Tea Pesticide Residue Rapid Detection Kit (10)

Product Information

Product Name
Tea Pesticide Residue Rapid Detection Kit (10)

Product Overview
Tea Pesticide Residue Rapid Detection Kit (10) is designed for the detection of pesticide residue in tea.

Description
Tea Pesticide Residue Rapid Detection Kit (10) is designed for the detection of pesticide residue in tea. This is a color reaction. Compared with blank control test, it is positive result that the white pill doesn't change any color or it just turns light blue. It indicates there is a high pesticide residue that it doesn't change any color, and it indicates there is a relatively low pesticide residue that it turns light blue. While it is negative result that the white pill turns blue or has the same color with blank control test card. For those samples of which the results are positive, use other analysis methods to determine the types and concentration of the pesticide.

Notes
1. Shake the reaction tubes evenly and avoid shaking acutely.
2. Use centrifuge for green tea during pre-reaction if possible. If filter papers are needed, please use rapid filter papers to shorten the time.
3. Control the speed during using needle tubing to increase the pressure of chromatography column and don't increase too hard in case collect deeper color filtering liquid which will disturb the result.
4. Avoid dropping too fast when adjusting the PH value. Mix evenly after dropping acid regulator and then test the PH value by PH papers.
5. The reaction should proceed in constant temperature in order to improve the accuracy.
6. This method is suitable for the rapid detection of pesticide residue in dry tea.

Kit Components
- 20 pcs of tea pesticide residue rapid detecting cards (10 small packages, 2 pcs in one small package);
- One bottle of Reagent A;
- One bottle of acid regulator;
- 10 pcs of reaction tubes;
- 10 pcs of chromatography columns;
- 10 pcs of 1 ml droppers;
- 1 pcs of injector;
- 1 pcs of top connection;
- One PH paper;
- One manual.

Detection method

Preparation

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY
Tea Pesticide Residue Rapid Detection Kit (10)

Cat. No.  FSD-100
Lot. No.  (See product label)

Take 2 g tea and cut them into small pieces. Then put them in the beaker, and add 10 ml pure water. Add 5 drops of Reagent A. Shake it evenly and stand it for 15 mins.

Pre-reaction
For green tea sample:
Suck 3 ml the above soak solution in the reaction tube, and shake it evenly. Filter directly (or centrifuged for 3 mins at 4000 rpm). Suck 1 ml filtered liquid or supernate in the beaker, adjust the PH value to 4-5 by acid regulator.

For Tie Guanyin, jasmine tea, oolong tea, pu'er tea, black tea:
Suck 3 ml above soak solution into reaction tube, and shake it evenly. Stand it for 3 mins, then suck 1 ml supernate or filtered liquid into beaker. Adjust PH value to 4-5 by acid regulator.

Assay Protocol
1, Suck 1 mL pure water into chromatography column, and use needle tubing to exhaust the air.
2, Suck 1 mL above treated solution into chromatography column and use needle tubing to increase the pressure.
3, Get rid of the first drop and collect colorless clean filtered liquid as testing liquid.
4, Drip 2 drops (namely 80 ul) of testing liquid on the white pill of rapid detecting card.
5, Place the detecting card in the incubator at 40 ℃ for 10mins for pre-reaction.
6, Keep constant temperature for 3 mins to superimpose the white pill on the red pill for reaction. According to the color variation of white pill, judge the result.
7, Do a blank control test with pure water or distilled water for each test.

Sensitivity
The lowest detection limit of Tea Pesticide Residue Rapid Detection Kit (10) to several commonly used pesticides are as follows (Unit: mg/kg):

<table>
<thead>
<tr>
<th>Name of Pesticide</th>
<th>Lowest Detection Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methamidophos</td>
<td>0.5</td>
</tr>
<tr>
<td>Carbofuran</td>
<td>0.5</td>
</tr>
<tr>
<td>Dichlorvos</td>
<td>0.01</td>
</tr>
<tr>
<td>Methomyl</td>
<td>0.1</td>
</tr>
<tr>
<td>Carbosulfan</td>
<td>0.5</td>
</tr>
<tr>
<td>Dipterex</td>
<td>0.1</td>
</tr>
<tr>
<td>Dimethoate</td>
<td>1</td>
</tr>
<tr>
<td>Methyl parathion</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Sample Type
Tea

Storage
This product should be stored in ventilated, dry and dark condition. And it should be kept in the refrigerator at 4 ℃. And the expiration time is one year.