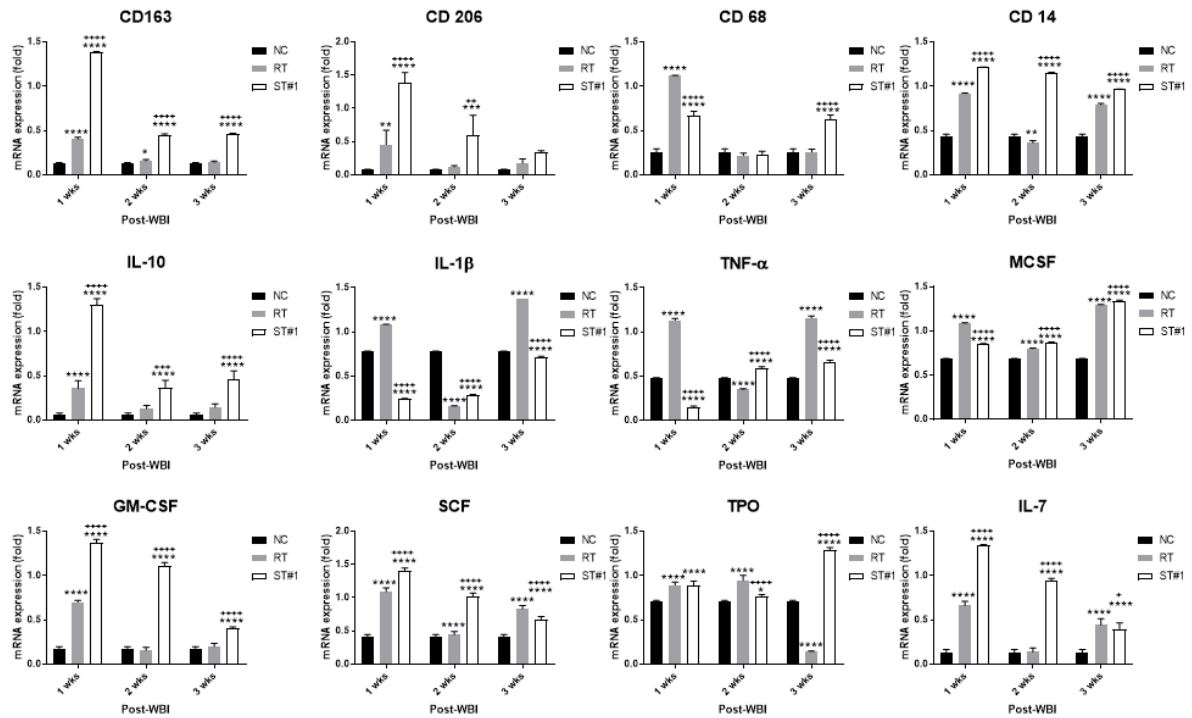


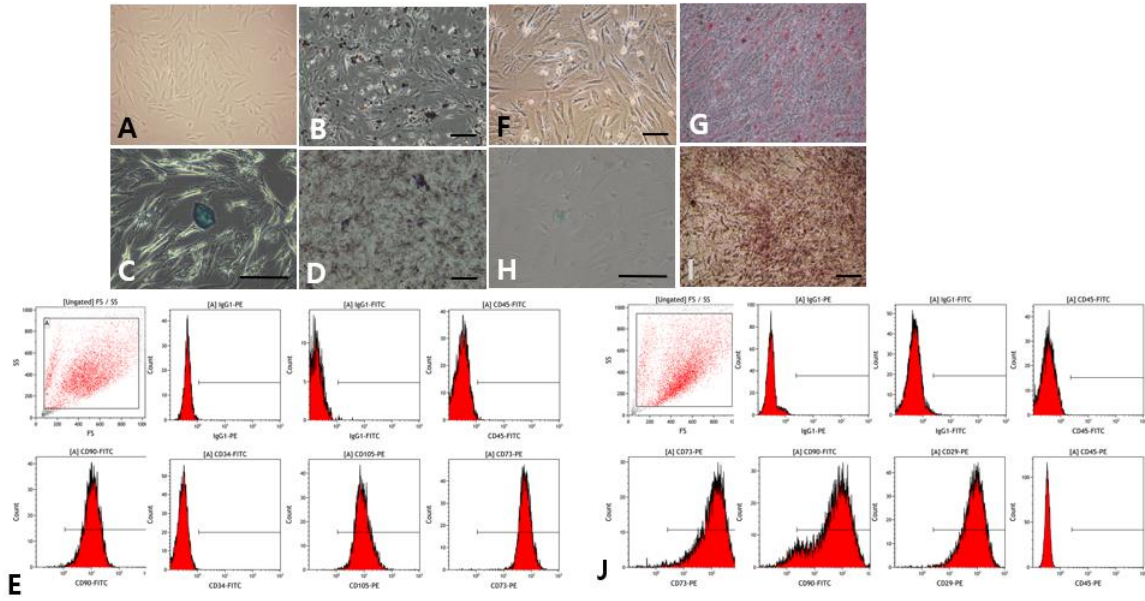
Supplementary Table 1 Primers used for qRT-PCR in human and mouse gene expression analysis, respectively

Species	Gene	Sequence 5'-3'		Amplicon size (bp)
		Forward	Reverse	
Human	β -Actin	GGACTTCGAGCAAGA GATGG	AGCACTGTGTTGGCGT ACAG	235
Human	IL-4	CCGTAACAGACATCT TTGCTGCC	GAGTGTCTTCTCATG GTGGCT	108
Human	IL-10	TCTCCGAGATGCCTTC AGCAGA	TCAGACAAGGCTTGG CAACCCA	126
Human	IL-1 β	CCACAGACCTTCCAG GAGAATG	GTGCAGTTCAGTGATC GTACAGG	136
Human	TNF- α	CTCTTCTGCCTGCTGC ACTTTG	ATGGGCTACAGGCTTG TCACTC	135
Human	CD68	CGAGCATCATTCTTTC ACCAGCT	ATGAGAGGCAGCAAG ATGGACC	136
Human	CD80	AGGAACACCCTCCAA TCTCTG	GGTCAAAAGTGAAAG CCAACA	150
Human	CD206	AGCCAACACCAGCTC CTCAAGA	CAAAACGCTCGCGCA TTGTCCA	121
Mouse	GM-CSF	CAAAGAAGCCCTGAA CCTCCT	TGGCTGTCATGTTCAA GGCG	179
Mouse	MCSF	TGTACCCTAAAGCCA CCCCT	TATGCGAAGGGGAAG CTCAC	155
Mouse	IL-7	TTCTGCTGCCTGTCAC ATCAT	AACTTGCGAGCAGCA CGATT	208
Mouse	TPO	AGCTCACAAGGACCC CAATG	TGAATCCCTGAAGCCT GCTC	257
Mouse	SCF	ACACAAGTGAGTAGG GCACG	CCCGCAGATCTCCTTG GTTT	201

Mouse	SDF-1	CGTTCTTCGAGAGCC ACAT	TTGTTCTTCAGCCGTG CAAC	101
Mouse	IL-1 β	TGGTGTGTGACGTTCC CATT	TGTCGTTGCTTGGTTCT CCT	174
Mouse	TNF- α	TGGCCTCCCTCTCATC AGTT	GTCCCTTGAAGAGAA CCTGGG	191
Mouse	CD14	GTGGCTAAAGCCTGG ACTCA	GCAGCGCTAAAACCTT GGAGG	191
Mouse	CD68	AATGTGTCCTTCCCAC AGGC	AGAAACATGGCCCGA AGTGT	202
Mouse	CD163	GGGCAGTATTGGCAG TAGCA	TGTTTCCAAGGTGACG AGGG	195
Mouse	CD206	GTGTGGAACCACCAC TGACT	GGTCAGCATTCTGCTG CTTG	182
Mouse	IL-10	CAGTACAGCCGGGAA GACAA	AGGCTTGGCAACCCA AGTAA	184
Mouse	GAPDH	GGGGTGAGGCCGGTG CTGAGTAT	CATTGGGGGTAGGAA CACGGAAGG	459



Supplementary Figure 1 Human and mouse adipose tissue-derived stromal cells (ADSCs) were cultured and characterized by flow cytometry and multilineage differentiation. (A-D) Human ADSCs grew as a monolayer of spindle-shaped cells. Adipogenic, chondrogenic, and osteogenic differentiation was evaluated using Oil Red O, toluidine blue, and von Kossa staining, respectively. (E) human ADSCs expressed CD73, CD90, and CD105, but not CD34 and CD45. (F-I) Mouse ADSCs were spindle-shaped, similar to fibroblasts. Multiple lineage differentiation of mouse ADSCs into bone, fat, and cartilage was shown by staining with von Kossa, Oil Red O, and toluidine blue, respectively. (J) CD29, CD73, and CD90 were expressed in mouse ADSCs at a rate >90%, and CD45, CD31, and CD34 were not expressed. Original Magnification under phase-contrast microscope: 100x (A, B, D, F, G, I) and 200x (C, H). Scale bar: 100 μ m



Supplementary Figure 2 Characterization of repopulated bone marrow (BM) post-whole-body irradiation (WBI) in the normal control (NC), irradiated (RT), and stem cell-treated (ST) groups. mRNA expression in the BM at weeks 1, 2, and 3 post-WBI was evaluated using reverse transcription PCR (RT-PCR). CD, cluster of differentiation; IL, interleukin; TNF- α , tumor necrotic factor- α ; M-CSF, macrophage colony-stimulating factor; GM-CSF, granulocyte-macrophage colony-stimulating factor; SCF, stem cell factor; SDF-1, stromal cell-derived factor 1; TPO, thrombopoietic growth factor; GAPDH, glyceraldehyde 3-phosphate dehydrogenase. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$, and **** $p < 0.0001$ vs. controls; + $p < 0.05$, ++ $p < 0.01$, +++ $p < 0.001$, and ++++ $p < 0.0001$ vs. RT.