



Rapid Glufosinate Test Kit

Glufosinate is a broad-spectrum non-selective systemic herbicide for a wide range of broadleaf weeds, grasses, and some woody species, working by inhibiting glutamine synthetase. It is commonly used as a pre-harvest desiccant and may be found in foods such as potatoes, peas, beans, corn, wheat, and barley. It can also enter the human food chain through animals fed contaminated feed.

Studies show that flour made from glufosinate-treated wheat can retain 10-100% of the chemical's residues. Notably, glufosinate is persistent in the environment, remaining detectable in crops planted up to 120 days after application. Its half-life varies from 3 to 70 days depending on soil conditions, and residues can persist in frozen foods for up to two years, demonstrating resistant to boiling water cooking. The Environmental Protection Agency (EPA) classifies glufosinate as "persistent" and "mobile," indicating its durability in the soil.






For safety, the World Health Organization/Food and Agriculture Organization (WHO/FAO) recommends an acceptable daily intake (ADI) of 0.02 mg/kg for glufosinate, while the European Food Safety Authority has set an ADI of 0.021 mg/kg, which is also the acute reference dose (ARfD) for women of childbearing age. These guidelines emphasize the need for ongoing monitoring and regulation of glufosinate use.

For customers requiring faster turnaround times and suitable method for the semiquantitative and/or qualitative screening of Glufosinate in surface water, durum wheat, whole oats, soybeans and yellow pea samples that support rapid and informed decision-making, Gold Standard Diagnostics Horsham offers the only commercially available glufosinate enzyme-linked immunosorbent assay (ELISA) test kit.



Our ABRAXIS® Glufosinate ELISA 96-well plate kit is based on proven ELISA technology using a competitive ELISA based on the recognition of glufosinate by specific polyclonal antibodies. A reaction occurs between the Glufosinate (which may be present in the sample), and the enzyme labelled Glufosinate for the binding sites of the anti-glufosinate antibodies immobilized on the microtiter plate. After the addition of the substrate solution, a color signal is produced. The intensity of the color is inversely proportional to the concentration of glufosinate present in the sample.

Key Benefits of ABRAXIS® Glufosinate ELISA Analysis

-  Rapid, laboratory-based analysis - answers in less than 2 hours for up to 44 samples
-  Test Kit Range – 0.015 ppb to 10 ppb in matrix
-  Low per-test cost
-  Improves turnaround by eliminating delays associated with sample shipment for off-site analysis
-  Tests operate with standard lab equipment, microplate readers

Gold Standard Diagnostics Horsham's ABRAXIS® Glufosinate ELISA Test Kit offers users brand name protection, compliance, prevention of costly product recalls in and ensures consumer confidence.

Ordering

The ABRAXIS® Glufosinate ELISA, 96-well test kit includes all the materials and reagents for sample analysis.

Part Number	Product Description
500060	ABRAXIS® Glufosinate, ELISA, 96-well