Electronic Supplementary Material (ESI) for Nanoscale Advances.

Cytotoxicity assessment of exfoliated MoS_2 using primary human mast cells and the progenitor cell-derived mast cell line LAD2†

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ELECTRONIC SUPPLEMENTARY INFORMATION

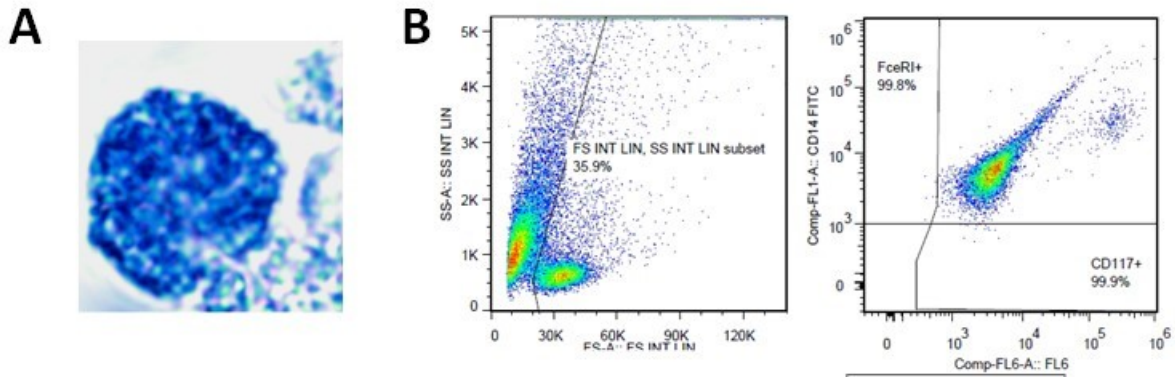

Figure S1. Characterization of primary mast cells. Optical microscopy images of primary mast cells (A) stained with acidic toluidine blue. Flow cytometry characterization of primary mast cells (B) stained with FceRI and CD117.

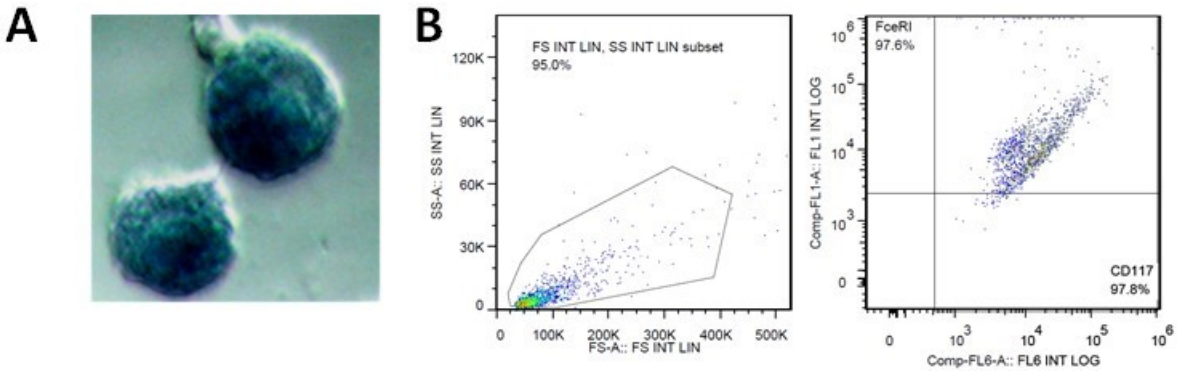

Figure S2. Characterization of LAD2 cells. Optical microscopy images of primary mast cells (A) stained with acidic toluidine blue. Flow cytometry characterization of LAD2 cells (B) stained with FceRI and CD117.

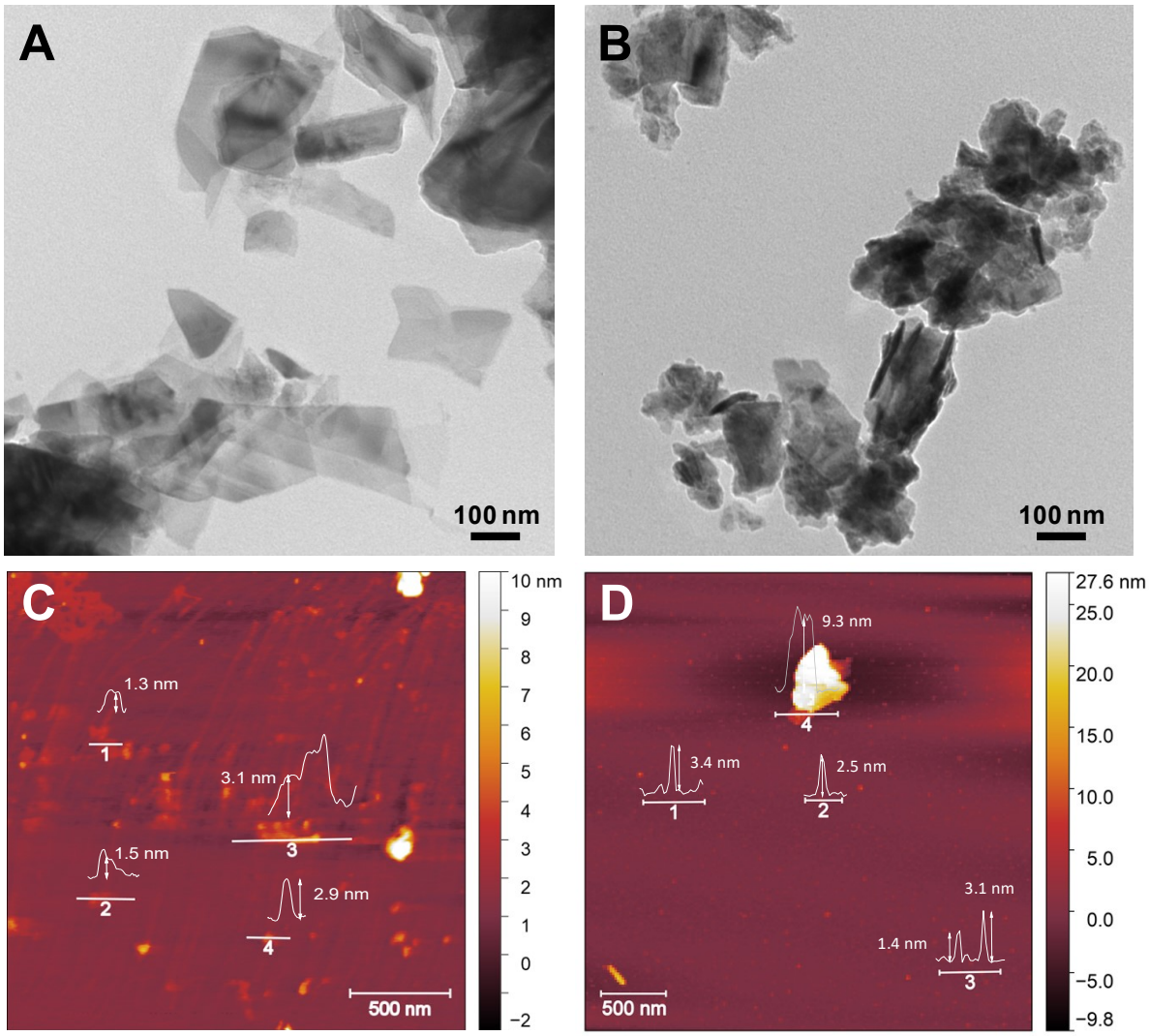

Figure S3. TEM and AFM analysis of MoS_2. (A) TEM image of selected BD-MoS_2 flakes; (B) TEM image of selected BS-MoS_2 flakes; (C) AFM image of selected BD-MoS_2 flakes; (D) AFM image of selected BD-MoS_2 flakes.

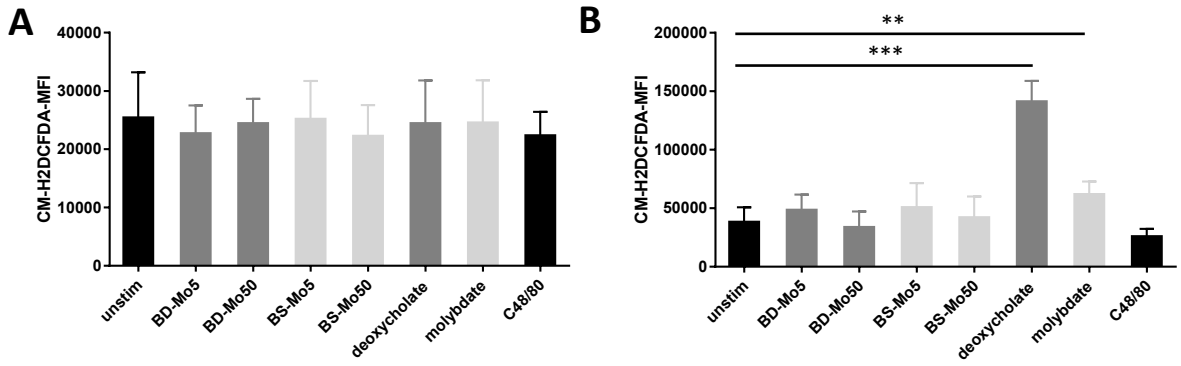

Figure S4. ROS production in primary mast cells and LAD2 cells. ROS production of **(A)** primary mast cells **(B)** LAD2 cells treated with 5, 50 µg mL^{-1} BD- or BS-MoS_2 for 1h and stained with CM-H2DCFDA. All experiments were conducted thrice in triplicate and shown as mean ± SD. *P<0.05; **P<0.01, ***P<0.001 by one-way ANOVA with Bonferroni post-tests.

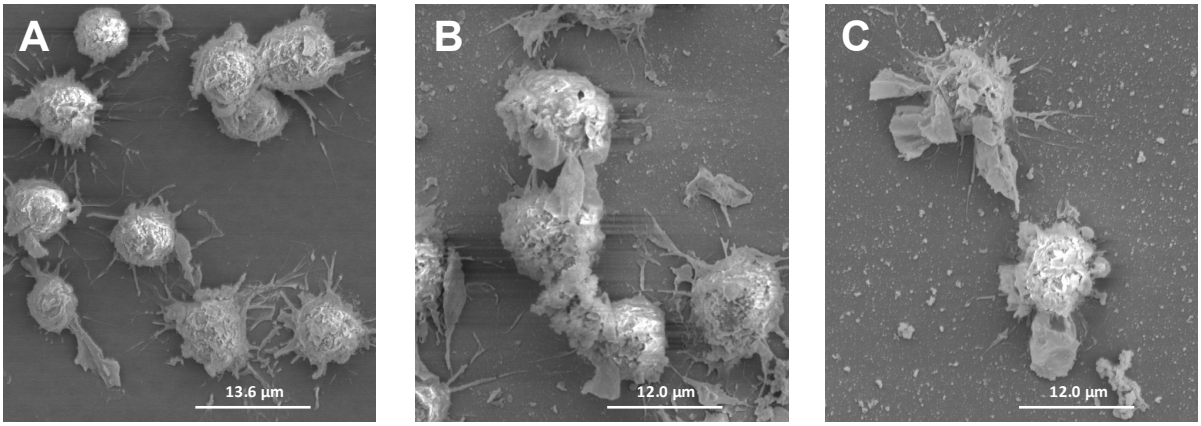

Figure S5. SEM of unexposed and exposed LAD2 cells. (A) Untreated LAD2 cells. LAD2 cells treated with 50 µg mL^{-1} **(B)** BD-MoS_2 or **(C)** BS-MoS_2 for 1h.