STEMart Enhances Genotoxicity Testing Portfolio with Comprehensive In Vitro Mouse Lymphoma Assay TK Service

STEMart announces the In Vitro Mouse Lymphoma Assay TK test for medical devices.

NEW YORK, NY, UNITED STATES, October 27, 2025 /EINPresswire.com/ -- STEMart, a US-based provider of comprehensive services for all phases of medical device development, announced the reinforcement of its genetic toxicology offerings with a dedicated service focusing on the In Vitro Mouse Lymphoma Assay TK test. This essential assay can evaluate whether substances leaching from a medical device can induce gene mutations or chromosomal events, under GLP or non-GLP conditions.

Genetic toxicology testing evaluates the potential risk of test substances inducing gene mutations or chromosomal damage using multiple in vitro and in vivo bacterial and mammalian cell assay systems. STEMart adheres to OECD guidelines revised for the medical device sector and offers diverse genotoxicity and biocompatibility testing protocols under GLP conditions. STEMart also offers medical device cytotoxicity testing to evaluate biocompatibility by assessing substances extracted from specific cell culture media following exposure to L929 cells.

The Mouse Lymphoma Assay identifies gene mutations, chromosomal structural alterations and other genotoxic effects caused by medical devices or extracts by testing multiple cell cultures (typically mammalian cells). This assay helps to mitigate the risk of genotoxicity from medical devices that undergo prolonged patient contact.

Conducted in accordance with OECD Guidelines for Testing of Chemicals, Test No. 490, the in vitro Mouse Lymphoma Assay (MLA) detects induced point mutations or clastogenic events in the thymidine kinase (TK) gene of L5178Y TK+/– mouse lymphoma cells by measuring resistance to the lethal nucleoside analogue triflurothymidine (TFT).

STEMart now provides an in vitro mouse lymphoma assay service to evaluate the potential of medical device extractables to induce gene mutations or chromosomal events. This assay can be performed under GLP (Good Laboratory Practice) or non-GLP conditions. The final report provided to the client includes methodological descriptions, raw data, analytical results and interpretations.

This new in vitro mouse lymphoma assay service offered by STEMart has many advantages,

including the rapid proliferation of cells to high densities in suspension culture. STEMart can supply substantial cell numbers for statistically valid testing. Mutation screening is conducted after treatment and passage to achieve the required expression time. Furthermore, the expression cycle for newly induced mutants is relatively brief. STEMart focuses on enhancing the cost-effectiveness of the assay by minimizing fluctuations in the proportion of mutants caused by clonal expansion and adaptive variations among newly induced mutants.

STEMart provides comprehensive, cost-effective services, delivering reliable test results for clients' medical devices. STEMart's specialists assess medical devices and develop appropriate testing protocols to ensure that manufacturers' products comply with regulatory requirements. This newly released sensitive assay offers critical data for global pharmaceutical, chemical, and medical device regulatory submissions.

To learn more about in vitro mouse lymphoma assays and other medical device testing solutions, or to consult with the experts at STEMart, please visit https://www.ste-mart.com/in-vitro-mouse-lymphoma-assay-tk.htm.

About STEMart

STEMart is an industry-leading eCommerce platform incorporated with an extensive global footprint and a broad portfolio of more than 10,000 products. It aims to provide better lab materials, medical instruments and consumables, excellent technologies, and high-quality services to global customers in the fields of science, technology, and engineering, from the discovery stage upward to the manufacturing process. STEMart is dedicated to enhancing research and biotech production with simpler and safer protocols to access better health worldwide.

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