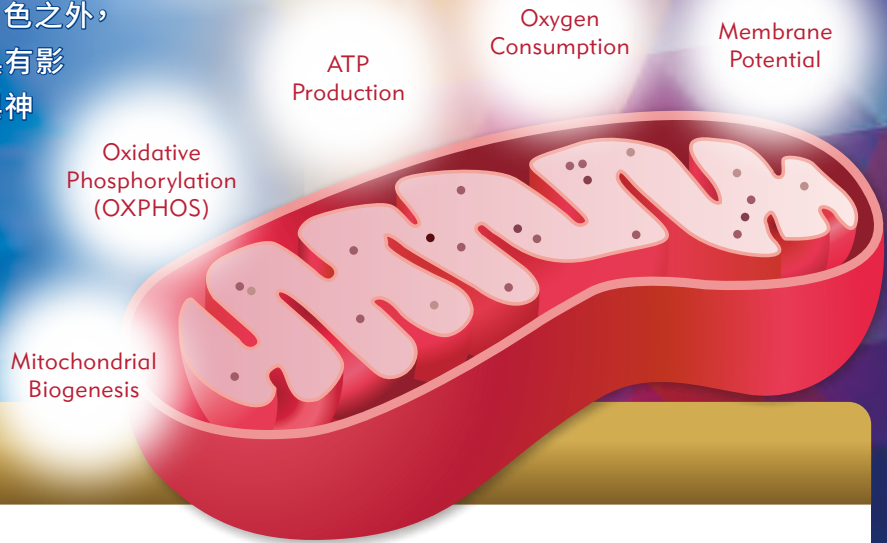


粒線體 功能研究 代謝分析 產品特輯

粒線體在細胞內除了擔負著供應能量的重要角色之外，對於訊息傳遞、代謝、凋亡等細胞生理活動皆具有影響性，已有愈來愈多的研究指出，粒線體異常與神經方面疾病及癌症皆具有高度相關性。

伯森提供全面性的粒線體分析產品，協助您以多種角度切入粒線體功能及代謝研究，讓您的實驗結果無懈可擊！

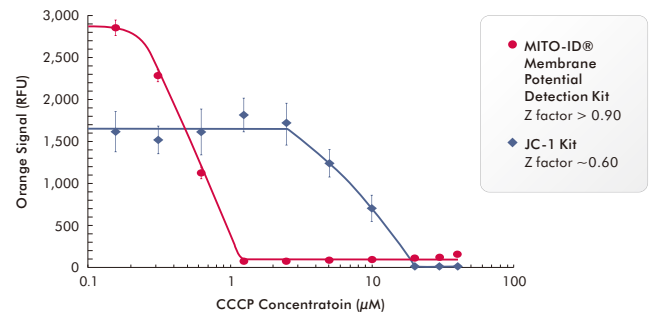


Membrane Potential

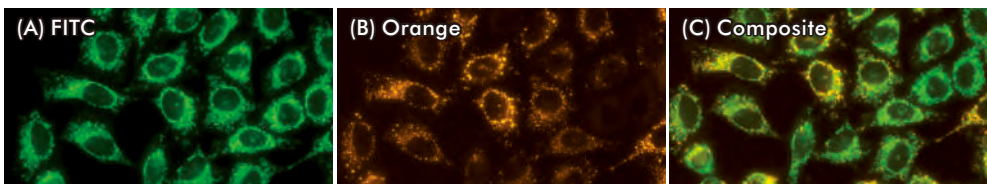
MITO-ID® Membrane potential detection kit



- 靈敏度更高：能區分出小至 10mV 的膜電位差異，較傳統 JC-1 (僅能區分出約 100mV 膜電位差異) 及 JC-10 染劑具有更高的偵測靈敏度！
- 使用便利：適用於顯微鏡及流式細胞儀偵測，亦有螢光微量盤讀取儀偵測套組可供選擇。
- 文獻摘錄：
 - *Environ. Health Perspect.* 124, 1399 (2016)
 - *Oncogene* 35, 3760 (2016)
 - *Cancer Genomics Proteomics* 13, 259 (2016)
 - *Sci. Rep.* 6, 29367 (2016)



MITO-ID® Membrane potential detection kit is 10X more sensitive than JC-1 with superior aqueous solubility.



細胞正常狀態下，粒線體膜電位正常，MITO-ID® 染劑在細胞質會呈現綠色 (A)、在粒線體會呈現橘紅色 (B)、於顯微鏡下可觀察到細胞呈現兩種螢光顏色 (C)。而當細胞發生凋亡時，粒線體膜電位下降，MITO-ID® 染劑在細胞質及粒線體皆呈現綠色，於顯微鏡下觀察細胞將主要呈現綠色，橘紅色螢光訊號會明顯地大幅下降。

Membrane Potential 熱門產品訂購資訊

Cat. No.	Product
ENZ-51018	MITO-ID® Membrane potential detection kit
ENZ-51019	MITO-ID® Membrane potential cytotoxicity kit
ab113850	JC-1 - Mitochondrial Membrane Potential Assay Kit
ab112133	JC-10 Mitochondrial Membrane Potential Assay Kit (Flow Cytometry)
ab112134	JC-10 Mitochondrial Membrane Potential Assay Kit (Microplate)
ab113852	TMRE-Mitochondrial Membrane Potential Assay Kit

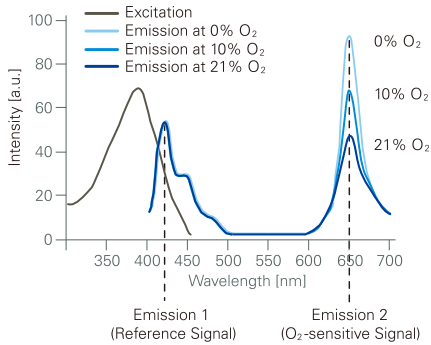
Cat. No.	Product
ENZ-52304	JC-1 (ultra pure)
ENZ-52305	JC-10 (ultra pure)
ENZ-52309	TMRE (ultra pure)



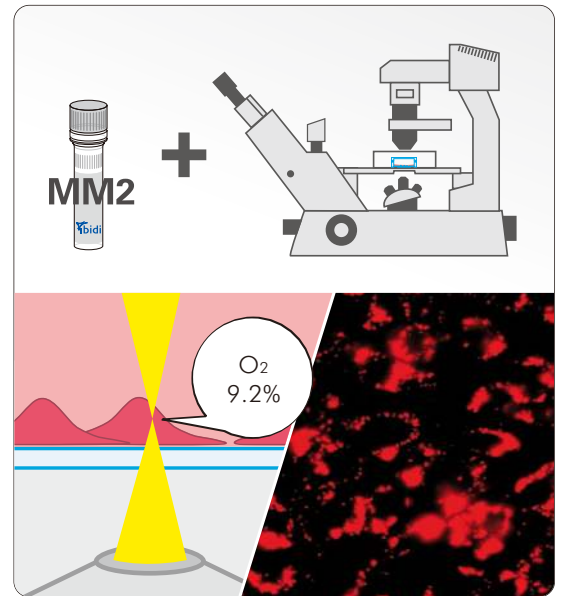
MM2 Nanoparticles

細胞內氧含量監測

- 能直接進入細胞內，偵測細胞內氧氣含量的奈米螢光基團。
- 放射光 (Emission) 強度能轉換成氧氣含量值。
- 搭配一般螢光顯微鏡或是共軛焦螢光顯微鏡即可使用。
- 適合 *in vitro* 缺氧實驗，例如 3D culture、腫瘤球、以及組織等。
- 文獻摘錄：*Oncogene*. Mar 19;34(12):1608 (2015)



Phosphorescence Spectrum of MM2
 Ex 400 nm (390-405 nm)
 Em 1 420 nm (415-430 nm)
 Em 2 650 nm (640-670 nm)

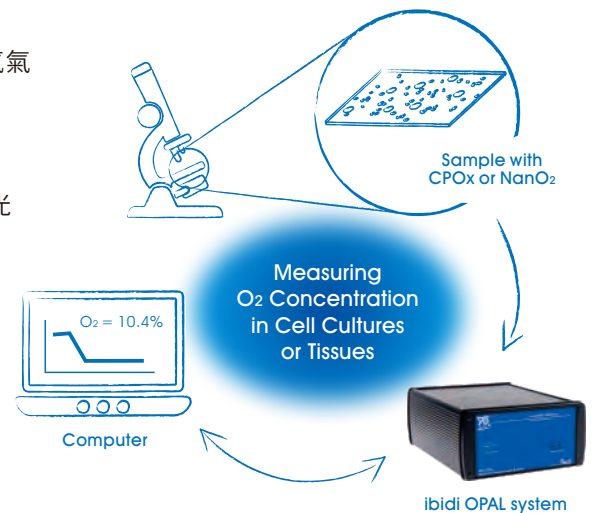


Cat. No.	Product
IB-74161	MM2: fluorescence intensity nanoparticle reagent for intracellular O ₂ measurement, 100 μg (10-100 assays)

ibidi OPAL System & NanO₂ Nanoparticles

細胞內氧含量監測，特別推薦自發性螢光樣本或高背景螢光樣本採用

- 將 NanO₂ 的螢光生命週期 (Fluorescence lifetime) 轉換為對應的氧氣含量值，獲得的結果具更好的訊噪比。
- 能直接進入細胞內，偵測細胞內氧氣含量。
- OPAL 系統包含主機、光源、濾片及偵測器，能簡單與實驗室原有的螢光顯微鏡結合，偵測 NanO₂ 螢光生命週期。
- 獨家 Two-frequency Phase Modulation 技術能有效消弭背景螢光的干擾，適合偵測綠色植物等具高背景螢光的樣本。
- 偵測過程不消耗氧氣，不影響測量結果，數秒內即可完成測量。
- 適合 *in vitro* 缺氧實驗，例如 3D culture、腫瘤球、以及組織等。
- 文獻摘錄：*Proc Natl Acad Sci U S A*. Apr 19;113(16): E2231-40 (2016)



Cat. No.	Product
IB-74001	ibidi OPAL - Optical O ₂ Measurement System
IB-74151	NanO ₂ : fluorescence lifetime nanoparticle reagent for intracellular O ₂ measurement, 100 μg (10-100 assays)
IB-74111	CPOx-Beads, orange: fluorescence lifetime probe for extracellular O ₂ measurement, Ø 50 μm, 3 mg, 5 mg/ml (10-100 assays)

Oxygen Consumption 更多熱門產品訂購資訊

Cat. No.	Product	Cat. No.	Product
ab197243	Extracellular Oxygen Consumption Assay	ab197244	Glycolysis Assay [Extracellular acidification]

ATPlite & ATPlite 1 Step

- 穩定性佳：較其它同質商品更加穩定，可於 4°C 保存。
- 無惱人氣味：成分不含 DTT。
- 價格更實惠：Kit 內含 ATP 標準品，無須另外購買。
- 更貼近真實生理狀態：可搭配 3D 細胞培養，以 ATPlite 3D 系列試劑進行細胞增生及毒殺分析。
- 文獻摘錄：
 - *Clin Cancer Res.* Feb 15;23(4):1001-1011 (2017)
 - *Biotechnol J.* Aug;12(8) (2017), PMID: 28430399

	ATPlite	ATPlite 1 Step
Signal Intensity	Good	3X more light than ATPlite
Half-life	5 hours	30 minutes
Assay Format	2-step assay format	1-step: Mix and Measure format

Cat. No.	Product
PK-6016943	ATPlite, 300 assays
PK-6016941	ATPlite, 1000 assays
PK-6066943	ATPlite 3D, 300 assays

Cat. No.	Product
PK-6016736	ATPlite 1 step, 100 assays
PK-6016731	ATPlite 1 step, 1000 assays
PK-6066736	ATPlite 1 step 3D, 100 assays

※ Assay number is based on 96-well microplate. 更大包裝請洽伯森業務專員

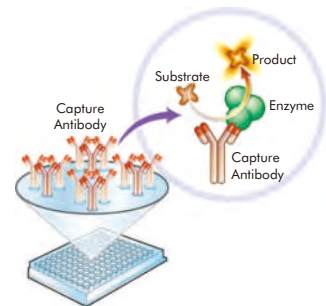
Oxidative Phosphorylation (OXPHOS)

Complex I~V Activity Assay Kits

- 高專一性：採用專一性抗體來偵測特定 complex 活性，確保實驗結果準確性。
- 實驗設計具高度彈性：提供 *in vitro* 及 *ex vivo* 兩種反應模式可供選擇，分別適用於藥物篩選及細胞內活性分析。
- 儀器取得方便：使用可見光分析儀即可偵測。
- 文獻摘錄：
 - *Oncotarget* 8:6376-6398 (2017)
 - *Redox Biol* 11:415-428 (2017)
 - *PLoS One* 12:e0178946 (2017)
 - *Sci Rep* 7:3864 (2017)

Oxidative Phosphorylation (OXPHOS) 熱門產品訂購資訊

Cat. No.	Product	Reactivity
ab109721	Complex I Enzyme Activity Microplate Assay Kit (Colorimetric)	Mouse, Rat, Cow, Human
ab109908	Complex II Enzyme Activity Microplate Assay Kit	Mouse, Rat, Cow, Human
ab109909	Complex IV Human Enzyme Activity Microplate Assay Kit	Cow, Human, Pig
ab109911	Complex IV Rodent Enzyme Activity Microplate Assay Kit	Mouse, Rat
ab109714	ATP synthase Enzyme Activity Microplate Assay Kit	Rat, Cow, Human
ab109903	MitoTox™ Complex I OXPHOS Activity Assay Kit	Human, Mouse, Rat, Cow
ab109904	MitoTox™ Complex II OXPHOS Activity Assay Kit	Mouse, Cow, Human
ab109905	MitoTox™ Complex II + III OXPHOS Activity Assay Kit	Cow, Mammal
ab109906	MitoTox™ Complex IV OXPHOS Activity Assay Kit	Cow, Human
ab109907	MitoTox™ Complex V OXPHOS Activity Assay Kit	Rat, Cow, Human
ab110419	MitoTox™ Complete OXPHOS Activity Assay Kit (5 Assays)	Cow, Human
ab110413	Total OXPHOS Rodent WB Antibody Cocktail	Mouse, Rat, Cow, Human, Cynomolgus monkey
ab110411	Total OXPHOS Human WB Antibody Cocktail	Human



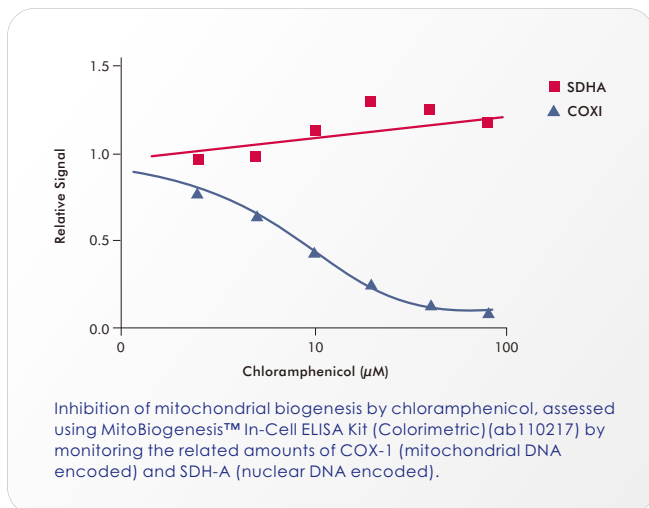
Mitochondrial Biogenesis

MitoBiogenesis™ In-Cell ELISA Kit

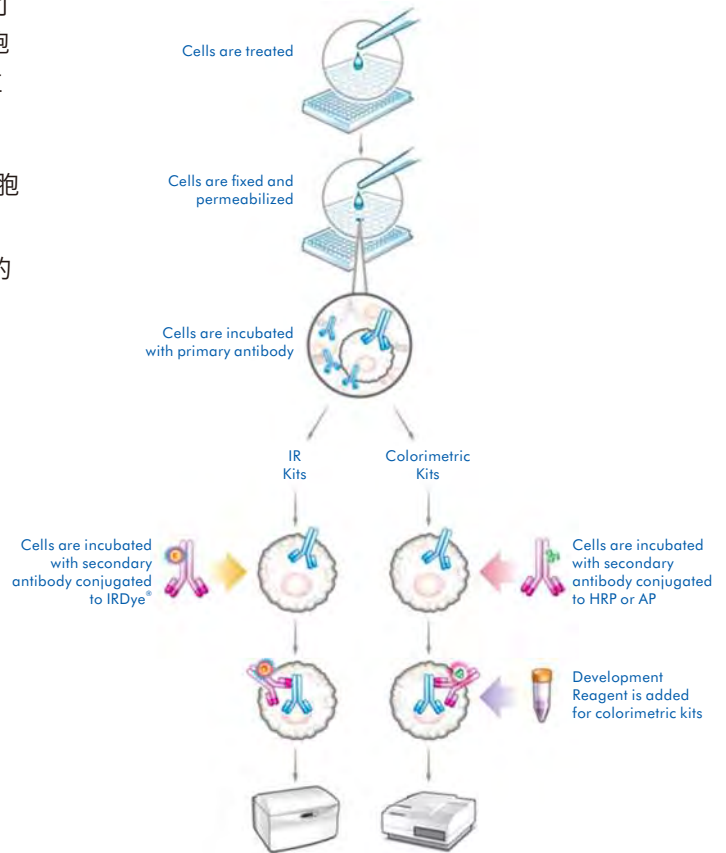
abcam

檢測粒線體生成 (Mitochondrial Biogenesis) 已成為粒線體功能研究及藥物安全性分析的一個重要環節。由 Abcam 公司所推出的「MitoBiogenesis™ In-Cell ELISA Kit」利用免疫細胞化學 (immunocytochemistry) 原理，可直接量化細胞中與粒線體生成相關的蛋白質表現程度。產品特點包含：

- **快速、簡易：**無須收集細胞萃取物，直接於 Well 中固定細胞後即可進行偵測！
- **高專一性：**所使用的抗體對皆經過嚴謹的驗證，保證絕佳的專一性！
- **同時量化：**可直接在同一 Well 中進行粒線體生成標的 (COX-1 & SDH-A) 以及全蛋白 (Total protein) 的量化！
- **彈性設計：**有可見光、螢光、紅外光等分析模式可選擇。
- **文獻摘錄：**
 - *PLoS One* 11:e0160380 (2016)
 - *Exp Cell Res* 1;343(2):168-176 (2016)



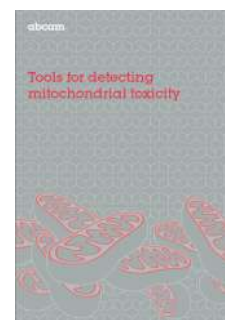
In-Cell ELISA Principle



Cat. No.	Product
ab110217	MitoBiogenesis™ In-Cell ELISA Kit (Colorimetric)
ab110216	MitoBiogenesis™ In-Cell ELISA Kit (IR)
ab140359	MitoBiogenesis™ In-Cell ELISA Kit (Fluorescent)
ab123545	MitoBiogenesis™ Western Blot Cocktail
ab168540	MitoBiogenesis™ Flow Cytometry Kit

更多粒線體功能及代謝分析產品訂購資訊

Cat. No.	Product
ab115348	Aldehyde Dehydrogenase (ALDH2) Activity Assay Kit
ab109902	Pyruvate dehydrogenase (PDH) Enzyme Activity Microplate Assay Kit
ab119692	Citrate Synthase Activity Assay Kit
ab119693	Malate Dehydrogenase 2 (MDH2) Activity Assay
ab110170	Mitochondria Isolation Kit for Cultured Cells
ab110171	Mitochondria Isolation Kit for Cultured Cells (with Dounce Homogenizer)
ab110168	Mitochondria Isolation Kit for Tissue
ab110169	Mitochondria Isolation Kit for Tissue (with Dounce Homogenizer)
ab143145	Rotenone (Mit. complex I inhibitor)
ALX-380-075	Antimycin A (Mit. Complex III inhibitor)
ALX-380-037	Oligomycin (F-ATPase inhibitor)



掃描 QR code 瀏覽【Abcam Mitochondrial Toxicity 產品目錄】
歡迎踴躍洽詢伯森業務專員，索取產品資訊與最新優惠訊息