



TECHNOLOGY AVAILABLE FOR LICENSING

Intensified Neutral Loss Tags and Use Thereof in Mass Spectrometry

Patent Application #10/741,585

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Fluorescent Xanthene Derivatives

Patent Application #10/250,975

Inventors: Roger Giese, Jianxian Gao

Invention Details:

The inventions consist of methods and reagents for covalent labeling of chemical and biochemical analytes. The tags and linkers in some scenarios can be attached using aqueous conditions and the attachments are reversible. The key to the specificity of one linker is the hydrolytic instability of label-linked imidazole carboxylic acid conjugates that decay leaving the label-linked imidazole moiety firmly attached only to the phosphate compound at the conclusion of the reaction process. The intensity tags increase signal through increased formation of gas phase ions in the mass spectrometer. The labeling compounds can include any type of detectable signal group, such as fluorophores, lumiphores, enzymes, radioisotopes, metal, enzymes, etc. The fluorescent dyes invented at Northeastern have improved chemical and photochemical stability. Also, one invention uses a new technique for rapidly preparing samples.

Benefits of the Invention:

New techniques and reagents for labeling multiple chemical and biochemical analytes.

Advantages:

Functional tools
Cleaner samples
Improves detection

Uses:

Tags
Linkers
Sample preparation
Mass Spec analysis
Detection

The Bottom Line:

Novel tags, linkers, dyes and methods improve detection, identification and quantitation of bio-organic and chemical substances with the added option in some cases of recovering original material.

For More Information:

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