

Materials List for:

Assessment of the Immunomodulatory Properties of Human Mesenchymal Stem Cells (MSCs)

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URL: <https://www.jove.com/video/53265>

DOI: [doi:10.3791/53265](https://doi.org/10.3791/53265)

Materials

Name	Company	Catalog Number	Comments
Ficoll-Paque PLUS	GE Healthcare	71-7167-00 AG	Density gradient for isolation of peripheral blood mononuclear cells (PBMCs)
Vibrant CFDA-SE Cell Tracer Kit (CFSE)	Life Technologies	V12883	Cellular label for detection of cell division
Phytoagglutinin (PHA)	Sigma	L8902	Activation of human PBMCs
Dynabeads Human T-Activator CD3/28	Life Technologies	111.32D	Activation of human T lymphocytes, e.g. CD4 ⁺ T cells, CD8 ⁺ T cells, etc.
autoMACS™ Separator	Miltenyi Biotec	autoMACS™ Separator	Magnetic based cell separator
autoMACS® Columns	Miltenyi Biotec	130-021-101	separation columns
CD14 microbeads, human	Miltenyi Biotec	130-050-201	For positive selection of CD14 ⁺ human monocytes and macrophages from PBMCs
CD4 microbeads, human	Miltenyi Biotec	130-045-101	For positive selection of CD4 ⁺ human T lymphocytes from PBMCs
RPMI 1640 Medium	Life Technologies	11875	Human PBMC/leukocyte culture medium
DMEM, Low glucose, pyruvate	Life Technologies	11885	Human mesenchymal stem cell (MSC) culture medium
L-glutamine	Life Technologies	25030-081	Supplementation for MSC complete medium
Penicillin/Streptomycin	Life Technologies	15070-063	Supplementation for PBMC/leukocyte and MSC complete medium
Fetal bovine serum (FBS)	1) Hyclone, for MSC culture 2) Life Technologies, for all other cells (i.e. PBMCs, specific leukocyte populations)	1) SH30070.03M 2) 10091-148	Pre-test lots for support of MSC <i>in vitro</i> culture
24-well cell culture plate	Corning	COR3524	Co-culture plate
50 ml centrifuge tube	Corning	430291	Isolation PBMCs from whole blood by Ficoll-Paque PLUS
15 ml centrifuge tube	Corning	430766	Collection of the labeled and unlabeled cell fractions
Round-bottom tubes	BD Falcon	352008	Collection of cells for flow cytometric analysis