

Low-affinity Nerve Growth Factor Receptor (CD271) Heterogeneous Expression in Adult and Fetal Mesenchymal Stromal Cells

¹Mario Barilani, ¹Federica Banfi, ¹Silvia Sironi, ¹Enrico Ragni, ^{2,3}Salomé Guillaumin, ¹Francesca Polveraccio, ^{4,5}Lorenzo Rosso, ⁶Monica Moro, ⁷Giuseppe Astori, ^{8,9}Michela Pozzobon and ^{1,*}Lorenza Lazzari

¹Laboratory of Regenerative Medicine – Cell Factory, Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, 20122, Milano, Italy

²Regenerative, Modular & Developmental Engineering Laboratory (REMODEL), Biomedical Sciences Building, National University of Ireland Galway (NUI Galway), H91 CF50, Galway, Ireland

³Science Foundation Ireland (SFI) Centre for Research in Medical Devices (CÚRAM), Biomedical Sciences Building, National University of Ireland Galway (NUI Galway), H91 CF50, Galway, Ireland

⁴Thoracic surgery and lung transplantation Unit, Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, 20122, Milano, Italy

⁵University of Milan, 20122, Milano, Italy

⁶INGM, National Institute of Molecular Genetics "Romeo ed Enrica Invernizzi", 20122, Milan, Italy

⁷Advanced Cellular Therapy Laboratory - Hematology Unit, S. Bortolo Hospital - ULSS 6, Contra' San Francesco 41, 36100, Vicenza, Italy

⁸Stem Cells and Regenerative Medicine Lab., Women's and Children's Health Dept., University of Padova, Via Giustiniani 3, 35128, Padova, Italy.

⁹Foundation Institute of Pediatric Research "Città della Speranza", Corso Stati Uniti 4, 35127, Padova, Italy.

*Corresponding author (lead author)

Lorenza Lazzari, PhD

Laboratory of Regenerative Medicine – Cell Factory

Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico

Via F. Sforza 35, 20122, Milano, Italy

Phone: +39 02 5503 4053; Fax: +39 02 5503 2796

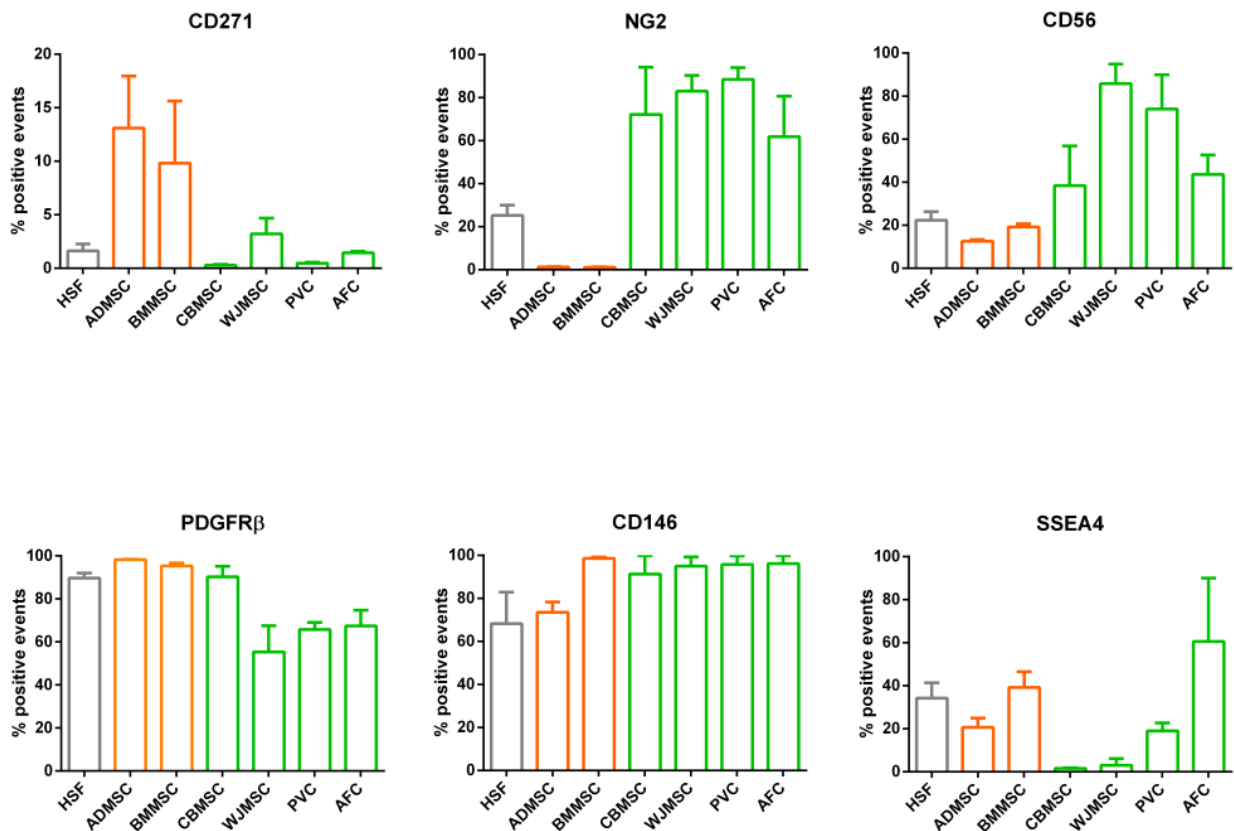
Email: lorenza.lazzari@policlinico.mi.it

Supplementary table 1

Tube 1	Fluorochrome	Code	Company
<i>Annexin V</i>	FITC	556419	Becton Dickinson, Franklin Lakes, NJ, USA
<i>Mouse anti-human CD271</i>	PE	557196	Becton Dickinson, Franklin Lakes, NJ, USA
<i>7-AAD</i>	/	559925	Becton Dickinson, Franklin Lakes, NJ, USA
Tube 2			
<i>Mouse anti-human PDGFRβ</i>	PE	FAB1263P	R&D Systems, Minneapolis, MN, USA
<i>Mouse anti-human CD146</i>	PE-Cyanine 7	562135	Becton Dickinson, Franklin Lakes, NJ, USA
<i>Mouse anti-human CD56</i>	PE-Cyanine 5	A07789	Beckman Coulter, Bea, CA, USA
Tube 3			
<i>Mouse anti-human SSEA4</i>	FITC	560126	Becton Dickinson, Franklin Lakes, NJ, USA
<i>Mouse anti-human NG2</i>	PE	IM3454U	Beckman Coulter, Bea, CA, USA
<i>Mouse anti-human CD34</i>	PerCP-Cyanine 5.5	347222	Becton Dickinson, Franklin Lakes, NJ, USA
Tube 4			
<i>Mouse anti-human CD90</i>	PE	561970	Becton Dickinson, Franklin Lakes, NJ, USA
<i>Mouse anti-human CD105</i>	PerCP-Cyanine 5.5	560819	Becton Dickinson, Franklin Lakes, NJ, USA
<i>Mouse anti-human CD73</i>	PE-Cyanine 7	561258	Becton Dickinson, Franklin Lakes, NJ, USA
<i>Mouse anti-human CD271</i>	AlexaFluor 647	560877	Becton Dickinson, Franklin Lakes, NJ, USA
Tube 5			
<i>Mouse anti-human CD34</i>	FITC	560942	Becton Dickinson, Franklin Lakes, NJ, USA
<i>Mouse anti-human CD14</i>	PerCP-Cyanine 5.5	562692	Becton Dickinson, Franklin Lakes, NJ, USA
<i>Mouse anti-human CD45</i>	APC-H7	560274	Becton Dickinson, Franklin Lakes, NJ, USA

Supplementary table 1. Flow cytometry experimental layout.

Supplementary figure 1



Supplementary figure 1. Surface marker expression percentages. The histograms show the percentages of surface marker expression (% positive events) for all the cell types analyzed by flow cytometry. HSF, human skin fibroblasts; ADMSC, adipose tissue mesenchymal stem cells; BMMSC, bone marrow mesenchymal stem cells; CBMSC, cord blood mesenchymal stem cells; WJMISC, Wharton's jelly mesenchymal stem cells; PVC, perivascular cells; AFC, amniotic fluid cells.