Creative Diagnostics Launches High-Sensitivity ELISA Kits for Antibiotic Residue Detection in Biologics Manufacturing

Creative Diagnostics announces the release of a specialized portfolio of Antibiotic Residue Detection ELISA Kits.

NEW YORK, NY, UNITED STATES, January 26, 2026 /EINPresswire.com/ -- Creative Diagnostics, a leading manufacturer and supplier of antibodies, antigens and assay kits, has announced the release of a specialized portfolio of Antibiotic Residue Detection ELISA Kits. These kits are developed to help biopharmaceutical manufacturers detect and quantify trace levels of antibiotics, such as Gentamicin, Kanamycin, and Neomycin, in biological products, including vaccines, recombinant proteins, and monoclonal antibodies.

Biological products are pharmaceuticals that are prepared through biotechnological processes using microorganisms, cells, animal tissues, and bodily fluids, which are used for the prevention, treatment, and diagnosis of human diseases. This category includes preventive products, (e.g., bacterial and viral vaccines), therapeutic products, (e.g., antitoxins, antisera, blood products, and biotechnology products), and diagnostic products, including in vivo and in vitro products.

Antibiotics are often added to cell culture media during biologics production to prevent microbial contamination. However, international regulatory standards, including the United States Pharmacopeia (USP) and the European Pharmacopoeia (EP), require the removal of these residues during purification to prevent adverse patient reactions, such as ototoxicity and severe allergic responses. These regulatory guidelines also require strict control over antibiotic use in biologics manufacturing and establish testing standards for residual levels.

"Our highly sensitive and reproducible (>80%) antibiotic detection ELISA kits can identify antibiotic residues in raw materials, intermediates, and final products of biologicals. They offer a high-throughput, cost-effective alternative to traditional LC-MS/MS methods," stated Dr. Jessica Waldorf, senior scientist of Creative Diagnostics. "Our ELISA kits empower manufacturers to ensure their biological products meet stringent safety and purity requirements while achieving reproducible test results."

For example, Creative Diagnostics offers a Chloramphenicol (CAP) ELISA Test Kit (DEIA6881), which is a competitive enzyme immunoassay for quantitatively analyzing chloramphenicol in fish, shrimp, eggs, honey, meat (beef, chicken and pork), milk, milk powder, condensed milk and

serum.

The unique features of the kit are:

1. High recovery (80-115%), rapid extraction (10-40 minutes), and cost-effectiveness.
2. High sensitivity (0.05 ng/g or ppb) and a low detection limit (0.025 ng/g or ppb) for shrimp, fish and meat samples.
3. High reproducibility.
4. A quick ELISA assay (less than 1 hour, regardless of the number of samples).

Chloramphenicol is a broad-spectrum antibiotic widely used in animal production because of its exceptional antibacterial properties and pharmacokinetic characteristics. However, it induces hematotoxic side effects when used in humans, potentially leading to aplastic anemia and granulocytopenia. Consequently, it has been prohibited or restricted in the European Union and the United States. This kit is a novel product based on ELISA technology. Compared to conventional instrumental analysis, it offers rapid operation (less than one hour per test), simplicity, accuracy, and high sensitivity. These features significantly reduce operational error rates and alleviate workload intensity.

To learn more about the ELISA Kit portfolio, visit https://www.creative-diagnostics.com/antibiotic-residues-detection-elisa-kits-in-biological-products.htm.

About Creative Diagnostics

Creative Diagnostics is a leading manufacturer and supplier of antibodies, viral antigens, innovative diagnostic components, and critical assay reagents. In addition to providing contract R&D and biologic manufacturing services for diagnostic manufacturers along with GMP biologics manufacturing for the biopharmaceutical market, the company aims to continue to act as a trusted source for all researchers' assay development and manufacturing needs.

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