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Autor(en) des Beitrags:
Khan, Parvez; Idrees, Danish; Moxley, Michael A; Corbett, John A; Ahmad, Faizan; von Figura, Guido; Sly, William S; Waheed, Abdul; Hassan, Md Imtaiyaz

Titel des Beitrags:
Luminol-based chemiluminescent signals: clinical and non-clinical application and future uses.

Abstract:
Chemiluminescence (CL) is an important method for quantification and analysis of various macromolecules. A wide range of CL agents such as luminol, hydrogen peroxide, fluorescein, dioxetanes and derivatives of oxalate, and acridinium dyes are used according to their biological specificity and utility. This review describes the application of luminol chemiluminescence (LCL) in forensic, biomedical, and clinical sciences. LCL is a very useful detection method due to its selectivity, simplicity, low cost, and high sensitivity. LCL has a dynamic range of applications, including quantification and detection of macro and micromolecules such as proteins, carbohydrates, DNA, and RNA. Luminol-based methods are used in environmental monitoring as biosensors, in the pharmaceutical industry for cellular localization and as biological tracers, and in reporter gene-based assays and several other immunoassays. Here, we also provide information about different compounds that may enhance or inhibit the LCL along with the effect of pH and concentration on LCL. This review covers most of the significant information related to the applications of luminol in different fields.

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