

Core Facilities



## Multimode Microplate Reader with integrated Gas Control Module



Our Multimode Microplate Reader – SPARK – offers a comprehensive range of advanced detection methods. Equipped with Quad4 Monochromators, the Spark multimode reader delivers exceptional sensitivity, enabling users to select any wavelength from UV to NIR and perform absorbance, excitation and emission scans.

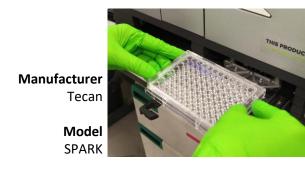
Users have full access to all wavelengths and can easily switch between top and bottom reading modes, ensuring measurement of multiplexed assays.

Options for sample measurements in 6- to 384- well plates:

- Absorbance by high-speed monochromator, with a wavelength range from 200nm to 1000 nm, selectable in 1 nm steps. Kinetics measurements.
- Fluorescence intensity TOP & BOTTOM reading by Quad4 monochromators and/or filters, including Time-Resolved Fluorescence (TRF). Kinetics measurements.
- Spectrally enhanced photomultiplier tube (PMT) that extends emission wavelength range from 230-900 nm to 280-900 nm.
- Luminescence scan and Multicolour luminescence.
- Temperature control: RT+3°C to 42°C.
- Humidity Cassette.
- · Shaking functionality.
- Integrated Gas Control Module (GCM™) for CO<sub>2</sub> and O<sub>2</sub> that enables precise gas regulation to enhance cell viability or replicate specific physiological conditions, such as hypoxia.



Core Facilities



Multimode Microplate Reader with integrated Gas Control Module

## **Applications:**

- DNA/RNA quantification
- protein quantification
- ion channel studies
- ion flux studies
- calcium ion detection
- reporter gene and gene expression assays
- · cell viability and toxicity assays
- cell-based assays
- · binding studies
- enzyme assays
- ELISA
- immunoassays
- fluorescence and luminescence applications
- TR-FRET / HTRF® applications

## **Equipment financed by:**









