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Supplemental Information

In Vitro* Macrophage Assay Predicts the *In Vivo

Anti-inflammatory Potential of Exosomes

from Human Mesenchymal Stromal Cells

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SUPPLEMENTAL INFORMATION

Table S1. Applied Biosystem TaqMan gene expression assay information

Gene symbol	Unigene ID	Assay ID
GAPDH	Mm.304088	Mm99999915_g1
TNF- α	Mm.1293	Mm00443258_m1
IL-1 β	Mm.222830	Mm00434228_m1
IL-6	Mm.1019	Mn00446190_m1
iNOS	Mm.2893	Mm00440502_m1
Arg1	Mm.154144	Mn00475988_m1

Figure S1.

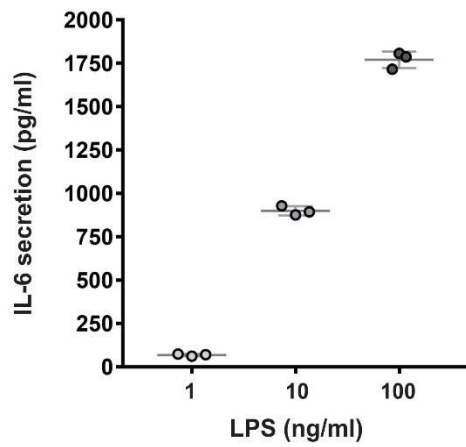


Figure S1. Interleukin-6 secretion in conditioned media of macrophages activated with different doses of LPS. RAW264.7 macrophages were treated with 1, 10 or 100 ng/ml of LPS and conditioned media was collected after 4 h. Interleukin-6 in conditioned media was determined by ELISA. Data represent mean \pm SD (n=3).

Figure S2.

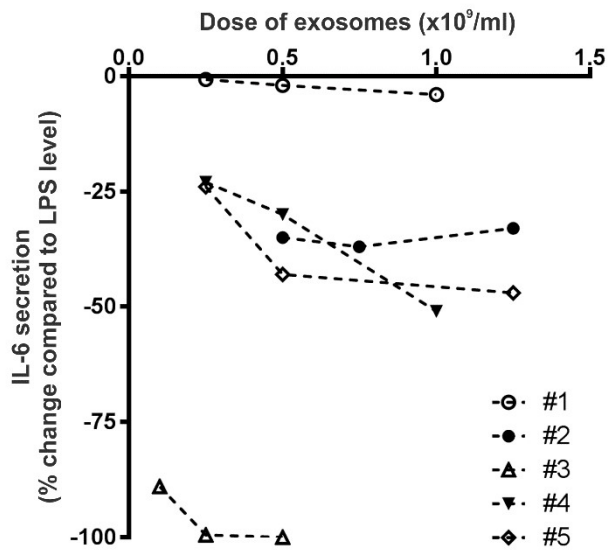


Figure S2. Dose-response data for different exosomes preparations. The anti-inflammatory activity of MSC-derived exosomes was determined by testing different doses of each preparation in the macrophage assay. Results are expressed as percentage of change of IL-6 secretion in conditioned media relative to LPS-stimulated levels. Samples identified as in Table 1. A dose of 0.5×10^9 vesicles/ml was selected as the more appropriate to categorize the anti-inflammatory potential of the different preparations and was used for all the subsequent experiments.

Figure S3.

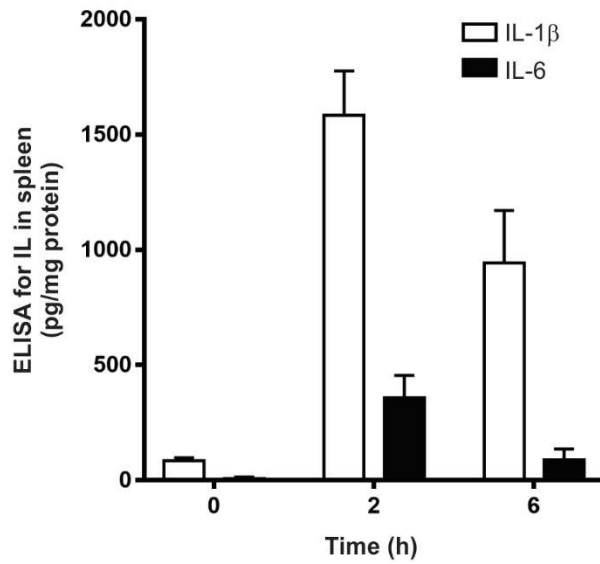


Figure S3. Time-course expression of the pro-inflammatory cytokines IL-1 β and IL-6 in spleen in a mouse model of systemic inflammation. LPS (2.5 mg/kg) was administered i.v. and the expression of IL-1 β and IL-6 was assessed by ELISA in spleen lysates at 0, 2, and 6 h. Data represent mean \pm SD (n=4 per time point).