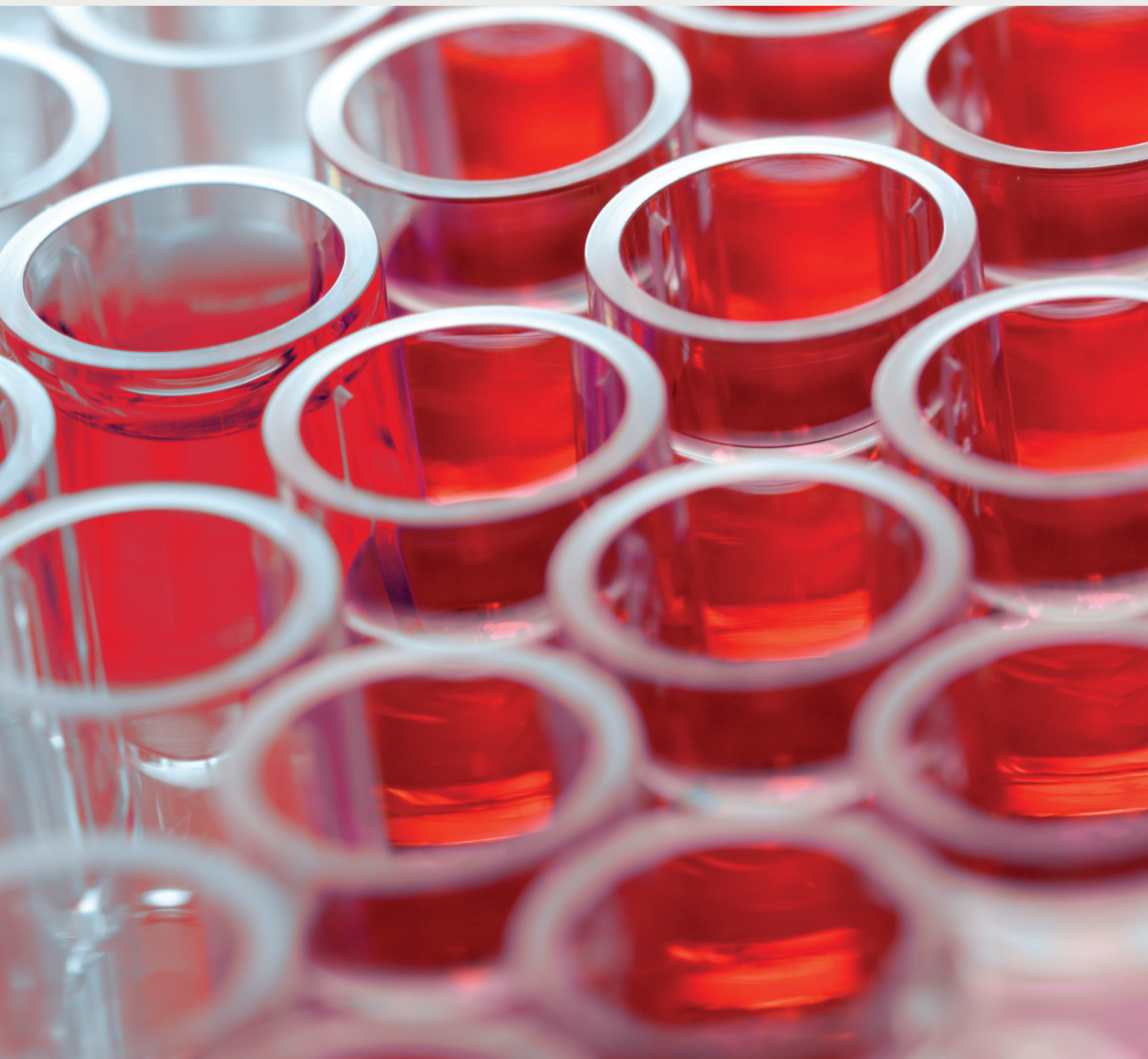




Predictive Toxicology

Innovative Solutions for
Early Safety Assessment



enzolifesciences.com

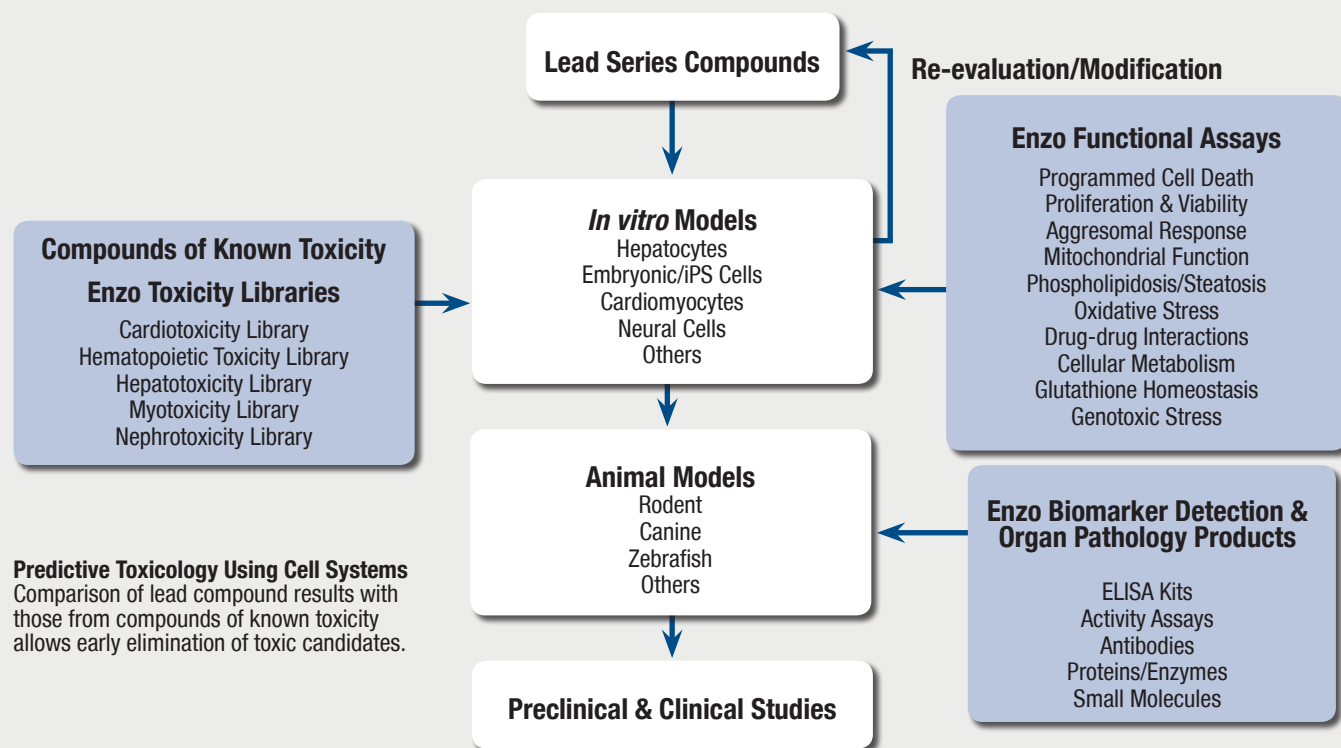


FIND YOUR TOXICOLOGY SOLUTION

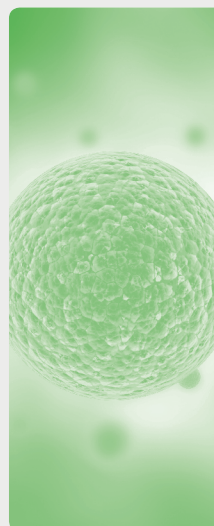
SOLUTIONS FOR PREDICTIVE TOXICOLOGY

Enabling a Data-Driven Approach

The drug development industry has undertaken significant efforts to identify toxic events at the earliest opportunity during the development process, moving from predominantly long-term, disease-specific observational models to a more predictive model focused on target-specific, mechanism-based biological investigations. The growth in such early safety assessment initiatives has driven the need for reliable, cost-effective, high throughput *in vitro* toxicity assays capable of predicting toxic liabilities prior to investment in more costly pre-clinical and clinical trials.



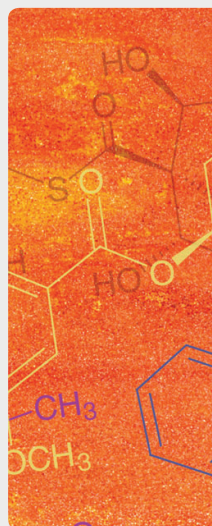
Through our broad range of scientific expertise and industry-proven manufacturing capabilities, Enzo Life Sciences provides a comprehensive set of solutions for the toxicology market, including cell-based assays and focused compound libraries, as well as assay kits and reagents for biomarker detection and pathway analysis.



Cell-Based Assays & Biomarker Detection

Enzo's panel of fluorescence-based live cell assays are designed to assess the impact of toxic agents on overall cell function, with particular emphasis on the plasma membrane, lysosomal, mitochondrial and nuclear compartments. Many of the assays have been optimized for analysis by flow cytometry, while others are geared towards microplate-based cytometry.

Our portfolio of over 300 ELISA & detection kits includes sensitive, specific assays for relevant markers of cell viability, signaling pathways, and organ-specific toxicity. Over 40 years of assay development experience and state-of-the-art manufacturing facilities ensure time-tested reproducibility.



Compound Libraries

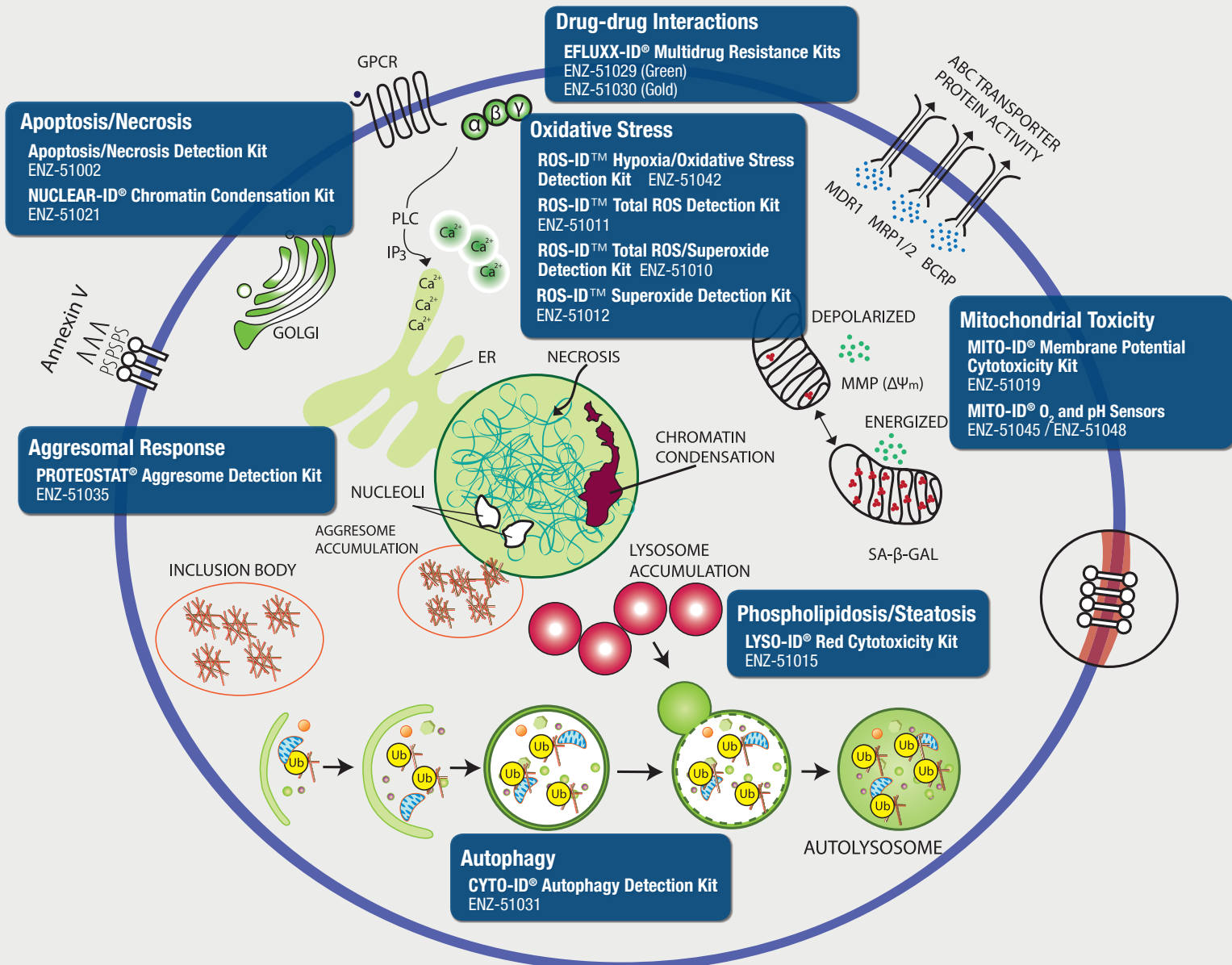
Our long-standing, flagship SCREEN-WELL® Compound Library product family offers an easy, ready-to-use method to streamline compound screening. We have a unique offering of focused compound libraries for organ-specific toxicology, as well as FDA approved drugs, natural products, chemical genomics, pathway targeting, and more.

Our in-house chemical production capabilities, combined with our supplier network built over a 40 year history, gives us the ability to rapidly and inexpensively source traditional, custom, and bulk compounds in the gram to kilogram scale. We complete our sourcing using stringent quality control standards with state-of-the-art methods.

VISUALIZE TOXIC EVENTS *IN VITRO*

CELLESTIAL® Assay Kits

Our fluorescence-based live cell assays and probes are designed to help assess the impact of toxic agents on overall cell function, and have been developed to produce dyes that are sensitive, specific, and convenient. CELLESTIAL® Assay Kits offer increased photostability, reduce false positives by eliminating non-specific dye-associated artifacts, and are compatible with common dyes and fluorescent markers for multiplex analysis. These optimized dyes are for the most demanding imaging applications, including microplate-based high content screening, flow cytometry, confocal microscopy, and wide-field fluorescence microscopy.



Additional Cell Analysis Assays

Programmed Cell Death

Comet SCGE Assay Kit
 Cytochrome C, p53, Survivin & Bcl-2 ELISAs
 p62 & NBR1 ELISAs

Genotoxic Stress

aCGH Labeling Kits
 BIOARRAY™ RNA Expression Analysis Kits
 DNA Damage (8-OHdG) ELISA

Cell Viability & Proliferation

ApoSENSOR™ Cell Viability Assay Kit
 Cell Counting Kit-8
 CYTO-ID® Long-term Tracer Kits
 NUCLEAR-ID® Cell Viability/Cell Cycle Kits
 p21 & p27^{kip1} ELISAs

Oxidative Stress

Heme Oxygenase ELISAs
 ROS-ID™ NO Detection Kits
 ROS-ID™ ROS/RNS Detection Kit

PROFILE ORGAN-SPECIFIC TOXICITY

SCREEN-WELL® Toxicity Libraries

The SCREEN-WELL® Libraries for cardiotoxicity, hepatotoxicity, hematopoietic toxicity, myotoxicity, and nephrotoxicity contain compounds with defined and diverse organ-associated toxicity profiles. A variety of structurally and mechanistically different compound classes are included, as well as non-toxic controls. Compounds are dissolved in DMSO at 10mM and aliquoted into deep-well plates at 100 or 500 µl per well. The libraries are useful for predictive toxicology screening, including high-content protocols.

- Better understand mechanisms of toxicity with your small molecule or candidate-drug of interest
- Compare your compound with known references for investigative toxicity
- Optimize formulation efficacy and safety

PRODUCT	COMPOUNDS	MAJOR TOXICITY CATEGORIES INCLUDED
Cardiotoxicity Library BML-2850	130	Ion channel blockage, cardiomyocyte apoptosis, mitochondrial toxicity, thrombosis, arrhythmia, hypotension/hypertension, fibrosis & carditis, non-cardiotoxic controls
Hepatotoxicity Library BML-2851	238	Steatosis, cholestatic effects, mitochondrial toxicity, CYP450 inactivation, toxic metabolites, Mallory body formation, elevation of liver enzymes, non-hepatotoxic controls
Hematopoietic Toxicity Library BML-2852	115	Myelosuppression, leukopenia, neutropenia, anemia, thrombocytopenia, hematopoietically non-toxic controls
Nephrotoxicity Library ENZ-LIB100	86	Analgesic nephropathy, interstitial nephritis, glomerulopathy, proximal and distal tubulopathy, nephrogenic diabetes insipidus, acute renal failure, chronic kidney disease, non-nephrotoxic controls
Myotoxicity Library ENZ-LIB101	60	Myalgia, colchicine-induced myopathy, rhabdomyolysis, atrophy, necrosis, thrombocytopenia, non-myotoxic controls

Cardiotoxicity

Cardiotoxicity Library
Angiotensin & Bradykinin ELISA Kits
cGMP ELISAs
FLUOFORTE® Calcium Assay Kits

Hematotoxicity

Hematopoietic Toxicity Library

Hepatotoxicity

Hepatotoxicity Library
Cytochrome P450 Antibodies & Modulators

Myotoxicity

Myotoxicity Library

Nephrotoxicity

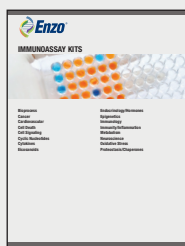
Nephrotoxicity Library
Creatinine Detection Kit
NGAL ELISA Kits

Neurotoxicity

cAMP ELISA Kits
PROTEOSTAT® Aggresome Detection Kit
SMN ELISA Kit
Substance P & Serotonin ELISA Kits

*Streamline investigation of mechanistic relationships
between compounds and toxicity*

You may also be interested in:



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For local distributors and detailed product information visit us online:
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Put our experience to work for you!
Our broad range of scientific expertise and industry-proven manufacturing capabilities enables us to provide a comprehensive set of solutions for toxicology research.