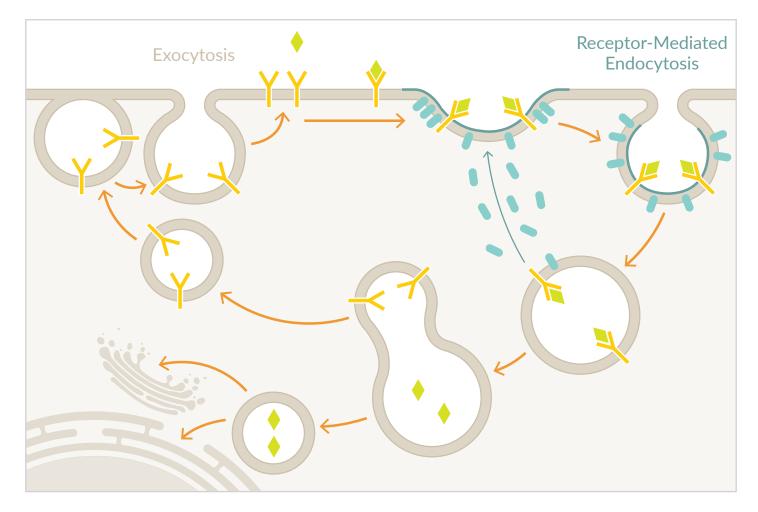
# **Receptor-Mediated Endocytosis**

Receptor-mediated endocytosis is an endocytotic mechanism in which specific molecules are ingested into the cell through a highly selective receptor-ligand interaction. Receptors on the plasma membrane of the target tissue will specifically bind to ligands on the outside of the cell. Cayman offers a diverse collection of assay kits with fluorescently labeled targets to monitor key receptor-driven events. With multiple fluorescent labels available, these kits have the flexibility to fit your model system.





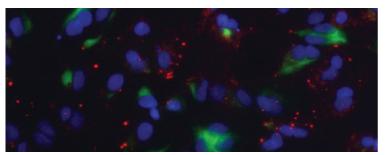
#### **Endocytosis Assay Kits**

Assay Kit	Particle Target	Cell Type(s)	Receptor(s)
LDL Uptake Assay Kits	LDL	hepatocytes	LDLR
	oxidized LDL	macrophages/endothelial cells	CD36/LDLR
Efferocytosis Assay Kit	apoptotic corpses	macrophages	CD36, integrins, TIM4, etc.
Phagocytosis Assay Kits	IgG-coated latex beads	macrophages/monocytes	FcγR
	E. coli	macrophages/neutrophils	SR-A

## For more details on our kits to study receptor-mediated endocytosis, continue to the back of this page

## LDL Uptake Assay Kits

- Detect cellular low-density lipoprotein (LDL) or oxidized LDL uptake in cultured cells
- Employs human LDL conjugated to either DyLight<sup>™</sup> 488 or DyLight<sup>™</sup> 550 or oxidized LDL conjugated to DyLight<sup>™</sup> 488 as a fluorescent probe
- Assess by fluorescence microscopy or flow cytometry
- 7-AAD is included in LDL Uptake Flow Cytometry Assay Kit and Oxidized LDL Uptake Assay Kit for live-cell gating

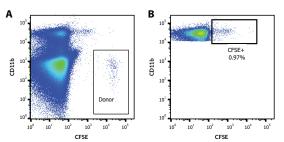


LDL Uptake Cell-Based Assay Kit - LDL uptake in Huh7 human hepatocytes. LDLR (green), LDL uptake (red), Hoechst-stained nuclei (blue).

Item No.	Product Name	Particle Target	Color	Cell Type(s)	Receptor(s)
10011125	LDL Uptake Cell-Based Assay Kit	LDL	red	hepatocytes	LDLR
601470	LDL Uptake Flow Cytometry Assay Kit	LDL	green	hepatocytes	LDLR
601180	Oxidized LDL Uptake Assay Kit	oxidized LDL	green	macrophages/endothelial cells	CD36/LDLR

### Efferocytosis Assay Kit

- Visualize effector (phagocytic) cells and bait (apoptotic) cells simultaneously
- Study modulators of efferocytosis, apoptosis, pro-resolving mediators, and cross-presentation
- Includes sufficient reagents to stain 5 x  $10^7\,effector$  cells and 2 x  $10^8$  bait cells



Apoptotic thymocytes are taken up by myeloid cells in vivo. Cells that have efferocytosed apoptotic cells are CD11b+, CFSEmid (Panel B).

Item No.	Product Name	Particle Target	Cell Type	Receptors
601770	Efferocytosis Assay Kit	apoptotic corpses	Macrophages	CD36, integrins, TIM4, etc.

#### Phagocytosis Assay Kits

- Visualize phagocytosis in 1-4 hours at 37°C
- Assess by flow cytometry or fluorescence microscopy
- Validated in human peripheral blood monocytes, mouse peritoneal macrophages, and phagocytic cell lines

Item No.	Product Name	Particle Target	Color	Cell Types	Receptor
601370	E. coli Phagocytosis Assay Kit	E. coli	green	macrophages/neutrophils	SR-A
500290	Phagocytosis Assay Kit (IgG FITC)	IgG-coated latex beads	green	macrophages/monocytes	FcγR
600540	Phagocytosis Assay Kit (IgG PE)	IgG-coated latex beads	orange	macrophages/monocytes	FcγR
601480	Phagocytosis Assay Kit (IgG-DyLight™ 405)	IgG-coated latex beads	blue	macrophages/monocytes	FcγR
601490	Phagocytosis Assay Kit (IgG-DyLight™ 633)	IgG-coated latex beads	red	macrophages/monocytes	FcγR

### Lysosome Imaging Reagents

Item No.	Product Name	Particle Target	Excitation Maximum (nm)	Emission Maximum (nm)
25152	LysoBrite™ Blue	lysosomes in live cells	■ 353	442
25154	LysoBrite™ Green	lysosomes in live cells	<b>4</b> 50	<b>5</b> 05
25156	LysoBrite™ Orange	lysosomes in live cells	<b>5</b> 42	<b>5</b> 56
25153	LysoBrite™ Deep Red	lysosomes in live cells	596	619

View a complete list of lysosome fluorescent probes online at www.caymanchem.com