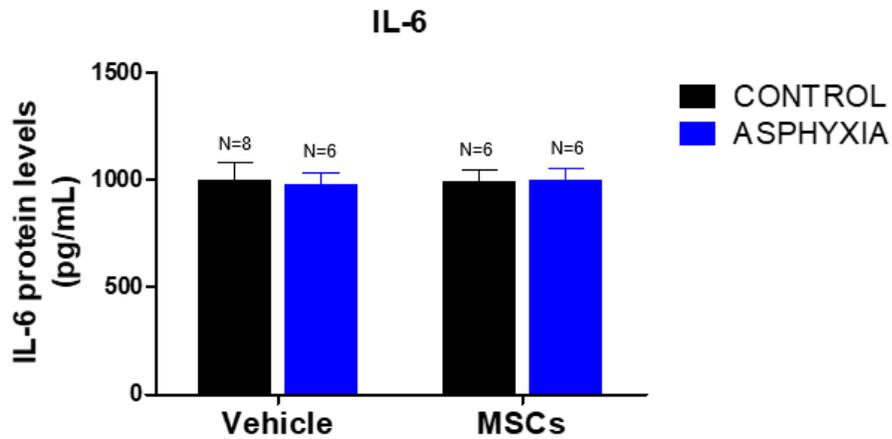


TapiaBustosetal2021SUPPLMATERIAL

**“Neonatal mesenchymal stem cell treatment improves myelination impaired by global perinatal asphyxia in rats”**

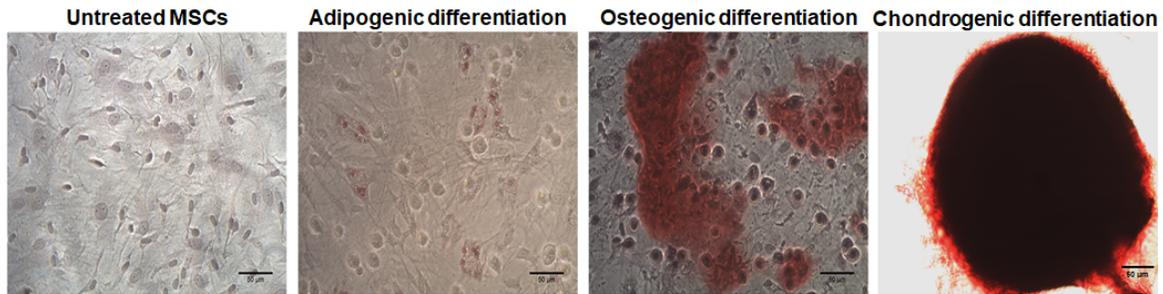
Tapia-Bustos A<sup>1,2</sup>; Lespay-Rebolledo C<sup>1</sup>; Vío V<sup>1</sup>; Perez-Lobos R<sup>1</sup>, Casanova E<sup>1</sup>; Ezquer F<sup>3</sup>; Herrera-Marschitz M<sup>1\*</sup>, Morales P<sup>1,4\*</sup>

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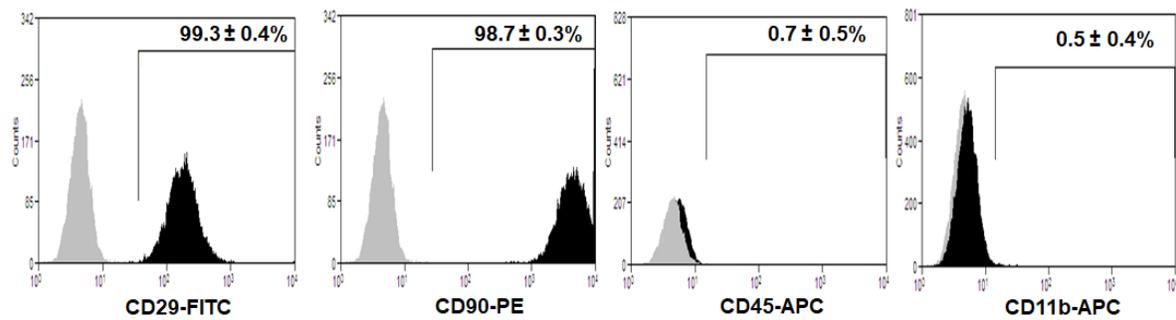


**Supplementary Figure 1. Effect of MSCs treatment on changes of IL-6 protein levels induced by perinatal asphyxia (PA), measured at P7 in telencephalon of CS and AS rat neonates: MSCs treatment.** Effect of PA on IL-6 protein levels (pg/mL) was determined by ELISA analysis. Data are shown as means  $\pm$  S.E.M., for independent experiments (N=6-8). In telencephalon, unbalanced two-way ANOVA indicated no significant effect of PA on IL-6 protein levels. Benjamini-Hochberg was used as a post hoc test.

A.



B.



**Supplementary Figure 2: Rat adipose-derived MSCs display mesenchymal stem cell characteristics.** (A) Representative microphotographs of plastic-adherent cells isolated from rat adipose tissue differentiated into adipogenic, osteogenic or chondrogenic lineages. (B) Immuno-phenotypification of adherent cells according to the expression of putative murine MSCs markers (CD29 and CD90), and the non-expression of markers characteristic of other cell types (CD45 and CD11b). Black histograms represent cells labeled with specific antibodies; grey histograms represent cells stained with isotype control antibodies. FITC: fluorescein isothiocyanate, PE: phycoerythrin, APC: allophycocyanin.

**Supplementary Table 1. Specific primers for RT-qPCR amplification.**

<b>Genes</b>	<b>Primer Forwards</b>	<b>Primer Reverse</b>	<b>Amplicon size</b>
MBP	AGTCGCAGAGGACCCAAGAT	GACAGGCCTCTCCCCTTTC	103 bp
Olig-1	GCCCAGGCCACGAGTACAAA	TCCACTCCGAAACCCAACGA	121 bp
Olig-2	GAAATGGAATAATCCCGAACTA CT	CCCCTCCCAAATAACTCAAA C	232 bp
Cox-2	GTTTGGAACAGTCGCTCGTCA TC	TGTATGCTACCATCTGGCTT CGG	94 bp
TNF- $\alpha$	AAATGGGCTCCCTCTCATCAGT TC	TCTGCTTGGTGGTTTGCTAC GAC	111 bp
IL-1 $\beta$	CACCTCTCAAGCAGAGCACAG	GGGTTCCATGGTGAAGTCAA C	79 bp
IL-6	TCCTACCCCAACTTCCAATGCT C	TTGGATGGTCTTGGTCCTTA GCC	79 bp
$\beta$ -actin	AAGTCCCTCACCTCCCAAAA G	AAGCAATGCTGTCACCTTCC C	97 bp