

< Supplementary information >

**Non-Thermal Atmospheric Pressure Plasma Efficiently Promotes the Proliferation of Adipose Tissue-Derived Stem Cells by Activating NO-Response Pathways**

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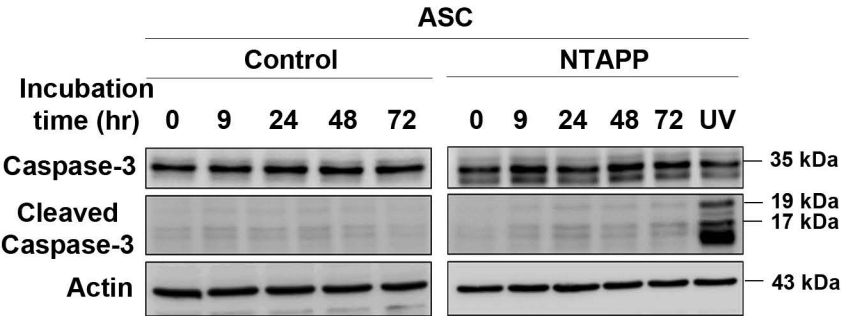
## **Legends to figures**

**Supplementary Figure S1. Non-thermal atmospheric pressure plasma (NTAPP) induces the activation of caspase-3 in HeLa cells but not in adipose tissue-derived stem cells (ASCs).** (A, B) In NTAPP-exposed ASCs (A) and HeLa cells (B), the expression of caspase-3 and cleaved caspase-3 was analyzed by western blots. Actin was used as a loading control. Cells treated to UV were used as a positive control for cell death.

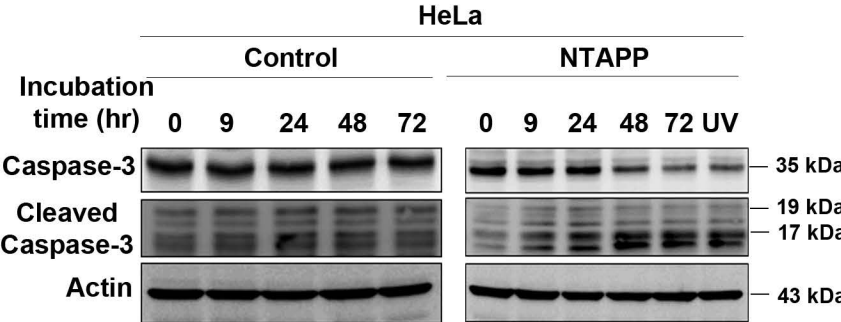
**Supplementary Figure S2. Non-thermal atmospheric pressure plasma (NTAPP)-exposed adipose tissue-derived stem cells (ASCs) maintain their stemness characteristics.** (A) Flow cytometry was performed to analyze the expression of surface markers, CD44, CD105, and CD45, in the NTAPP-exposed ASCs at 72 h after the initial exposure and in NTAPP-untreated control ASCs. (B) The NTAPP-exposed and -unexposed ASCs were induced to differentiate into adipocytes in adipogenic differentiation medium for 28 days, and the number of adipocytes was counted after Oil red O staining. The relative percentage of differentiated adipocytes was plotted with standard deviations.

**Supplementary Figure S1**

**A**

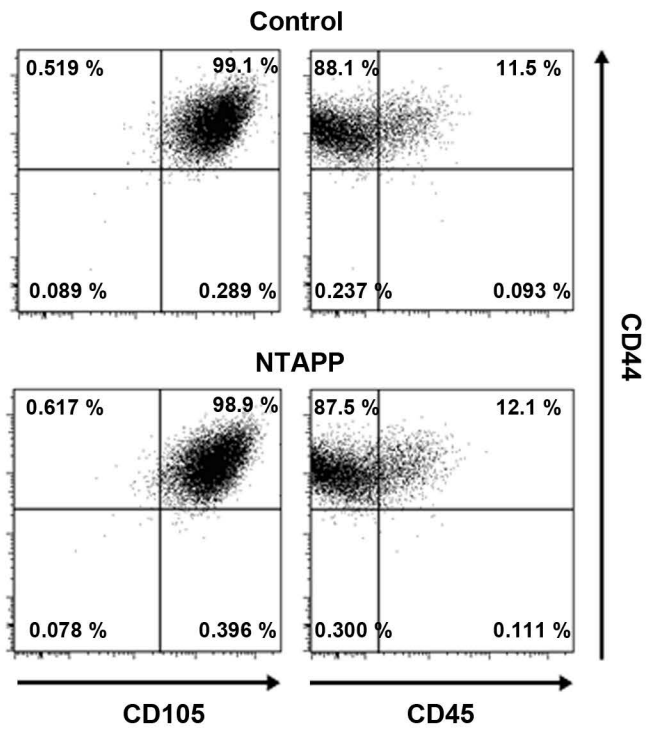


**B**



# Supplementary Figure S2

**A**



**B**

