Most chemiluminescence methods involve only a few chemical components to actually generate light. Luminol chemiluminescence (Nieman, 1989), which has been extensively investigated, and peroxoalate chemiluminescence (Given and Schowen, 1989; Orosz et al., 1996) are both used in bioanalytical methods and will be the subject of this primer on chemiluminescence. In each system, a "fuel" is chemically oxidized to produced an excited state product. In many luminol methods it is this excited product that emits the light for the signal. In peroxoalate chemiluminescence, the initial excited state product does not emit light at all and instead it reacts with another compound.

Contributors and Attributions

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