

Article

Plasma-Treated *Flammulina velutipes*-Derived Extract Showed Anticancer Potential in Human Breast Cancer Cells

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Abstract: A single paragraph of about 200 words maximum. For research articles, abstracts should give a pertinent overview of the work. We strongly encourage authors to use the following style of structured abstracts, but without headings: (1) Background: Place the question addressed in a broad context and highlight the purpose of the study; (2) Methods: Describe briefly the main methods or treatments applied; (3) Results: Summarize the article's main findings; and (4) Conclusions: Indicate the main conclusions or interpretations. The abstract should be an objective representation of the article, it must not contain results which are not presented and substantiated in the main text and should not exaggerate the main conclusions.

Keywords: keyword 1; keyword 2; keyword 3 (List three to ten pertinent keywords specific to the article; yet reasonably common within the subject discipline.)

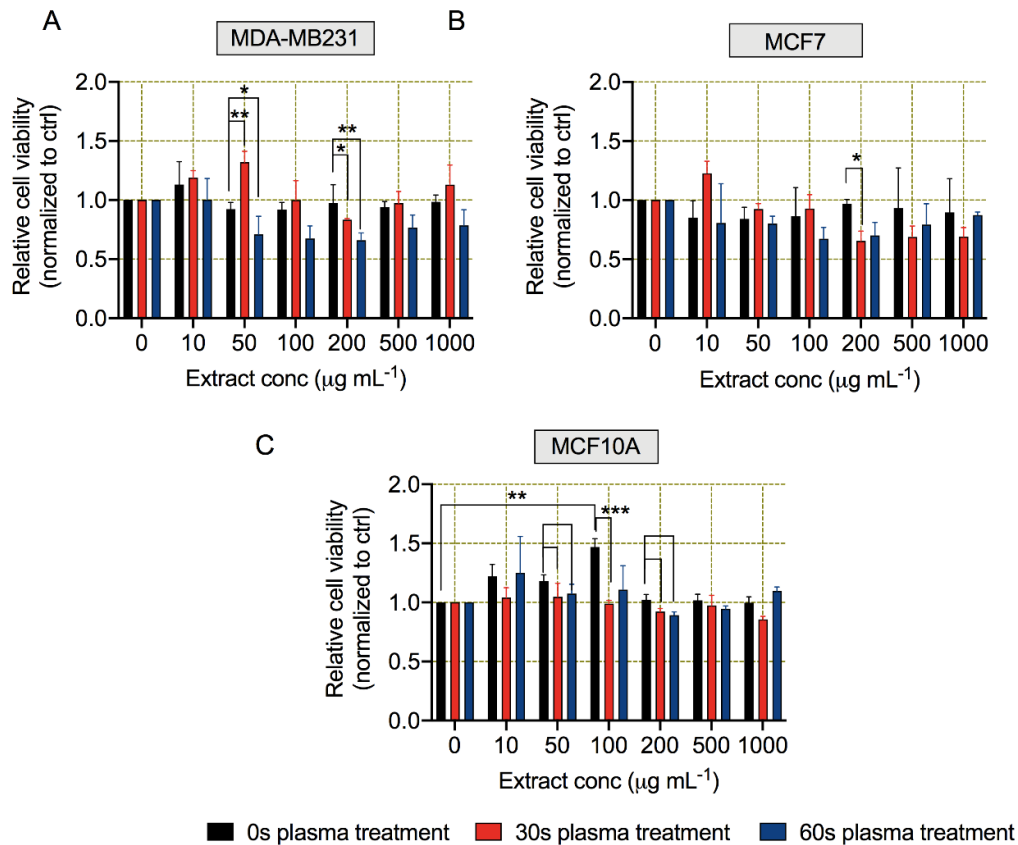


Figure S1. Plasma-treatment stimulates cytotoxicity of mushroom derived extracts against breast cancer cells. (A-C) Cell viability was accessed using alamarBlue assay in MDA-MB231, MCF7 cancer and MCF10A normal cells treated with extracts prepared from 30 s, 60 s plasma-treated and 0 s (plasma untreated) mushrooms at increasing concentrations after 24 h post incubation. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$. Untreated sample was used as a control in all tested plant extracts groups for normalization.

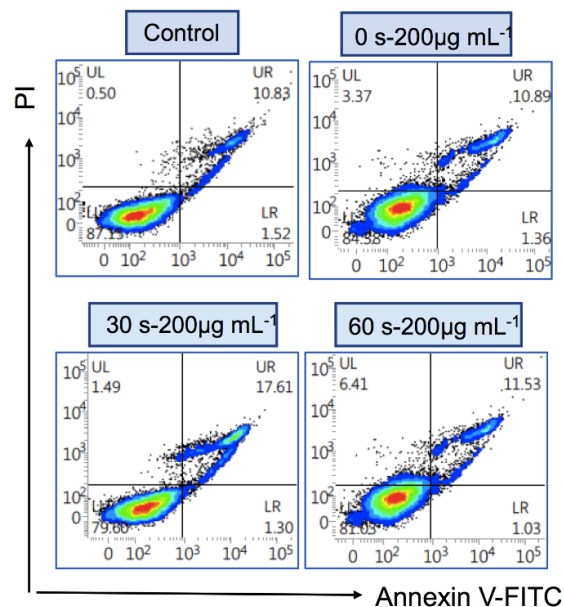


Figure S2. Plasma treatment improves effect of mushroom derived extracts on apoptotic cancer cell death. Cell death analysis in MDA-MB231 breast cancer cells treated with extracts prepared from 30 s, 60 s plasma and plasma untreated (0 s) mushrooms at $200 \mu\text{g mL}^{-1}$ after 24 h post-incubation using Annexin-V/PI staining. Untreated sample (no extract) was used as control.

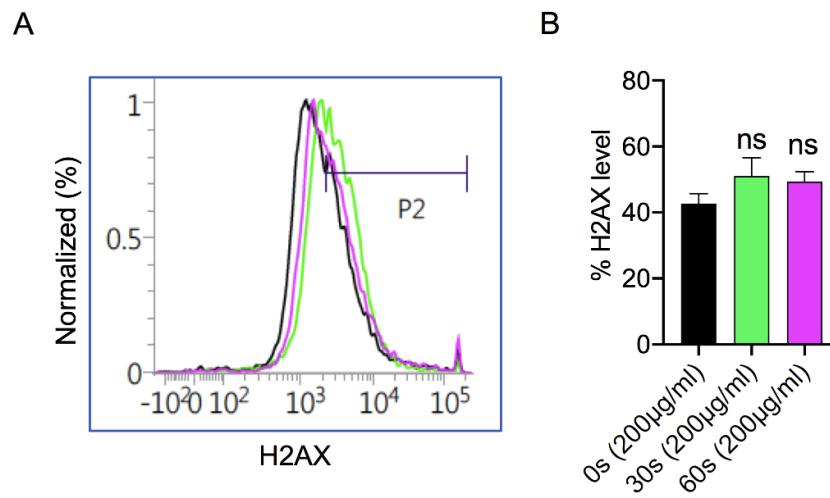


Figure S3. Levels of H2AX total protein does not alter in plasma-treated mushroom derived extracts exposed breast cancer cells. Quantification of total H2AX protein levels by flow cytometry. The representative graph shows the percentage change calculated from histograms.

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