

Overview of In Vitro Toxicity Assay Kits

Benefits of Using In Vitro Toxicity Assay from Preferred Cell Systems

- All assay kits incorporate an ATP bioluminescence, luciferin-luciferase readout.
- Each assay kit includes controls and standards for calibration and standardization.
- The readout for each kit type has been validated according to FDA Bioanlytical Method Validation Guidelines.
- Each kit include measurement assurance parameters to ensure that the reagents and assay are working correctly and the results can be trusted.
- The same readout for all assays allows easy comparison and ranking of potential toxicity to multiple tissues and organs from multiple species.
- The ATP readout measures proliferation/cytotoxicity and metabolic viability of those cells at the greatest sensitivity and selectivity and the highest precision of any in vitro assay allowing best-in-class reliability and reproducibility within and between laboratories.
- Easy to learn (less than 1 day) and rapid to use.
- Results in 2-7 days depending on the assay type, tissue and species.
- All assays include everything needed to perform the assay, including medium, ATP standards and controls, ATP Enumeration Reagent, sterile 96-well plate and non-sterile 96-well plate for calibration and standardization. You provide the tissues and the luminescence plate reader.
- Fast, efficient and cost-effective.

Overview of the In Vitro Toxicity Assay Kit Platforms

Cells / Tissues /	Type of	Name of Assay	Cell Types	Species
Organ Types	Toxicity			Available
Lympho- hematopoietic cells	Lympho- hematotoxicity	HALO [®] -Tox HT HALO [®] -Tox HT	Stem cells Erythropoietic	Human Primate
(Bone marrow toxicity)		"Global"	progenitors Myelomonocytic progenitors Magakanyonoiotic	Dog Rat Mouse
			Megakaryopoietic progenitors Lymphopoietic (T- and B-cell) Progenitors	
Immune Cells	Immunotoxicity	ImmunoGLO™-Tox HT ImmunoGLO™-Tox HT TCP	Functional immune cells Function T-lymphocytes	Human Primate Dog Rat
		ImmunoGLO™-Tox HT BCP	Function B-lymphocytes	Mouse
Liver cells	Hepatotoxicity	HepatoGLO™-Tox HT	Hepatocytes	Any
Heart cells	Cardiotoxicity	CardioGLO™-Tox HT	Cardiomyocytes	Any
Kidney cells	Renal toxicity	RenalGLO™-Tox HT	Cortex, medulla and tubule	Any
Skin cells	Skin toxicity	SkinGLO™-Tox HT	Epidermal	Any
Neural cells	Neurotoxicity	NeuroGLO™-Tox HT		Any
Intestinal cells	Intestinal toxicity	EpiGLO™-Tox HT		Any
Mesenchymal cells	Mesenchymal cell toxicity	MSCGIo™-Tox HT	Mesenchymal cells	
Tumor cells	Tumor cell toxicity	CellaGLO™-Tox HT	Multiple tumor types	Any
Cell lines	Transformed cell lines, including ES and iPS	STEMGIo™-Tox HT	Any cell line	Any