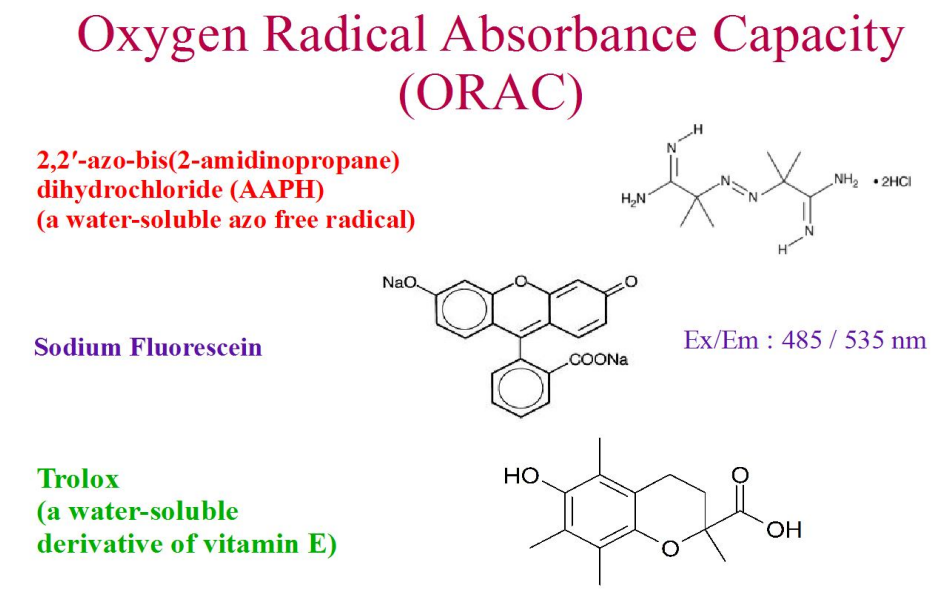
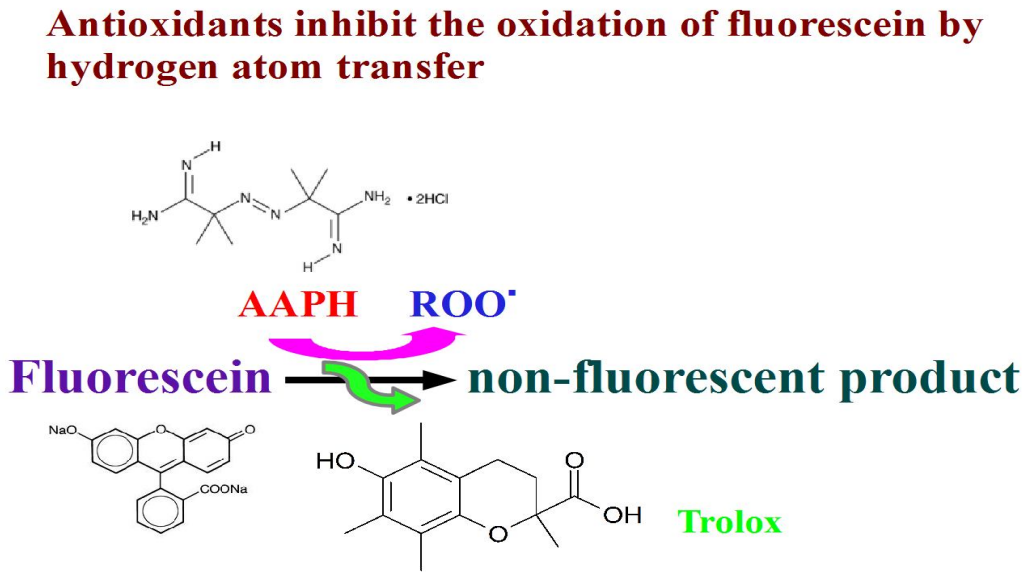
抗氧化活性評估檢測平台技術

抗氧化活性評估檢測平台技術可提供抗氧化及抗衰老產品之活性檢測評估，以期提升產品附加價值。目前本所開發的抗氧化活性檢測平台包括：

1. Oxygen Radical Absorbance Capacity-氧自由基吸收能力分析(簡稱ORAC)

氧自由基吸收能力分析是一種測量不同食品抗氧化能力的國際通用標準單位，即umol TE /100g，以平均總ORAC數值表示食物的抗氧化能力，檢測數值愈高代表其抗氧化能力就愈強。ORAC數值檢測方式是目前檢測抗氧化能力比較通用且可信賴的分析方法之一。





ORAC ASSAY

Make necessary test compound dilutions in Assay Buffer

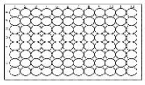
Prior to assay, warm plate chamber to 37°C, prepare fluorescein working solution and trolox standards.

Add 40 µL/well fluorescein solution(60 nM) to blank assay plate.

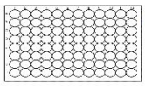
Add 40 µL/well trolox standards or test samples to fluorescein containing wells.

Prepare AAPH solution. Add 120 µL/well of AAPH working solution(12.8 mM) and place assay plate in plate reader. Begin kinetic fluorescence read. Excitation= 485 nm; Emission=538 nm.

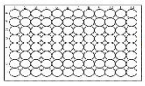
Add 40 µLfluorescein solution

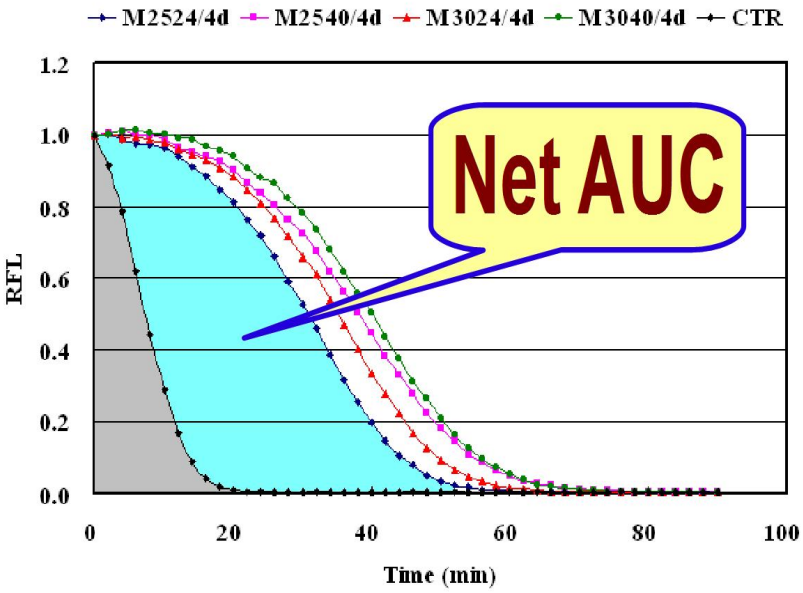


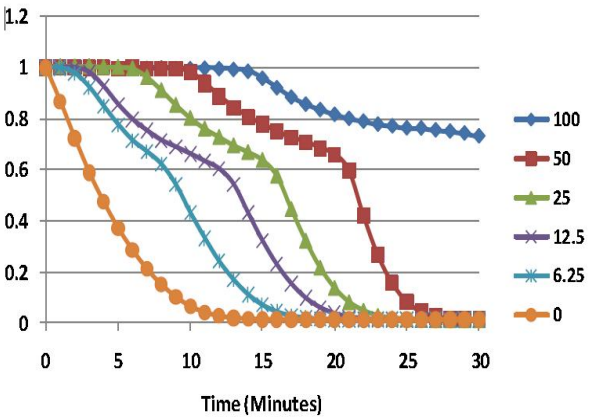
Add 40 µL standards or samples

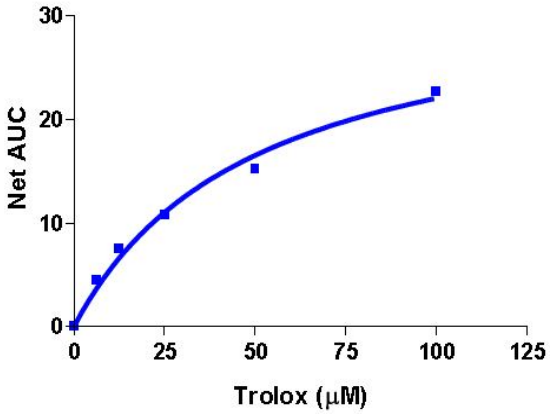
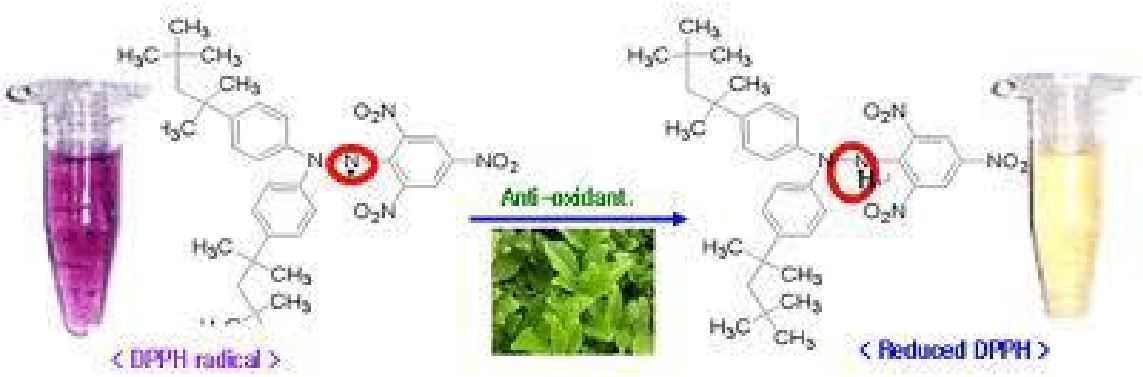
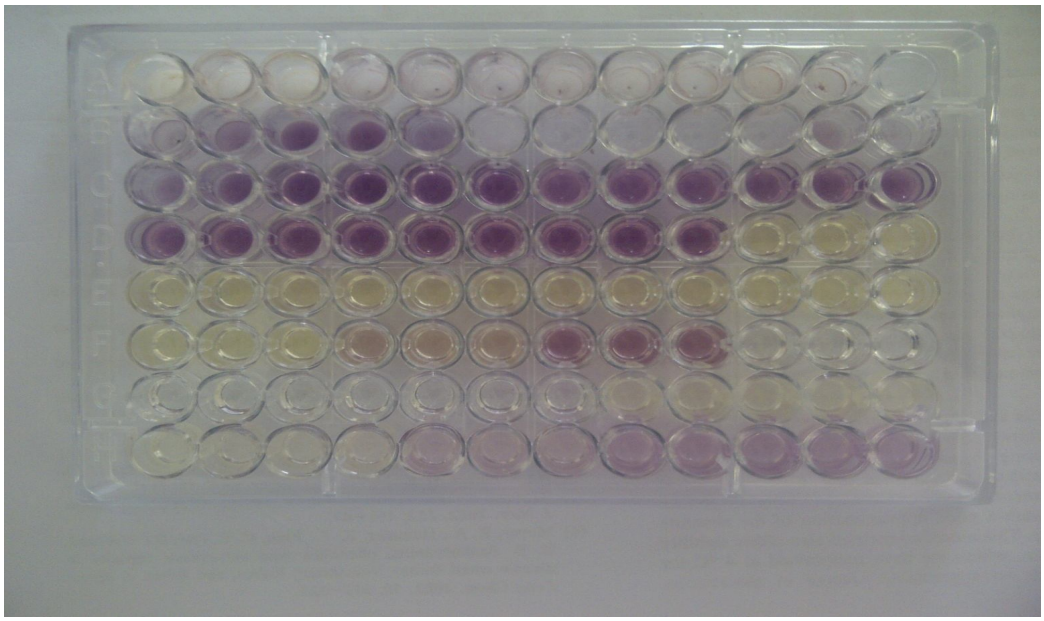


Add 120 µL AAPH solution









2. 清除DPPH（α,α-diphenyl-β-pricrylhydrazyl）自由基能力測定