

Chlorpyrifos ELISA Kit

Sample

Fruit (apple, orange), vegetables (spinach, potato, cabbage) and cereals (barley, sesame seeds, quinoa)

Species Reactivity

N/A

Intended Use

This kit can be used in quantitative and qualitative analysis of chlorpyrifos in fruit (apple, orange), vegetables (spinach, potato, cabbage) and cereals (barley, sesame seeds, quinoa).

Storage

Store all reagents at 2-8°C.

Valid Period: six months.

Precision

Variation coefficient of the ELISA kit is less than 10%.

Detection Limit

Fruit, vegetables, cereals.....10ppb

Accuracy

Tea, fruit, vegetables, cereals.....100±30%

Sensitivity

Test Sensitivity: 0.1ppb

General Description

Chlorpyrifos (CPS), is an organophosphate pesticide used to kill a number of pests including insects and worms. It is used on crops, animals, and buildings. It was introduced in 1965 by Dow Chemical Company. It acts on the nervous system of insects by inhibiting acetylcholinesterase. Chlorpyrifos ingestion results in more than 10,000 human deaths a year.

Chlorpyrifos is considered moderately hazardous to humans by the World Health Organization. Exposure surpassing recommended levels has been linked to neurological effects, persistent developmental disorders and autoimmune disorders. Exposure during pregnancy may harm the mental development of

children, and most home use was banned in 2001 in the U.S. In agriculture, it is "one of the most widely used organophosphate insecticides" in the United States, and before being phased out for residential use was one of the most used residential insecticides.