- Step 2.** **Aspirate and wash** the plate five times.
- Step 3.** Add **50 ul of Substrate A** solution and then **50 ul of Substrate B** solution to all wells, mix gently, and incubate at **25 °C for 15 min in the dark** for coloration.
- Step 4.** Pipet **50 ul of stop solution** into each well and mix gently (blue color turns yellow). **Measure OD at A450 nm**. Calculate concentration of **AMOZ** in each sample using the AMOZ Standard curve.

## General Information

3-amino-5-morpholinomethyl-1, 3-oxazolidin (AMOZ) is the metabolite residue of furaltadone. There are four main types of nitrofurans, they are: furazolidone, furaltadone, nitrofurazone and nitrofurantoin. Furaltadone's chemical formula is C<sub>13</sub>H<sub>16</sub>N<sub>4</sub>O<sub>6</sub> and molecular weight is 324.29g. It is an antibiotic widely used against Escherichia coli and Salmonella to treat and prevent the infections in gastrointestinal on animals including cattle, swine and poultry. It is also used in veterinary practice as an antibiotic and growth promoter. It can kill various gram-positive and gram-negative bacteria, which are mainly found in animal and aquaculture production. For that reason in some countries it is widely used mixed in animals' water and food. Furaltadone residue, AMOZ, can be passed through the food chain to human. AMOZ can cause cancer, teratogenesis, and other side effects. The mechanism of the drug works by interfering with various chemical reactions in the bacteria and damaging its DNA. Since its high toxicity on February of 2002 FDA banned the use of any nitrofurans in food-producing animals.

AMOZ is very stable in tissue so it will be a good source to be detected on shrimp, fish, meat, milk and honey. AMOZ can be detected by LC-UV, LC-MS, or LC-MS/MS methods, however AMOZ ELISA is a more sensitive and low cost tool to detect the use of furaltadone.

ADI's Nitrofuran (AMOZ) ELISA kit is a highly sensitive competitive type assay for the measurement of AMOZ in shrimp, fish, meat, milk and honey.

### Related Items:

Item ID	Description	Qty/Size
DE-100010	Clenbuterol ELISA kit, 96 tests (For Urine, Serum, Feed, Meat, Liver)	1 kit
DE-100020	Ractopamine ELISA kit, 96 tests (For Liver, Urine, Feed)	1 kit
DE-100030	Salbutamol ELISA kit, 96 tests (For Urine, Tissue, Feed, Animal Tissue, Aquatic, Honey, Intestine)	1 kit
DE-100040	Chloramphenicol ELISA kit, 96 tests (For Animal Tissue, Aquatic, Honey, Intestine, Urine, Egg, Milk, Serum)	1 kit
DE-100050	Florfenicol ELISA kit, 96 tests (For Animal Tissue, Aquatic, Honey)	1 kit
DE-100060	Nitrofuran (AMOZ) ELISA kit, 96 tests (For Fish, Shrimp, Honey, Chicken/Liver)	1 kit
DE-100070	Nitrofuran (AHD) ELISA kit, 96 tests (For Fish, Shrimp, Honey, Chicken/Liver)	1 kit
DE-100075	Nitrofuran (SEM) ELISA kit, 96 tests (Honey, Fish, Shrimp, Chicken/Liver, Fish/Shrimp)	1 kit
DE-100080	Nitrofuran (AOZ) ELISA kit, 96 tests (For Fish, Shrimp, Honey, Chicken/Liver)	1 kit
DE-100090	Sulfonamides Residues (SAs) ELISA kit, 96 tests (For Chicken/Liver, Pork/Liver, Honey/Egg, Serum/Urine, Milk)	1 kit
DE-100100	Sulfanethazine (SM2) ELISA kit, 96 tests (For Chicken/Liver, Pork/Liver, Honey/Egg, Serum/Urine, Milk)	1 kit
DE-100110	Sulfamethoxydiazine (SMD) ELISA kit, 96 tests (For Chicken/Liver, Pork/Liver, Honey/Egg, Serum/Urine)	1 kit
DE-100120	Quinolones (QNS) ELISA kit, 96 tests (For Pork/Liver, Chicken/Liver, Shrimp, Fish, Serum, Honey)	1 kit
DE-100130	Enrofloxacin ELISA kit, 96 tests (For Pork/Liver, Chicken/Liver, Shrimp, Fish, Serum, Honey)	1 kit
DE-100140	Ampicillin ELISA kit, 96 tests (For Pork/Liver, Chicken, Duck, Shrimp, Fish, Honey, Milk)	1 kit
DE-100150	Benzyl Penicillin ELISA kit, 96 tests (For Pork/Liver, Chicken, Duck, Shrimp, Fish, Honey, Milk)	1 kit
DE-100160	Tylosin ELISA kit, 96 tests (For Meat, Liver, Honey, Egg)	1 kit
DE-100170	Trenbolone ELISA kit, 96 tests (For Animal Tissue, Aquatic, Urine)	1 kit
DE-100180	Diazepam ELISA kit, 96 tests (For Tissue, Urine, Feed)	1 kit
DE-100190	Diethylstilbestrol (DES) ELISA kit, 96 tests (Fish, Shrimp, Liver, Meat, Feed, Urine)	1 kit
DE-100200	Gentamicin ELISA kit, 96 tests (Chicken/Liver)	1 kit
DE-100210	Streptomycin ELISA kit, 96 tests (Chicken/Liver, Honey, Milk)	1 kit
DE-100230	Olaquinox ELISA kit, 96 tests (Tissue)	1 kit
DE-100240	Sulfaquin-oxaline ELISA kit, 96 tests (For Pork/Liver, Honey/Egg, Serum/Urine, Milk)	1 kit DE-100060-flr 120417A

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