

Materials List for

# Generation of Monocyte-Derived Dendritic Cells with Differing Sialylated Phenotypes

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jove.com/video/65525

## Materials

Name	Company	Catalog Number	Comments
15 mL conical tube	AstiK's	CTGP-E15-050	Obtaining Monocyte-derived Dendritic Cells; Treatment of Cells with Sialidase
24-well plate	Greiner Bio-one	662 160	Obtaining Monocyte-derived Dendritic Cells; Treatment of Cells with Sialidase
50 mL conical tube	AstiK's	CTGP-E50-050	Obtaining Monocyte-derived Dendritic Cells
7-Aminoactinomycin D (7-AAD)	BioLegend	420404	Obtaining Monocyte-derived Dendritic Cells
Annexin V	Immunotools	31490013	Obtaining Monocyte-derived Dendritic Cells
Attune Acoustic Focusing Flow Cytometer	Thermo Fisher Scientific		Determination of Sialic Acid Profile; Maturation Profiling of mo-DCs
BSA	Sigma - Aldrich	A3294-100G	Obtaining Monocyte-derived Dendritic Cells; Determination of Sialic Acid Profile
CD14 (Monoclonal TÜK4)	Miltenyi Biotec	130-080-701	Obtaining Monocyte-derived Dendritic Cells
CD80	Immunotools	21270803	Maturation Profiling of mo-DCs
CD86	Immunotools	21480863	Maturation Profiling of mo-DCs
Cell counting slides and trypan blue	EVE	EVS-050	Obtaining Monocyte-derived Dendritic Cells
Centrifuge	Eppendorf	5430 R	Obtaining Monocyte-derived Dendritic Cells; Treatment of Cells with Sialidase; Determination of Sialic Acid Profile; Maturation Profiling of mo-DCs

Density gradient medium (Histopaque)	Sigma - Aldrich	10771-100ML	Obtaining Monocyte-derived Dendritic Cells
EDTA	Gibco, ThermoFisher	15400054	Obtaining Monocyte-derived Dendritic Cells
Elisa kit (IFN-γ)	Immunotools	31673539	Maturation Profiling of mo-DCs
EVE automated cell count	NanoEntek	10027-452	Obtaining Monocyte-derived Dendritic Cells
Fetal bovine serum (FBS)	Gibco	10500064	Obtaining Monocyte-derived Dendritic Cells; Treatment of Cells with Sialidase; Determination of Sialic Acid Profile
Granulocyte-macrophage colony-stimulating factor (GM-CSF)	Miltenyi Biotec	130-093-864	Obtaining Monocyte-derived Dendritic Cells
Human CD14 microbeads (Immunomagnetic beads)	Miltenyi Biotec	130-050-201	Obtaining Monocyte-derived Dendritic Cells
Interleukin (IL)-1β	Sigma - Aldrich	I9401	Obtaining Monocyte-derived Dendritic Cells
Interleukin (IL)-4	Miltenyi Biotec	130-093-919	Obtaining Monocyte-derived Dendritic Cells
Interleukin (IL)-6	Sigma - Aldrich	SRP3096	Obtaining Monocyte-derived Dendritic Cells
L-glutamine	Gibco	A2916801	Obtaining Monocyte-derived Dendritic Cells
LS column and plunger	Miltenyi Biotec	130-042-401	Obtaining Monocyte-derived Dendritic Cells
<i>Maackia amurensis</i> (MAA) lectin (MAA lectin - Biotinylated)	Vector labs	B-1265-1	Determination of Sialic Acid Profile
MHC-I (HLA-ABC)	Immunotools	21159033	Maturation Profiling of mo-DCs
MHC-II (HLA-DR)	Immunostep	HLADRA-100T	Maturation Profiling of mo-DCs
Microtubes	AstiK's	PCRP-E015-500	Obtaining Monocyte-derived Dendritic Cells; Treatment of Cells with Sialidase; Determination of Sialic Acid Profile; Maturation Profiling of mo-DCs
Neuraminidase (Sialidase)	Roche	11585886001	Treatment of Cells with Sialidase
Non-essential amino acids (NEAA)	Gibco	11140-050	Obtaining Monocyte-derived Dendritic Cells
Paraformaldehyde (PFA 2%)	Polysciences Europe	25085-1	Determination of Sialic Acid Profile; Maturation Profiling of mo-DCs
Paraformaldehyde (PFA 4%)	Biotium	22023	Determination of Sialic Acid Profile
Pasteur pipettes	Labbox	PIPP-003-500	Obtaining Monocyte-derived Dendritic Cells
<i>Peanut (Arachis hypogaea)</i> Agglutinin (PNA) lectin (PNA lectin - FITC)	Vector labs	FL-1071	Determination of Sialic Acid Profile
Penicillin/streptomycin	Gibco	15140163	Obtaining Monocyte-derived Dendritic Cells
Phosphate Buffered Saline (PBS)	NZYTech	MB18201	Obtaining Monocyte-derived Dendritic Cells; Treatment of Cells with Sialidase; Determination of Sialic Acid Profile; Maturation Profiling of mo-DCs
Prostaglandin E2 (PGE2)	Sigma - Aldrich	P0409	Obtaining Monocyte-derived Dendritic Cells
RBC lysis buffer	BioLegend	420302	Obtaining Monocyte-derived Dendritic Cells
RPMI-1640 medium (containing 11.1 mM glucose)	Gibco	31870074	Obtaining Monocyte-derived Dendritic Cells; Treatment of Cells

			with Sialidase; Determination of Sialic Acid Profile
<i>Sambucus nigra</i> lectin (SNA lectin - Biotinylated)	Vector labs	B-1305-2	Determination of Sialic Acid Profile
<i>Sambucus nigra</i> lectin (SNA lectin - FITC)	Vector labs	FL-1301-2	Determination of Sialic Acid Profile
Sodium pyruvate	Thermofisher	11360-070	Obtaining Monocyte-derived Dendritic Cells
SpectroMax190	Molecular Devices		Maturation Profiling of mo-DCs
Streptavidin-PE	BioLegend	405203	Determination of Sialic Acid Profile; Maturation Profiling of mo-DCs
Tetramethylbenzidine (TMB)	Sigma - Aldrich	T0440	Maturation Profiling of mo-DCs
Tumour necrosis factor- $\alpha$ (TNF- $\alpha$ )	Sigma - Aldrich	H8916	Obtaining Monocyte-derived Dendritic Cells
Zeiss LSM710 confocal microscope	Zeiss		Determination of Sialic Acid Profile