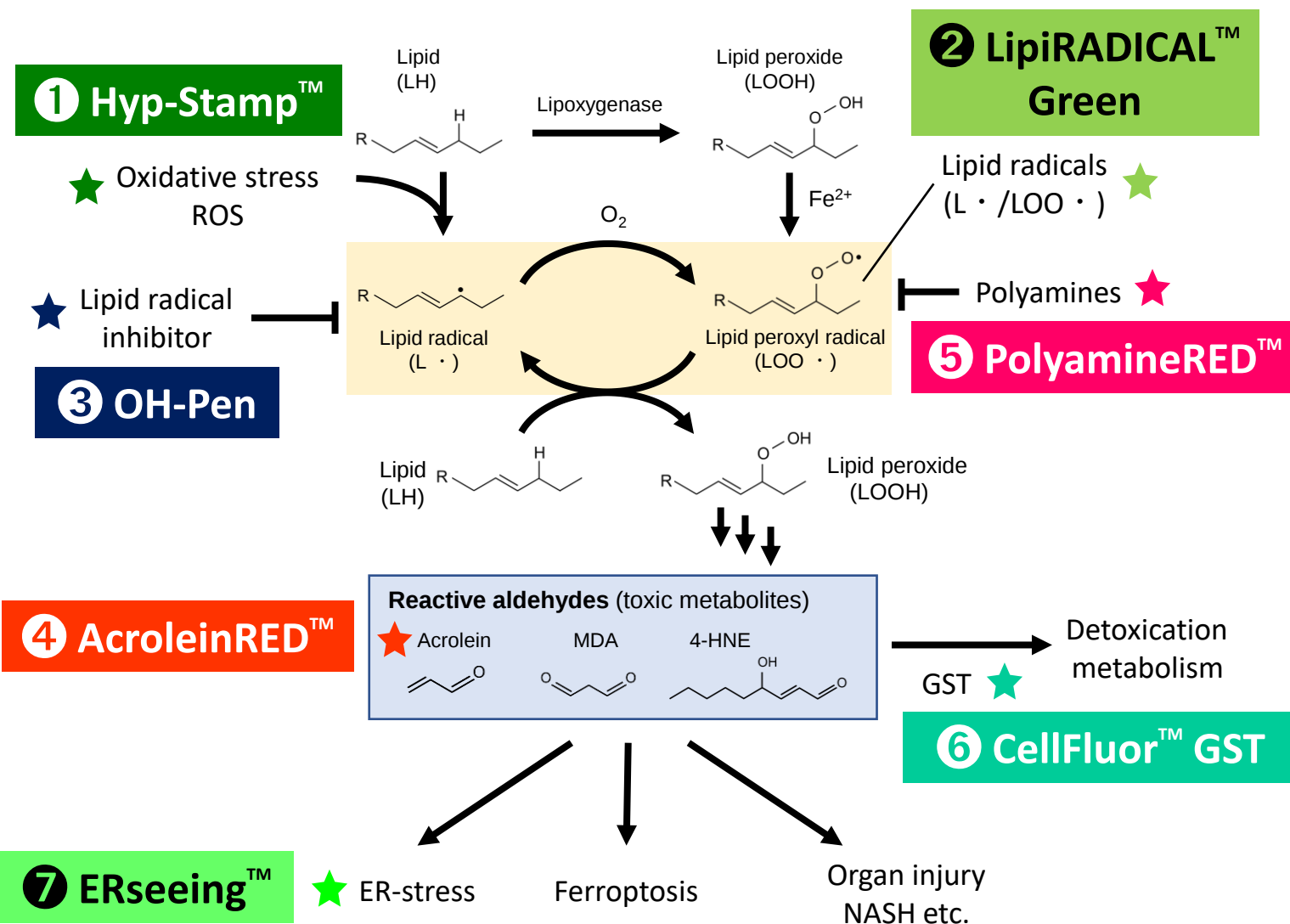


Lipid Peroxidation Detection Tools

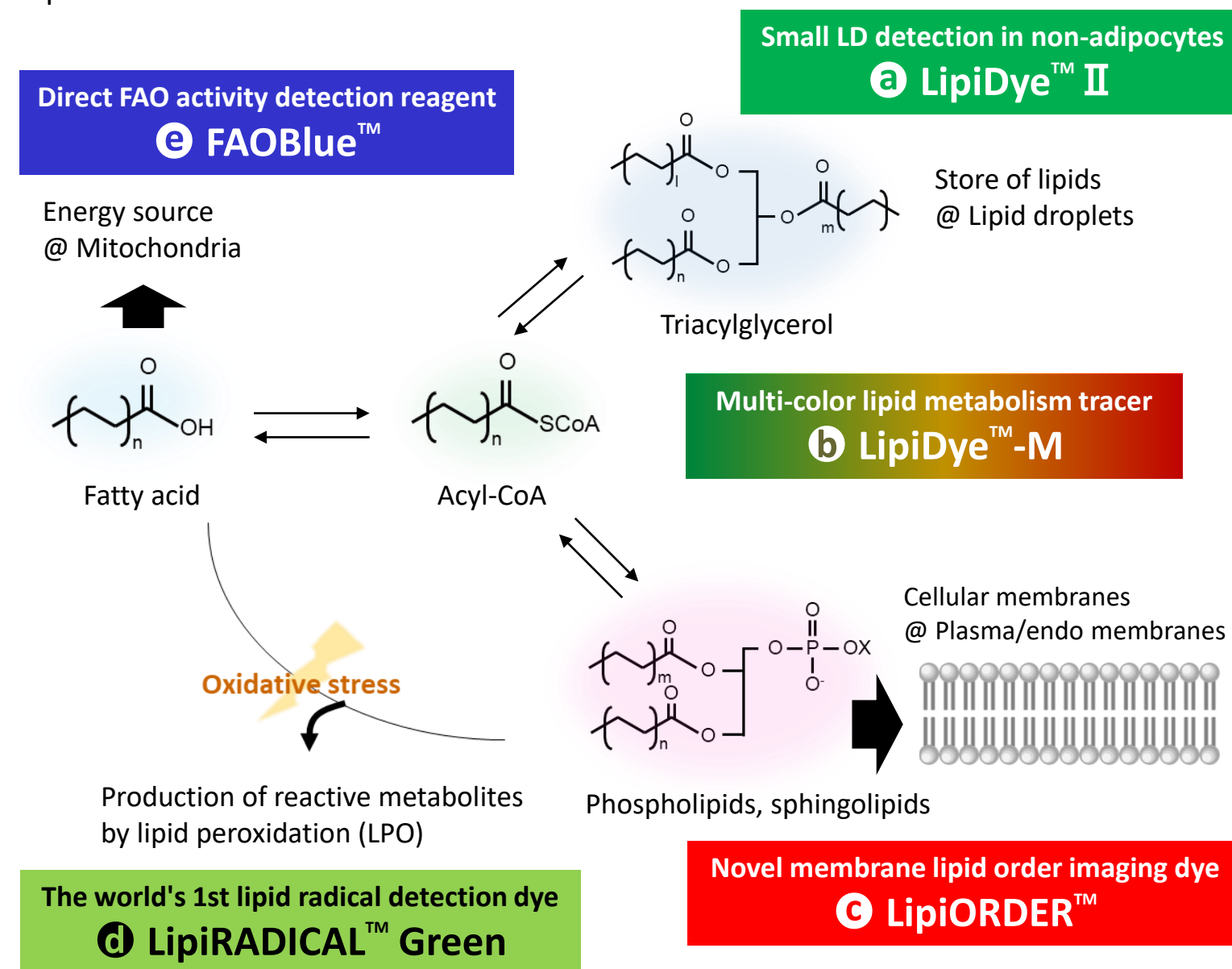
For more details: <https://www.diagnocine.com>

Oxidative stress is widely recognized as an important factor in cancer development. Cancer cells show higher reactive oxygen species (ROS) levels as well as upregulated antioxidant activity. Oxidative stress promotes **lipid peroxidation (LPO)** which is one of the several degradation processes of lipids. Quantitative measurement of LPO is utilized for the evaluation of anti-cancer drug of antioxidant suppression capacity. These are Innovative tools for your lipid peroxidation research.



Imaging Reagents for Lipid Metabolism

Five imaging dyes for lipid metabolism: **lipid storage**, **lipid degradation (fatty acid beta-oxidation (FAO) & lipid peroxidation (LPO))**, **microenvironment of biological membranes (membrane phase state)** & **tracking metabolic status**. Useful for your lipid metabolism research.

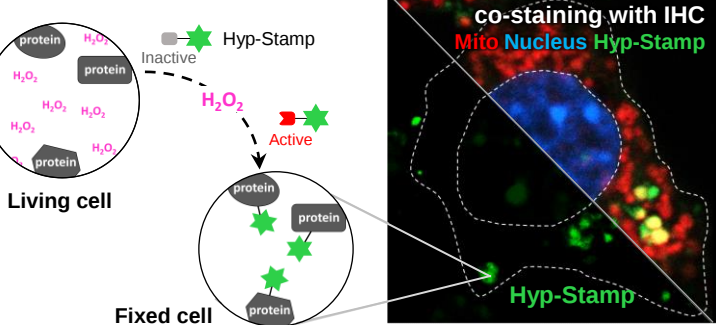


H₂O₂ imaging reagent in fixed cells
Hyp-Stamp™

1



Hyp-Stamp™ converts to “active form” by reacting with cellular H₂O₂ in living cells and labels fluorescein with proteins existed nearby H₂O₂, and after fixation, it can visualize the H₂O₂ localization in fixed cell/tissue with fluorescent microscope, since the labeled proteins remain at the original site.



Product Name	Product Code	Size
Hyp-Stamp <H ₂ O ₂ -Responsive Protein Labeling Reagent>	FNK-FDV-0052	100 µg

Lipid radical specific inhibitor
OH-Pen

3



OH-Pen, a unique lipid radical specific inhibitor, will not react with other reactive oxygen species. Although a radical compound, it is very stable and can be administered to animals *in vivo*.



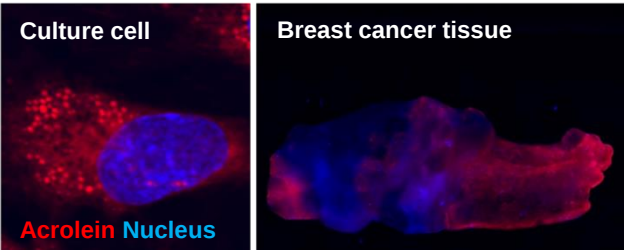
Product Name	Product Code	Size
OH-Pen <Lipid Radical Inhibitor>	FNK-FDV-0043	0.1 mg

Acrolein detection reagent in live cells
AcroleinRED™

4



AcroleinRED™ reacts specifically with acrolein, an unsaturated aldehyde that derived from LPO and exhibits strong toxicity, and visualizes with red fluorescence. It does not react with other unsaturated aldehydes or lipid metabolites, and can easily detect and semi-quantify endogenous acrolein or acrolein overproduced by external stimuli in living cells.



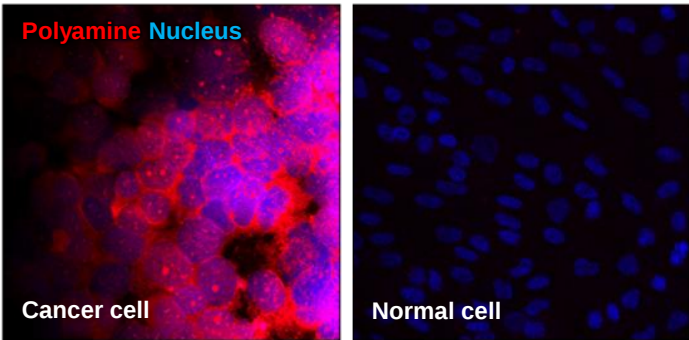
Product Name	Product Code	Size
AcroleinRED <Cell-based Acrolein Detection Reagent>	FNK-FDV-0022	0.5 mg

Intracellular polyamine imaging reagent
PolyamineRED™

5



PolyamineRED™ reacts specifically with polyamines and adds the red fluorescent dye TAMRA to polyamines. It does not react with monoamines or amino acids. Suitable with live cells, intracellular polyamines can be easily detected and semi-quantitated.



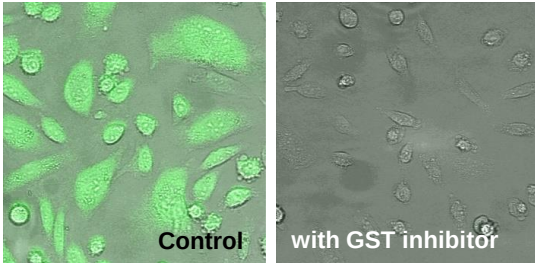
Product Name	Product Code	Size
PolyamineRED <Intracellular Polyamine Detection Reagent>	FDV-0020	0.5 mg

GST activity measuring probe in live cells
CellFluor™ GST/GSTP1

6



CellFluor™ GST/GSTP1 are rapidly taken in cells and emits green fluorescence from the intracellular pan-GST or GSTP1 activities, respectively, making it useful for the evaluation of GST activity in live cells. Pros.: Simple protocol, high-throughput screening with a fluorescent plate reader, high detection sensitivity.



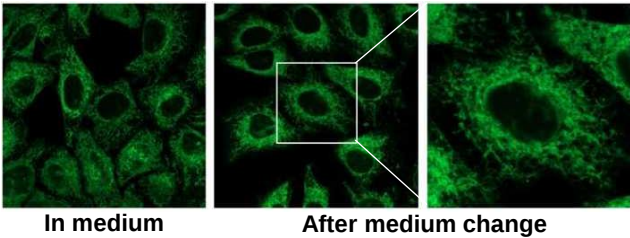
Product Name	Product Code	Size
CellFluor GST <Cell-based GST Activity Assay Reagent>	FDV-0030	0.1 µmol
CellFluor GSTP1 <Cell-based GSTP1 Activity Assay Reagent>	FDV-0034	1 kit

Endoplasmic Reticulum (ER) staining dye
ERseeing™

7



ERseeing™ is irreversible ER (Endoplasmic Reticulum) staining dye and suitable for long-term live imaging. ERseeing™ exhibits very low pharmacological effect and high retentivity which enables to visualize ER even after washout or medium change.



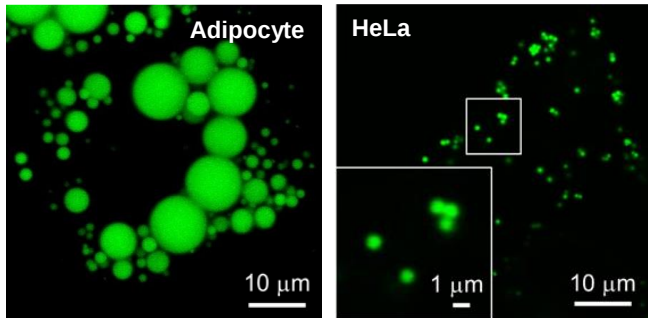
Product Name	Product Code	Size
ERseeing <Endoplasmic Reticulum Green>	FDV-0038	10 nmol

Small LD detection in non-adipocytes
Lipidye™ II

a



High-sensitivity and long-term staining reagent for lipid droplets (LDs) in living cells including non-adipocytes. ⇒ Suitable for long time observation over several days; imaging of LD fusion/degradation process in live cells; visualization of ultra micro LDs with super-resolution microscopy.



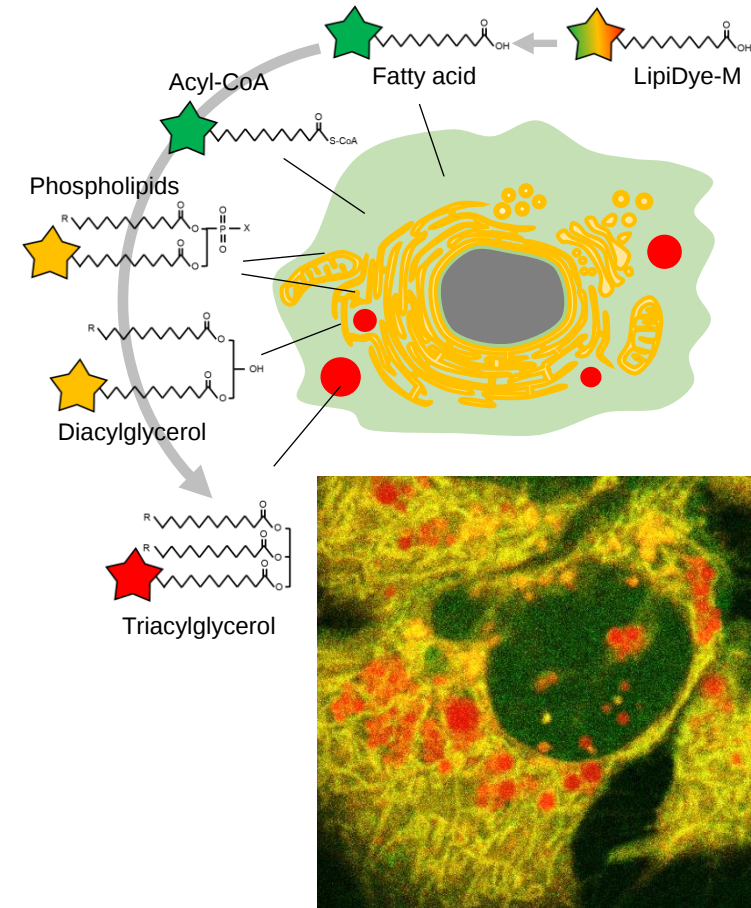
Product Name	Product Code	Size
Lipidye II <Lipid Droplet Live Imaging>	FNK-FDV-0027	0.1 mg

Multi-color lipid metabolism tracer
Lipidye™ -M

b



Lipidye™ -M is a C12 fatty acid mimic labeled with a novel solvatochromic dye. As Lipidye™ -M exhibits green-to-red fluorescence depending on its lipid structure and its localization, it can trace the status of cellular fatty acid uptake and lipid metabolism in cells. ⇒ Powerful tool for both basic research and pharmaceutical research for lipid metabolism.



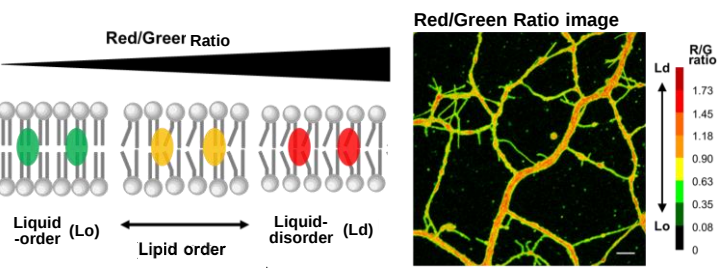
Product Name	Product Code	Size
Lipidye-M <Lipid Metabolism Tracer>	FNK-FDV-0028	0.1 mg

Novel membrane lipid order imaging dye
LipIORDER™

c



LipIORDER™, a solvatochromic fluorescence probe, quickly accumulates in the various biological membranes. Observe lipid order/disorder (Lo/Ld) quantitatively with ratiometric imaging of confocal laser microscopy. The photo-/chemically stable dye can be used for live cell imaging to observe phase state of cell membranes and intracellular membranes and so on.



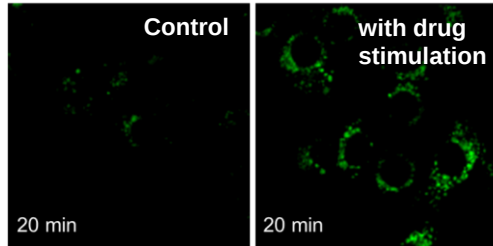
Product Name	Product Code	Size
LipIORDER <Membrane Lipid Order Imaging Dye>	FDV-0041	0.1 mg

The world's 1st lipid radical detection dye
LipI RADICAL™ Green

d 2



A specific fluorescent dye for lipid-derived radicals detection. ⇒ Suitable for live cell imaging, *in vitro/in cellulo* screening of LPO suppressor or anti-oxidant, structural analysis by fluorescent-LC/MS-MS etc.



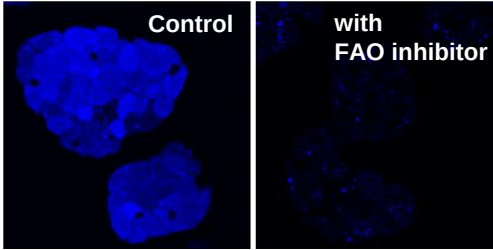
Product Name	Product Code	Size
LipI RADICAL Green <Lipid Radical Detection Reagent>	FNK-FDV-0042	0.1 mg

Direct FAO activity detection reagent
FAOBlue™

e



A novel and direct fatty acid beta-oxidation (FAO) activity detection reagent in live cells. When FAOBlue™ is degraded in the mitochondria, a strong blue-fluorescence is emitted. ⇒ Can detect perturbation of lipid-degradation by drug treatment quantitatively to estimate effects of drug candidates on lipid metabolism.



Product Name	Product Code	Size
FAOBlue <Fatty Acid Oxidation Detection Reagent>	FDV-0033	0.2 mg