Concentrations of europium as low as 60 fM can be detected.

The Synergy ™ 2 is a new type of reader that provides research robotic compatible and provides temperature control and shaking. It is a high-performance microplate reader that offers several detection technologies, including fluorescence, time-resolved fluorescence, luminescence, and absorbance. It is designed for use in high-throughput screening (HTS) and drug discovery applications. The Synergy ™ 2 can be used in HTS laboratories to perform a variety of assays, including protein-protein interactions, receptor-ligand binding assays, and cell-based assays.

The Synergy ™ 2 is a multi-detection microplate reader that offers the ability to measure multiple endpoints in a single assay. It provides flexibility and efficient cost-control for screening laboratory applications. The Synergy ™ 2 is equipped with a high-energy xenon flash lamp and a high-sensitivity PMT detector, allowing it to detect europium signals with a half-life of 80 minutes. The instrument is also equipped with a coelenteramide, which yields light at 480 nm.

Several different cyclic adenosine monophosphate (cAMP) assay methodologies are described. These methodologies include fluorescence polarization, luminescence resonance energy transfer, and DELFIA time-resolved fluorescence assays. The versatility of the Synergy ™ 2 makes it suitable for screening laboratories, while delivering flexibility and efficient cost-control to screening laboratory applications.

The detection of cAMP can be achieved using the Synergy ™ 2 in several ways. One method involves the use of cAMP buffer. In replicates of 8, 50 μl aliquots of each dilution were added to the assay mixture and allowed to incubate at room temperature for 30 minutes. After incubation, 20 μl of detection mix was added to the assay mixture and allowed to incubate at room temperature for 30 minutes. The luminescent signal was measured for 8 minutes. The luminescent signal was measured for 8 minutes.

The data analysis was performed using the Synergy ™ 2 Data Analysis Software. The software was used to fit the data to a four-parameter logistic curve and to calculate the IC50 values for the compounds tested. The results were then exported to Microsoft Excel for analysis.

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