

# 3<sup>rd</sup> International Conference and Exhibition on **Cell & Gene Therapy**

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## Special Session

### *Proximity Ligation Assays, A Method For Ultra Sensitive Protein Detection*



**Organized by**  
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SCIENTIFIC

Quantitative PCR (qPCR) has revolutionized the study of cellular nucleic acids, including genomic DNA, mRNA and microRNAs. Now TaqMan® Protein Assays, which are based on the proximity ligation assay (PLATM) technology, extend qPCR applications to the analysis of proteins through the amplification of a surrogate DNA template. This technology has been optimized for use with crude cell lysates, tissue homogenates, and blood samples and has been combined with TaqMan® chemistry to create a highly sensitive and specific process for measuring proteins. With its simple and rapid workflow akin to traditional qPCR techniques, PLA enables a broad range of applications that includes the analysis of proteins from complex or difficult samples such as serum and plasma, protein modifications such as phosphorylation, and protein and gene expression from a single sample and even a single cell in parallel on the same platform. Moreover, PLA is being applied in new ways to study normal and aberrant biological processes that are associated with homeostasis, growth and differentiation. The addition of TaqMan® Protein Assays to the qPCR assay repertoire marks the beginning of a new era in the analysis of proteins that will ultimately provide a better understanding of biological systems.