

## Technology Overview

Title: A Method to Prepare an Effective and Inexpensive Blocker for Autofluorescence

Reference:	0822
Summary:	Using readily available ingredients and simple protocols, USD researchers have created an innovative product, “Background Blocker” or BB. This discovery is highly effective for reducing autofluorescence with applications for biological research and diagnostics.
Description:	Many experiments in the biological sciences require microscopic viewing of target components within cells. Targets are stained to be fluorescent so that they can be differentiated from surrounding materials. However, background (non-target) proteins autofluoresce and interfere with observations of the targets. This background interference is reduced or eliminated by BB, making it possible to more effectively view labeled probes against a dark background. The product has proven effective in a wide range of plant and animal cell applications, at varied magnifications, with nucleic staining, antibodies, and with a range of common staining techniques. BB increases the efficacy of microscopic localization of materials and is useful for cell study, diagnostics, and to enhance flow cytometry and cell sorting.
Advantage:	Background Blackout can effectively serve a range of functions, depending upon the preparation method and the resulting product variations favorably compare to competitor products. The source ingredients are inexpensive, naturally occurring, and readily available and the preparation is uncomplicated.
Application:	Enhances microscopic biomedical research, flow cytometry, cell sorting
Stage:	Proof of concept established. Variations are under testing for broader applications.
Patents:	Provisional application filed.
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