Instantaneous Detection of Opiates in Single Poppy Seeds

Poppy seed is a common flavoring ingredient that is known to contain small amounts of opiates. Maximum morphine and codeine concentrations are estimated to be about 33 and 14 micrograms respectively per gram of seed. Consumption of typical amounts of baked goods containing poppy seeds has not been shown to cause any ill effects. However, ingestion of poppy seeds may result in false positives from drug tests.

Single poppy seeds from different sources were analyzed independently in two different laboratories by using the DART/AccuTOF combination. The resulting mass spectra were nearly identical.
