ELISA Kit for Agricultural Pollutants

Atrazine ELISA Kit

(Microtiter Plate Format)

◇ The antibody binds Atrazine and related Triazines and does not cross-react with other non-related agricultural compounds.

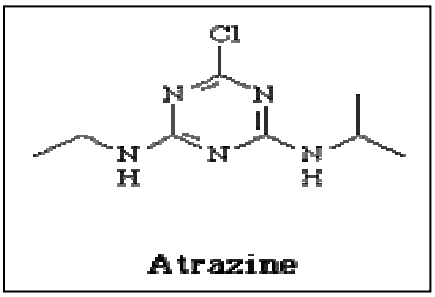
◇ The assay range is between 0.03 ppb and 3.0 ppb. This supersensitive assay allows the determination of Triazines in a range of environmental samples (water, soil, sediment, fish plasma, etc.).

◇ Direct sample. No time-consuming sample extraction or the use of hazardous organic solvents.

◇ Total time for measurement is less than 50 minutes.

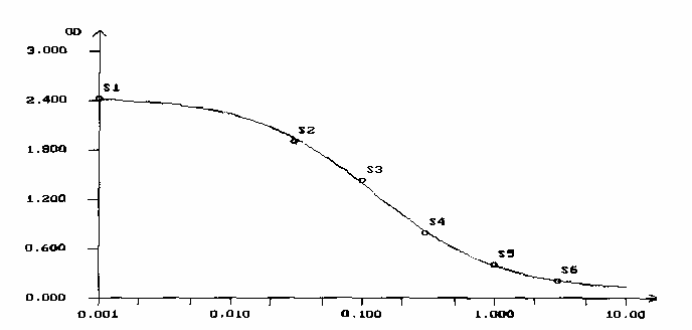
◇ The kit (96 Tests), a microtiter plate format with ready to use reagents, enables fast assay kinetics, super sensitivity, and the simultaneous measurement of multiple samples at a reasonable cost.

Chemical Structure



Atrazine is a broad-leaf, pre-emergence herbicide. It is one of the most widely used herbicides around the world. Atrazine is the leading member of a class of triazine ring-containing herbicides that includes simazine and terbutylazine. Atrazine has been found to be less biodegradable than other less substituted s-triazine ring compounds with a half life ranging from 1 week to 1 year in different soils. Because of their relative wide application, their relative high persistence, and their ability to leach through the soil, they can be detected in rain, surface water and ground water. The application of Atrazine is prohibited in several countries, in the U.S., according to the USEPA SWDA drinking water guidelines, the MCL for atrazine is not allowed to exceed 3 ppb.
This ELISA test kit detects Atrazine and related Triazines in environment samples at the ppt levels.

Atrazine Standard Curve



Samples containing Atrazine within the dynamic range (0.03-3.0 ppb) can be directly tested in the assay after filtration.

ABRAXIS

Basic Test procedure

- Add 50 uL of sample, and 50 uL enzyme conjugate. Swirl to mix.
- Incubate for 30 minutes.
- Decant and wash.
- Add 100 uL of color solution.
- Incubate 15 minutes.
- Stop the reaction and read color at 450 nm. Quantitate results.

Cross-reactivity Pattern

Cross-reactivity of the Abraxis Atrazine ELISA expressed as (%)

Compound	Cross-Reactivity (%)
Atrazine	100
Propazine	81
Simazine	6.9
Ametryn	3.9
Hydroxyatrazine	1.8
Desethylatrazine	1.3
Terbutylazine	1.0

The following compounds demonstrated no reactivity in the Atrazine Assay when tested at concentrations up to 1,000 ppb: aldicarb, aldicarb sulfoxide, aldicarb sulfone, alachlor, benomyl, butachlor, butylate, captan, carbaryl, carbendazim, carbofuran, 2,4-D, 1,3-dichloropropene, dinoseb, MCPA, metolachlor, metribuzin, PCP, picloram, propachlor, terbufos, thiabendazole, thiophanate-methyl.

Kit Format

Atrazine ELISA Kit (Microtiter Plate format, 96T) PN 520005
Atrazine ELISA Kit (Magnetic Particle format, 100T) PN 500001
Atrazine ELISA Kit (Fast Screen format, 10T) PN 550011
Atrazine ELISA Kit (Fast Screen format, 25T) PN 550001

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