

**Title:** Intracellular role of IL-6 in mesenchymal stromal cell immunosuppression and proliferation.

**Authors:** Akaitz Dorronsoro<sup>1,2\*†</sup>, Valérie Lang<sup>1\*</sup>, Izaskun Ferrin<sup>1</sup>, Jon Fernández-Rueda<sup>1</sup>, Lorea Zabaleta<sup>1</sup>, Estibaliz Pérez-Ruiz<sup>1</sup>, Pilar Sepulveda<sup>2</sup>, César Trigueros<sup>1</sup>

<sup>1</sup>Fundación Inbiomed, Foundation for Stem Cell Research, Mesenchymal Stem Cell Laboratory, Paseo Mikeletegi, 81. 20009. San Sebastián, Spain.

<sup>2</sup>Instituto de Investigación Sanitaria La Fe, Regenerative Medicine and Heart Transplantation Unit, Valencia, Spain., Avenida Fernando Abril Martorell, 106. Torre A, Laboratorio 5.04, 46026 València, Spain

**Running Title:** IL-6 signals intracellularly in hMSCs.

**Key words:** IL-6, hMSCs, T cells, immunosuppression, proliferation, intracellular.

**\*: Equal participation**

**†: To whom correspondence should be addressed:**

E-mail: [akaitz82@gmail.com](mailto:akaitz82@gmail.com)

Akaitz Dorronsoro, Ph.D.

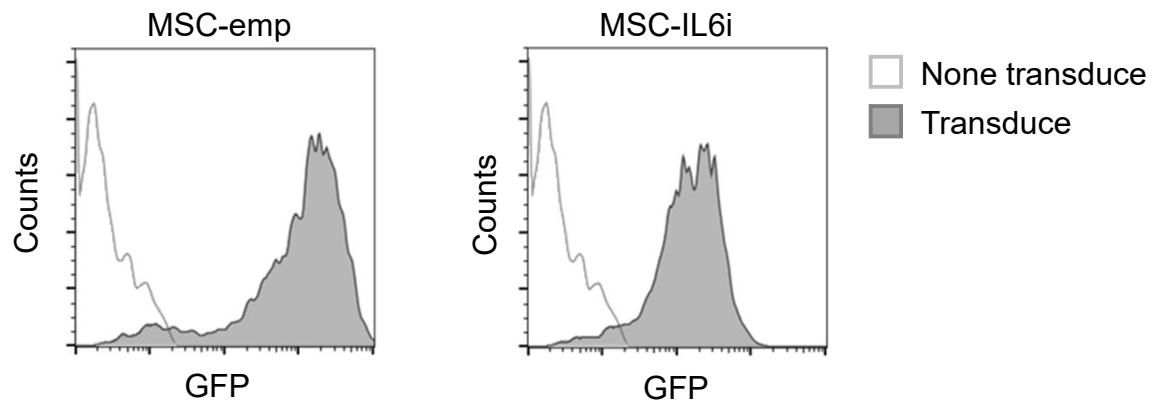
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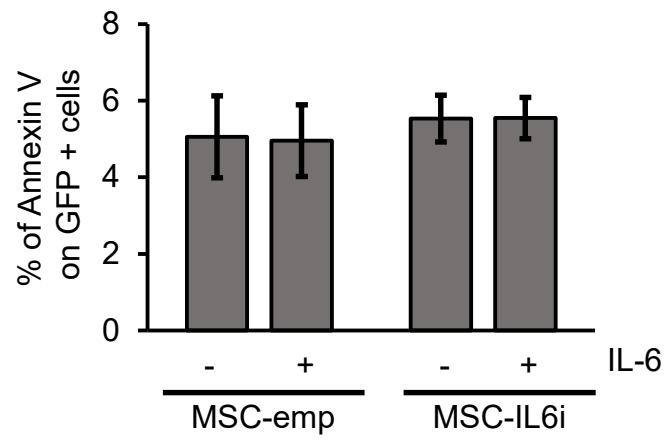
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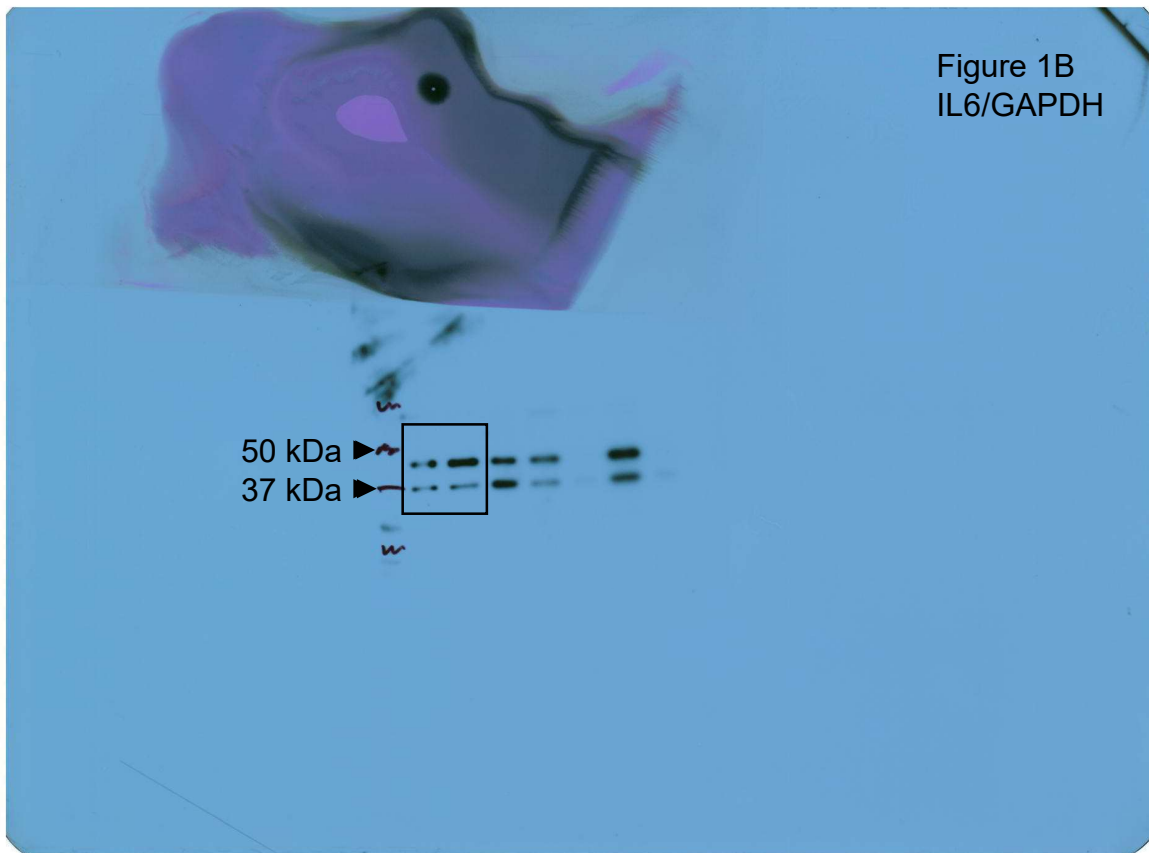
## Supplementary Figure 1



## Supplementary Figure 2



## Supplementary Figure 3



# Supplementary Figure 4

A

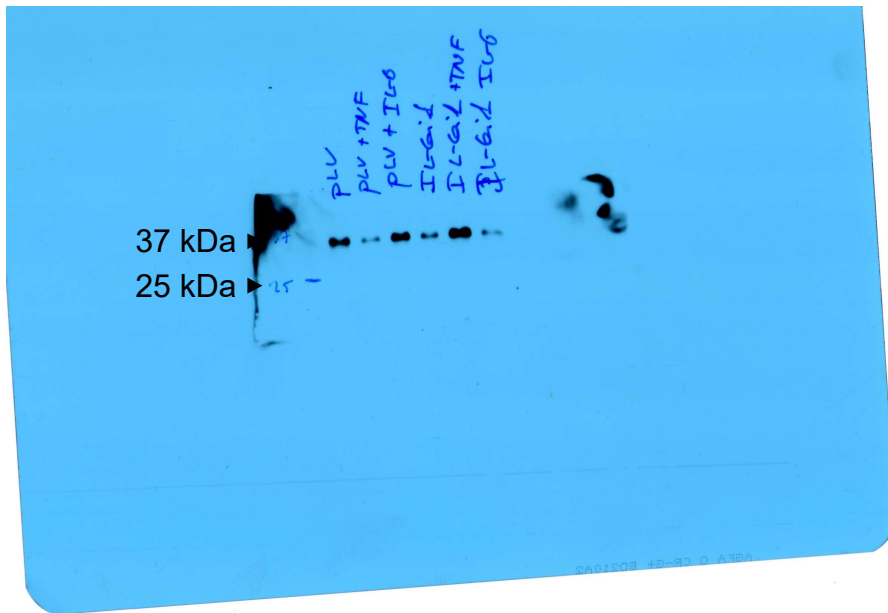


Figure 5A  
Cyclin D1

B

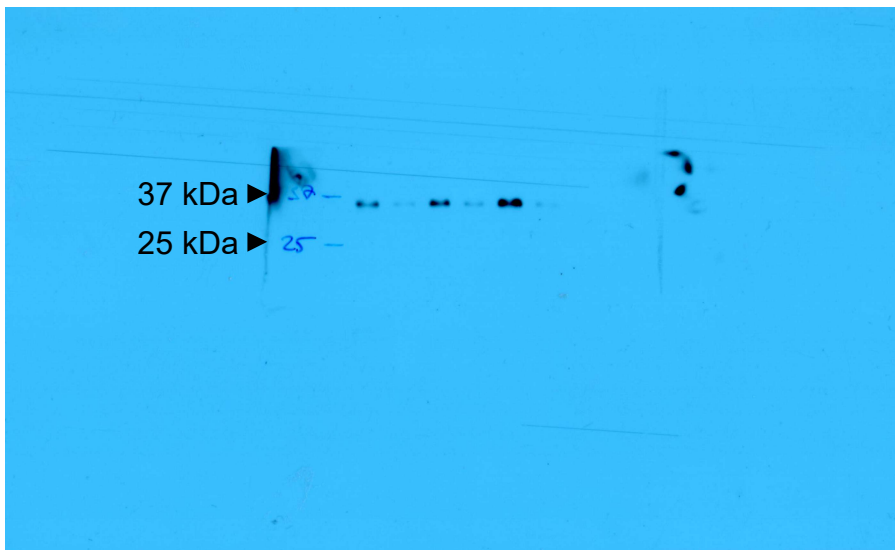


Figure 5C  
Cyclin D1

C

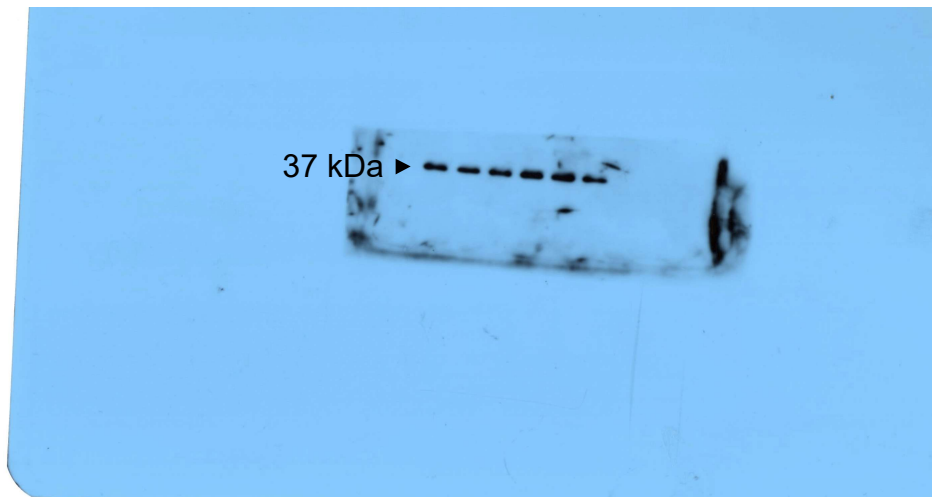
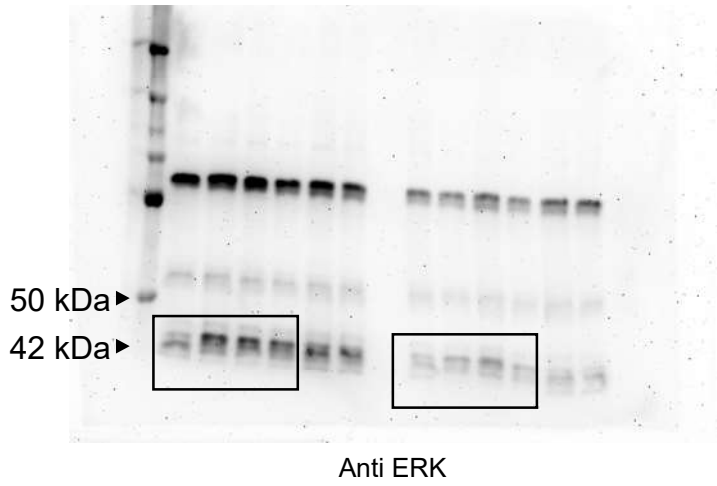


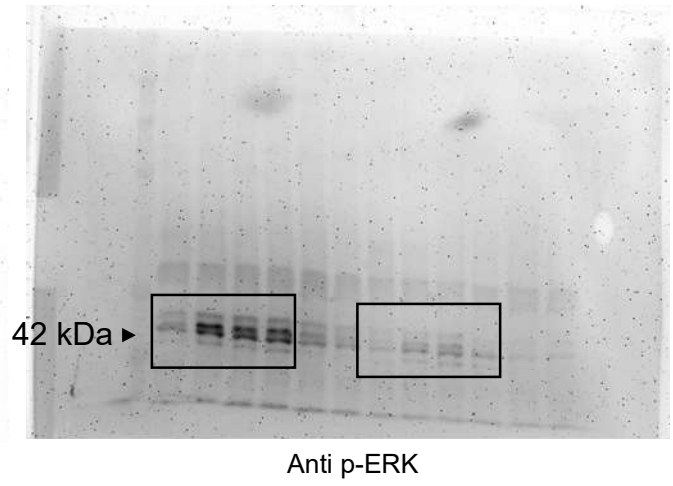
Figure 5 A/C  
GAPDH

## Supplementary Figure 5

**A**



**B**



**C**

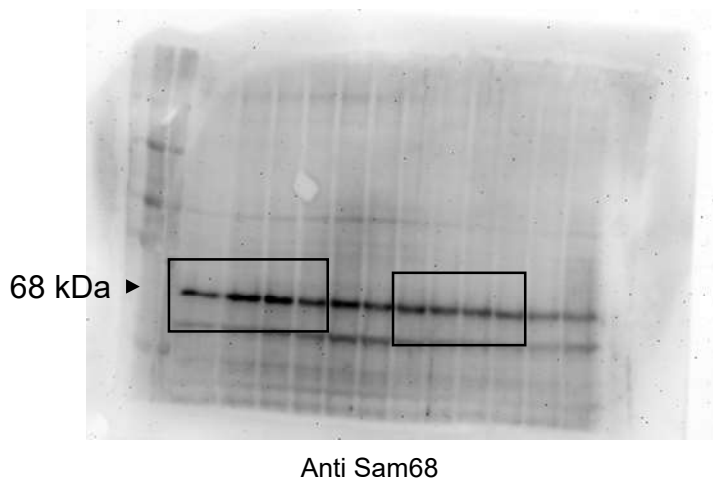
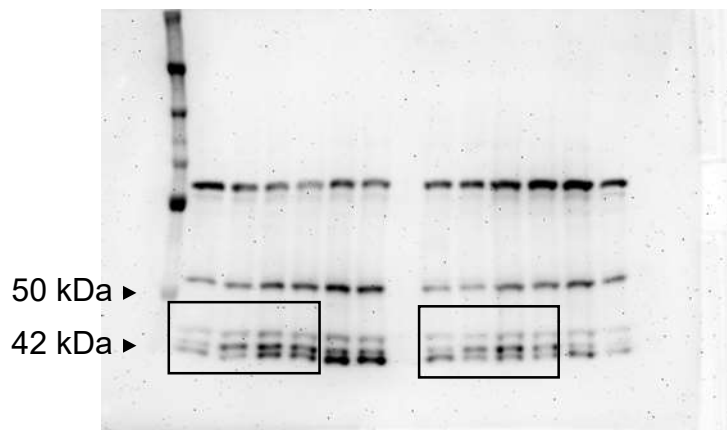


Figure 5B,  
upper panel

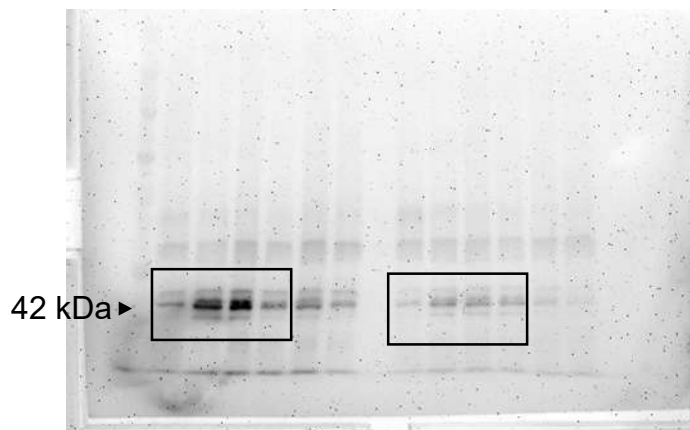
# Supplementary Figure 6

**A**



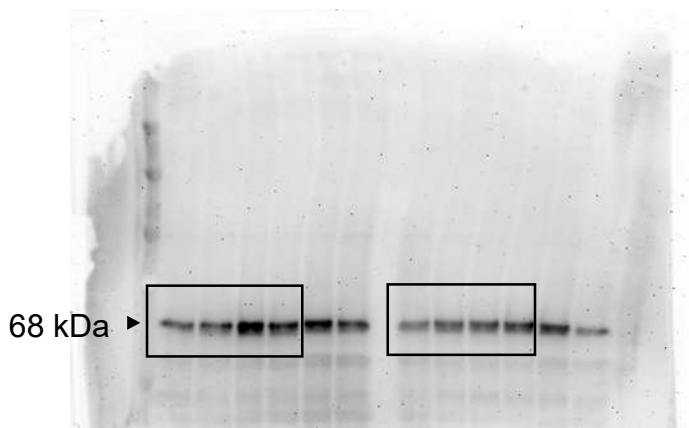
Anti ERK

**B**



Anti p-ERK

**C**



Anti Sam68

Figure 5B,  
lower panel

## **SUPPLEMENTARY FIGURE LEGENDS**

**Supplementary figure 1. Representative flow cytometry analysis of hMSC-emp or hMSC-IL6i cells transfected at <95%. Empty histograms are untransduced MSCs.**

Filled grey histograms are transduced MSCs.

**Supplementary figure 2. IL-6 silencing does not trigger cell death.** hMSC-emp or hMSC-IL-6i cells were cultured overnight in standard medium (-) or supplemented with IL-6 (20 ng/ml). Apoptosis was analyzed by FACS by Annexin-V DY634 and propidium iodide (PI) staining (the percentage of Annexin-V positive/PI negative cells is shown) on GFP + cells. Graph represents the mean of two independent experiments.

**Supplementary figure 3. Uncropped blot image of bands shown in Figure 1 B.** The cropped bands are framed within the black square.

**Supplementary figure 4. Uncropped blot image of bands shown in Figure 5A and 5C.** Handwritten tags indicate the sample loaded in each lane. MSC-emp (plv) & IL6i1 (MSC-IL6i)

**Supplementary figure 5. Uncropped blot image of bands shown in figure 5B, upper panel.** The cropped bands are framed within the black square.

**Supplementary figure 6. Uncropped blot image of bands shown in Figure 5B, lower panel.** The cropped bands are framed within the black square.