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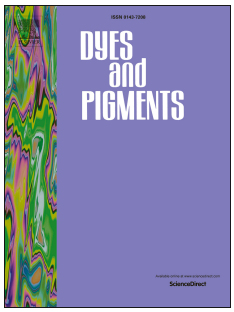

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Coumarin based fluorescent dye for monitoring of siliceous structures in living organisms

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Abstract

Fluorescence dyes capable to specific interactions with definite substances are applied in biology for visualization of organelles and tracking of single molecules. The dyes which bear basic moieties are capable to stain acidic vesicles, including lysosomes and silica deposition vesicles in diatom algae. A new coumarin based fluorescent dye Q-N2 which contains amine fragment was synthesized. The new dye shows blue fluorescence which spectrum in water solutions does not depend