

BERTHOLD TECHNOLOGIES GmbH & Co.KG Calmbacher Str.22 75323 Bad Wildbad Deutschland http://www.berthold.com/bio bio@Berthold.com Tel.: +49-7081-177-0 Fax: +49-7081-177-100

Press Release

TriStar²S LB 942 with HTRF[®]-Technology



The successful Berthold Technologies multilabel reader TriStar²S now takes the next step. Right after the recent introduction of the monochromator technology, the TriStar²S now also supports time resolved fluorescence energy transfer assays (TR-FRET, HTRF[®]). FRET is an excellent technology to monitor specific molecular interactions with high sensitivity in homogeneous phase. The effect relies on the distance-dependent transfer of the excitation energy from a donor-dye to an acceptor. Hence, two interacting partners complementary labelled with the respective dyes, induce FRET once they are tightly bound to each other and the red shifted acceptor emission is observed even if the donor is exclusively excited. With the time resolved FRET-technology now available for the TriStar²S the sensitivity of FRET-studies is dramatically enhanced. Time resolved FRET can be applied for FRET assays featuring an acceptor dye with long lived fluorescence decays, such as e.g. the CisBio HTRF[®]-kit. After excitation of the donor with a short light-pulse, the acceptor emission is only recorded after a tuneable time-delay of 50-300µs. This way, exclusively the acceptor emission is recorded and potential background emission, which typically decays with time constants in the nanosecond time regime, is effectively suppressed.

Thanks to the integration of the TR-FRET modality, the TriStar²S becomes an even more versatile tool for every laboratory which expects best sensitivity, highest flexibility and outstanding quality at an affordable price. The TriStar²S offers the following measurement options:

- Luminescence
- UV-Absorbance
- UV-Fluorescence



- Time Resolved Fluorescence (TRF)
- BRET-Luminescence
- Absorbance spectral scanning (UV-VIS)
- FRET
- Time Resolved FRET (TR-FRET/HTRF[®])
- VIS-Absorbance
- Fluorescence
- Fluorescence excitation scanning

About Berthold Technologies

Berthold Technologies, a family driven company with its headquarters in Bad Wildbad, Germany, has been providing bioanalytical instruments to the life sciences market for more than 60 years. The company is offering to customers in academic and pharmaceutical research, as well as clinical diagnostics, innovative products through a worldwide network of subsidiaries and distributors.

Contact

Bernd Hutter & Dr. Frank Schleifenbaum BERTHOLD TECHNOLOGIES GmbH & Co. KG bio@berthold.com phone: +49 7081 177-0 www.Berthold.com/bio