

Analgesic efficacy of articaine hydrochloride for velvet antler removal in red deer (*Cervus elaphus*) and analysis of drug residues in the harvested velvet antlers

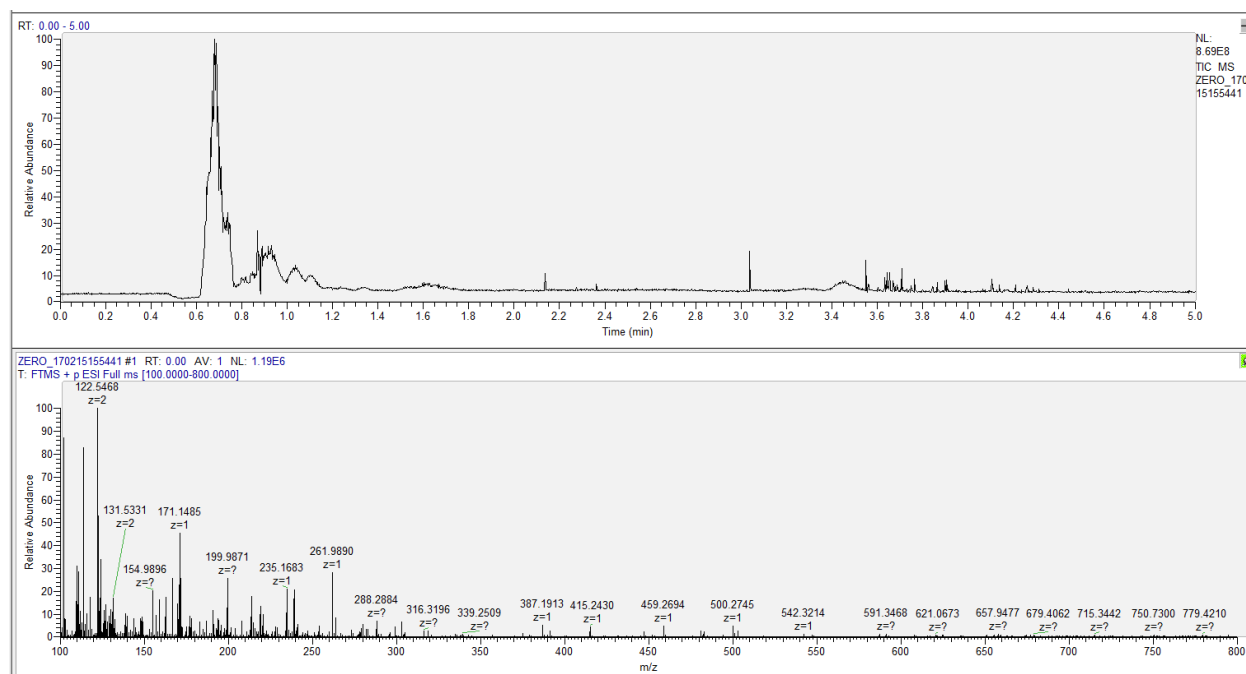
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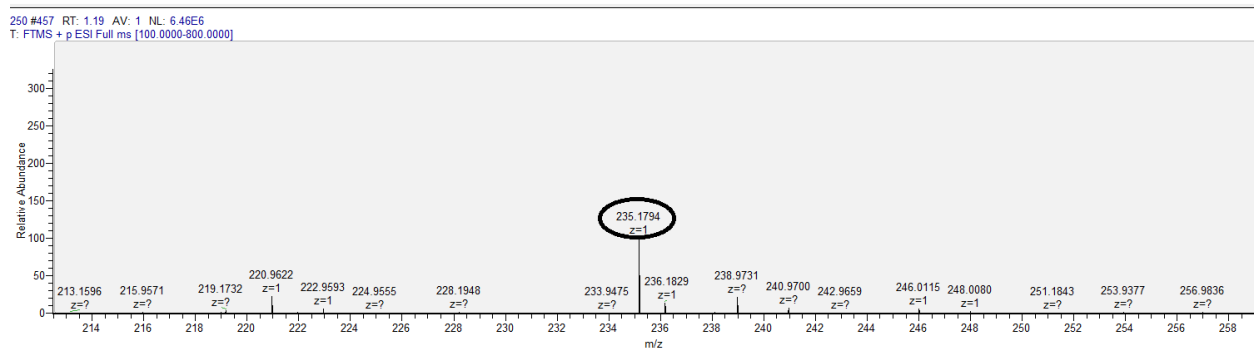
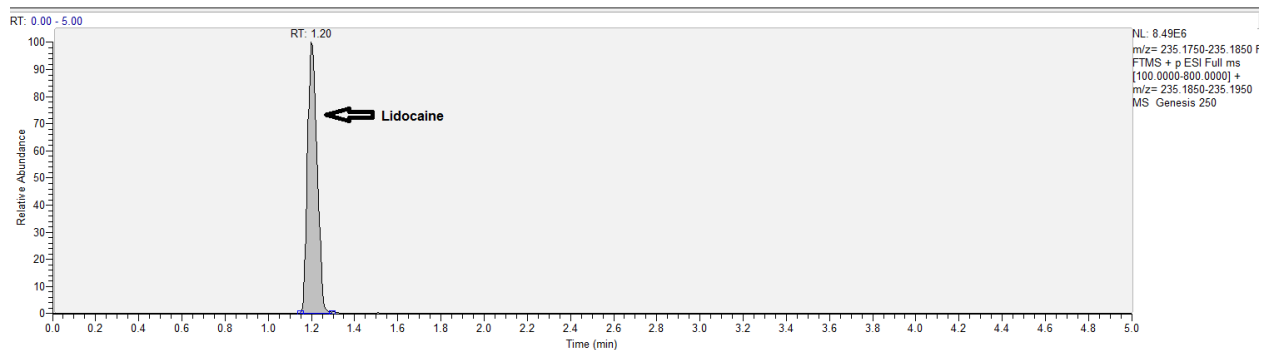
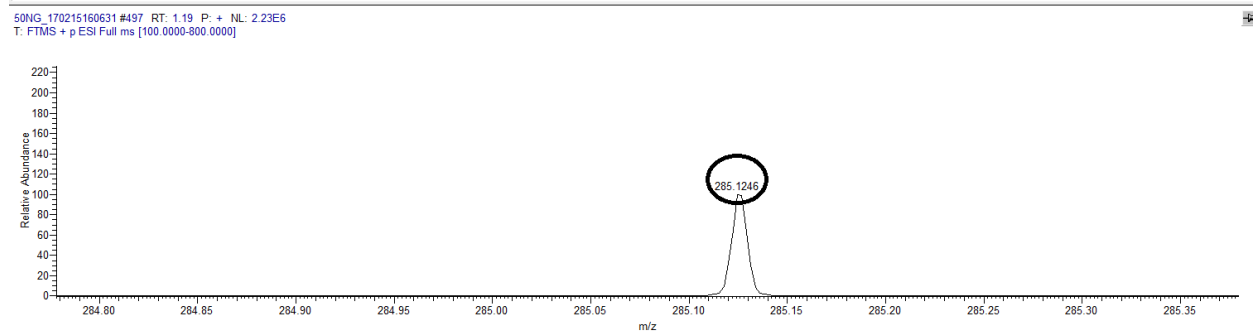
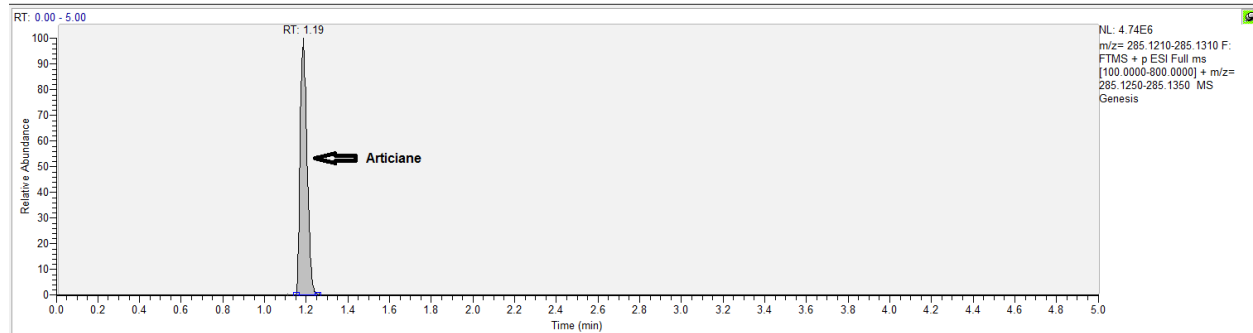
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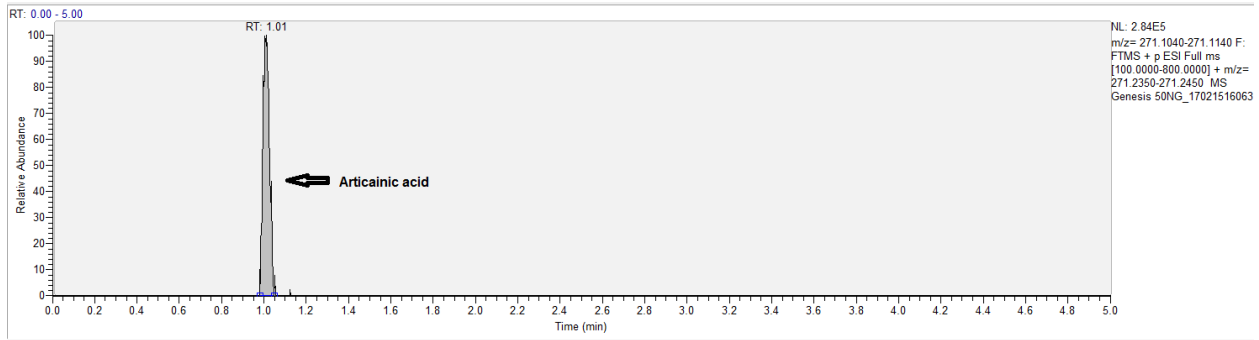
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Supplementary Figure 1. Representative chromatograms and the mass spectra of (a) drug-free antler, drug-free antler spiked with (b) lignocaine (5 ng/g), (c) articaine (50 ng/g), (d) articainic acid (100 ng/g), (e) monoethylglycinexylidide (MEGX) (100 ng/g), (f) 2,6-dimethylaniline (DMA) (100 ng/g), and antler samples obtained following ring block of (g) 4 % articaine hydrochloride and (h) 2% lignocaine hydrochloride in red deer (*Cervus elaphus*).

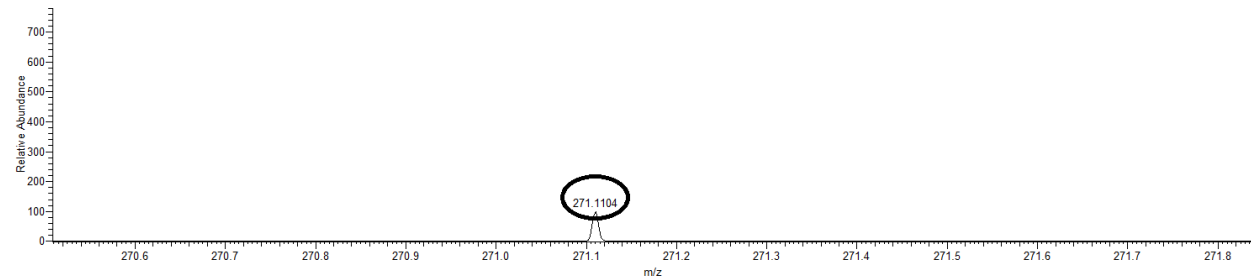
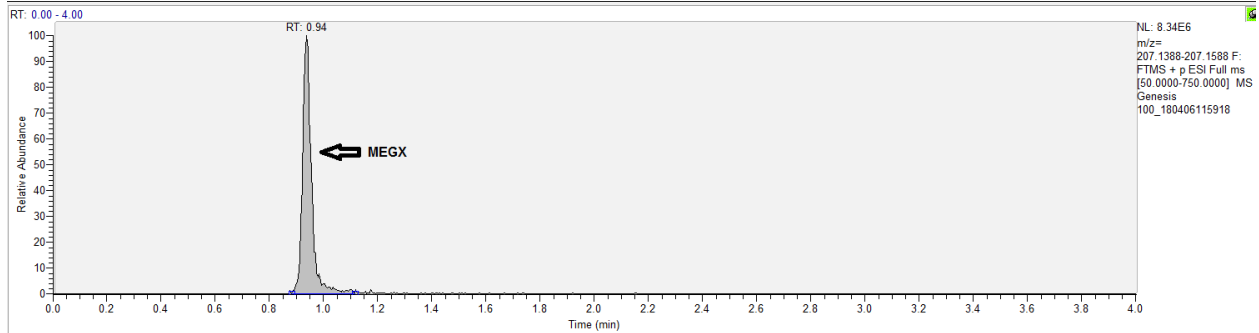
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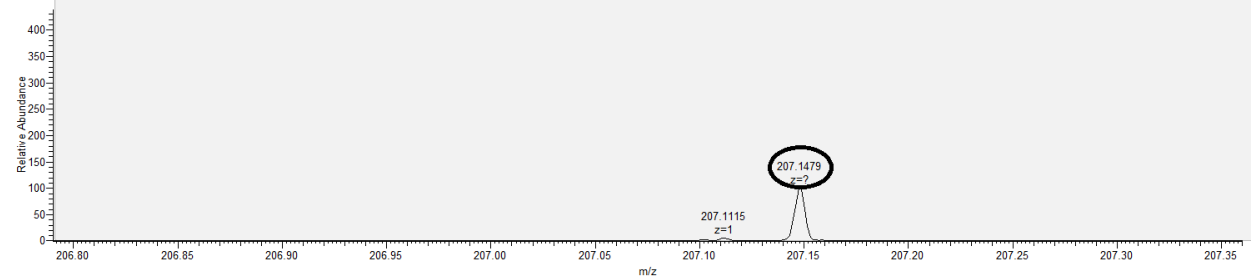
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d

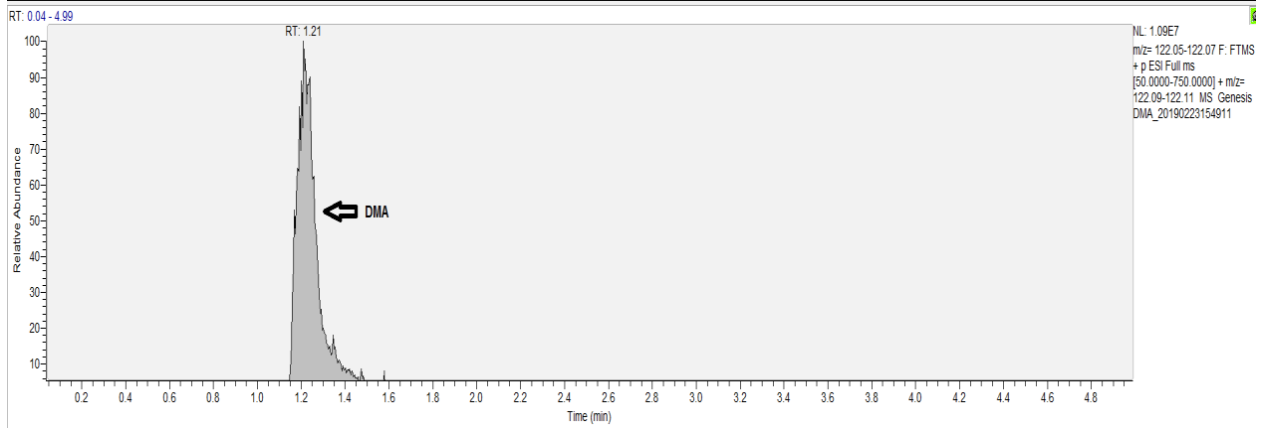
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**e**

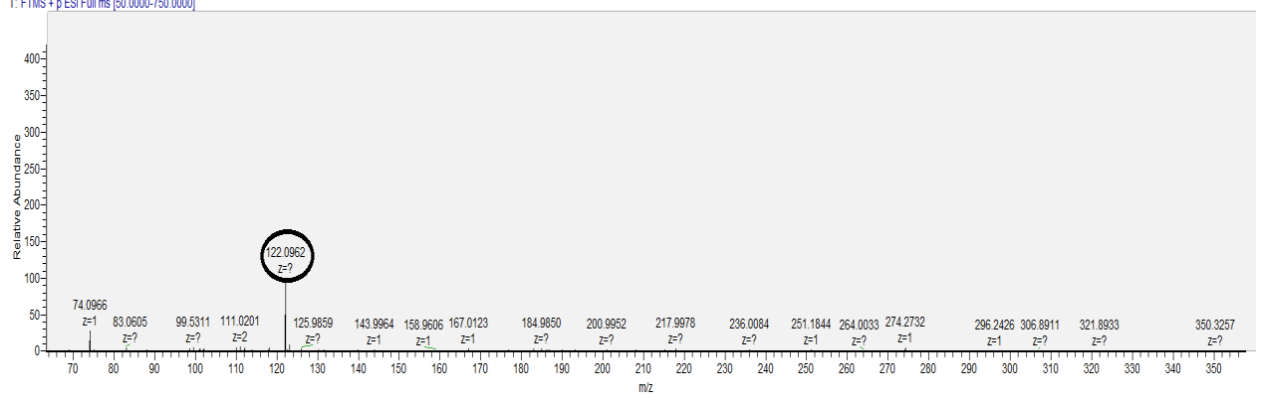
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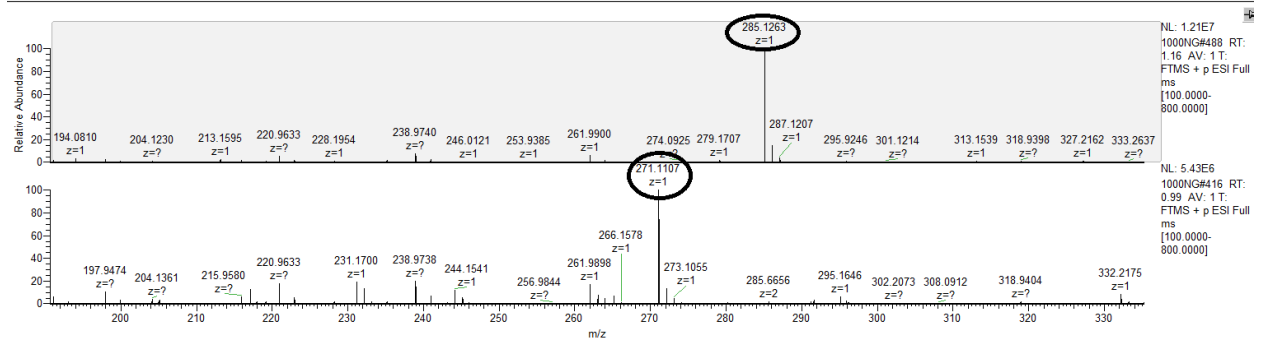
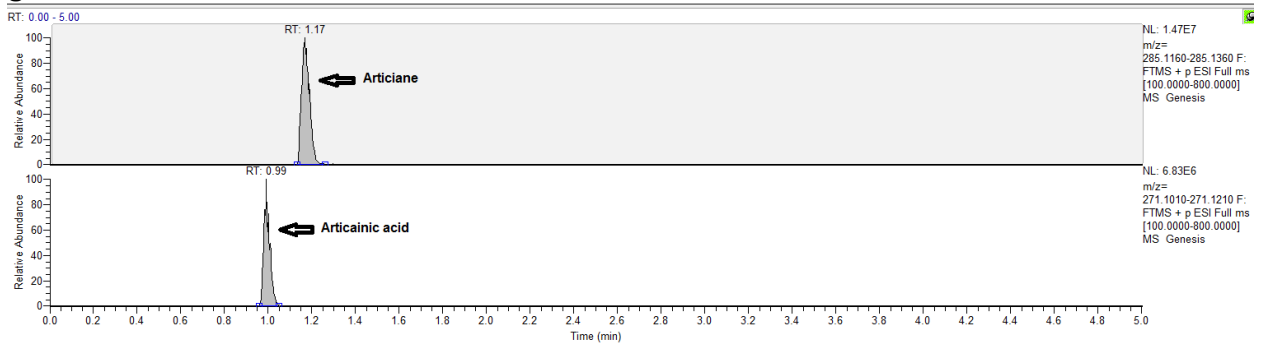
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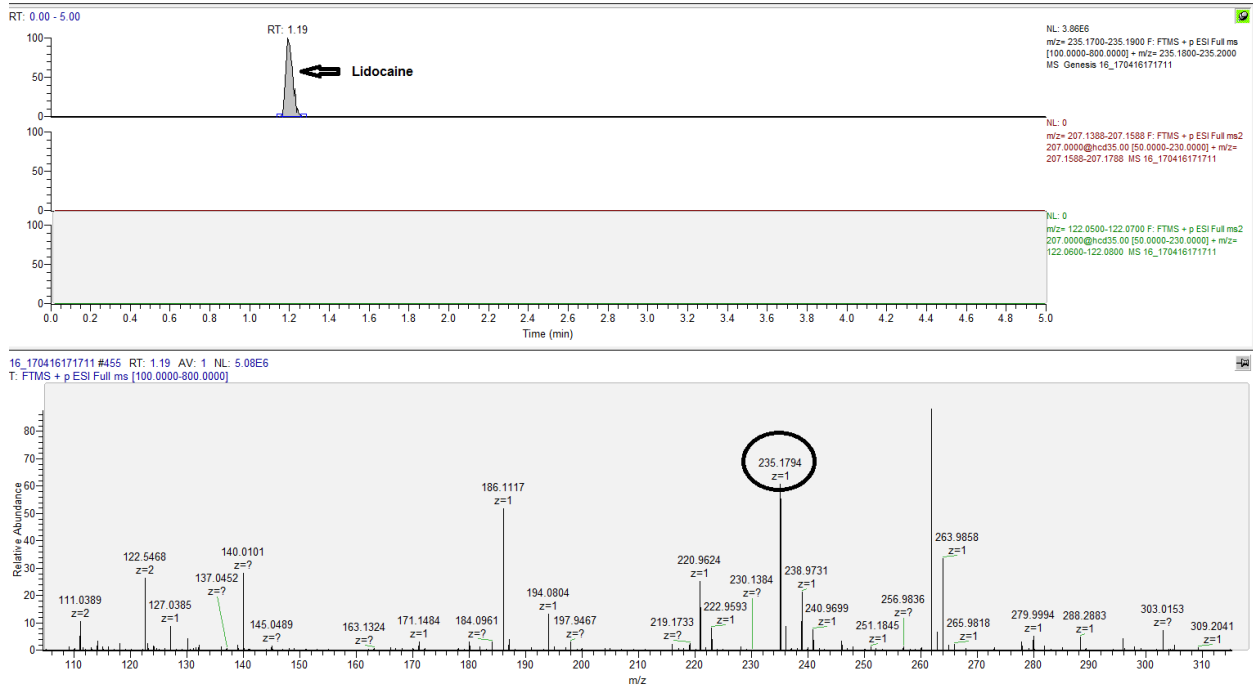
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g

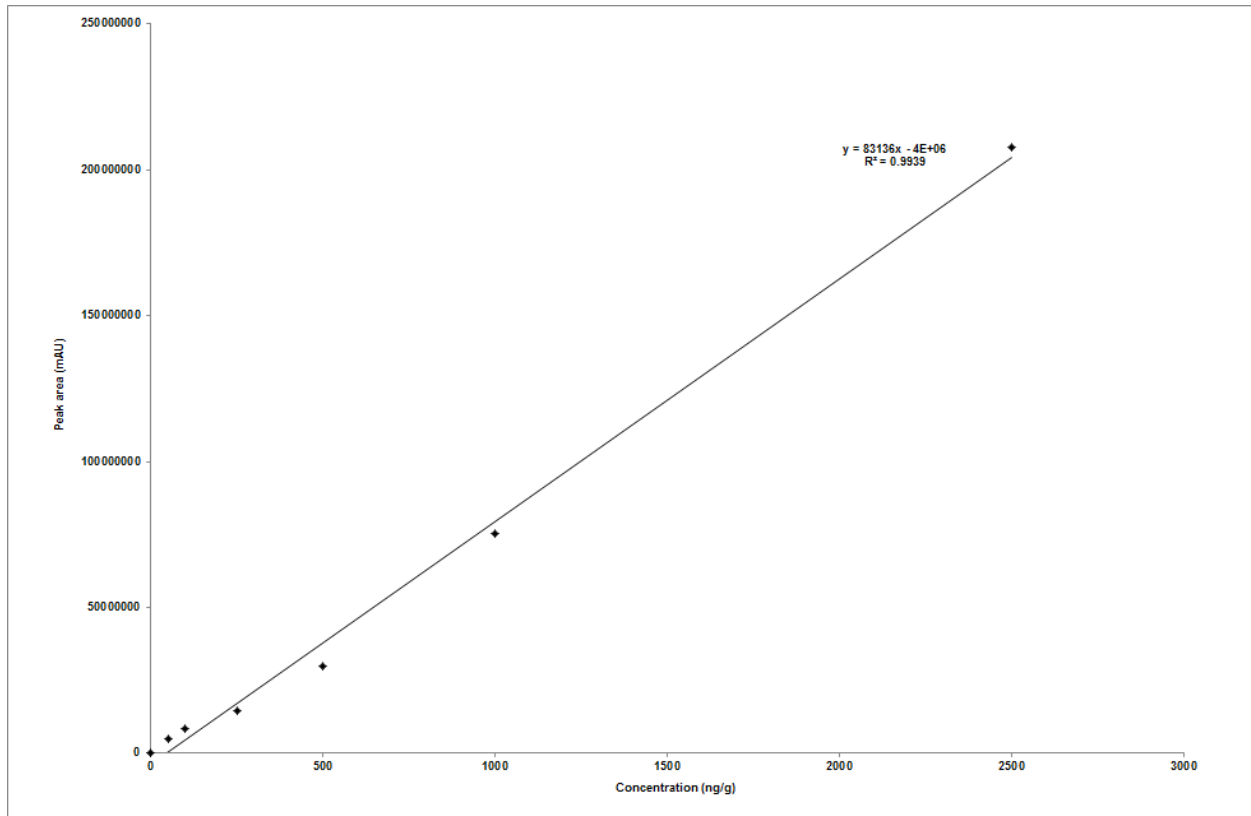


h



Supplementary Figure 2. Calibration curves of (a) articaine and (b) lignocaine constructed by spiking different concentrations of articaine and lignocaine, respectively, in drug-free velvet antlers.

a



b