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DFO AS A POSSIBLE SCREENING TOOL FOR THE DETECTION OF SALIVA ON ENVELOPES

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This presentation examines the possibility of using DFO (1-8-Diazafluoren-9-one), a reagent routinely used for the detection of latent fingerprints, as a screening tool for the detection of saliva on envelopes.

Envelopes are often submitted as evidence for cases involving terrorist activity, stalking and threat mail. The envelopes are either analyzed for DNA without a preliminary screening for saliva or are deemed unsuitable based upon the absence of lick marks as determined by a visual examination.

DFO is a reagent routinely used for the detection of latent fingerprints on porous surfaces. It is a fluorogenic substrate that reacts with amino acids present in latent fingerprints.⁽¹⁾

Because of its sensitivity to amino acids, DFO can be a useful tool for the detection of saliva on envelopes, and it has been shown to have no negative or altering effects on subsequent DNA profiling.⁽¹⁾