

Materials List for

Natural Killer (NK) and CAR-NK Cell Expansion Method using Membrane Bound-IL-21-Modified B Cell Line

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Materials

Name	Company	Catalog Number	Comments
100 mm surface treated sterile tissue culture dishes	VWR	10062-880	For transfection
293T cells	ATCC	CRL-3216	For transfection
6-well G-REX plate	Wilson Wolf	80240M	For NK cell expansion
AF647-conjugated AffiniPure F(ab') ₂ fragment goat anti-human IgG (H+L)	Jackson ImmunoResearch	109-606-088	For flow cytometry
CAR construct in SFG vector	Generated in Dr. Dongfang Liu's lab		For transfection
Collagenase IV	Sigma	C4-22-1G	For TILs isolation
Cryopreserve media Ingredient: Fetal Bovine Serum (FBS)	Corning	35-010-CV	90%
Cryopreserve media Ingredient: Dimethyl sulfoxide (DMSO)	Sigma	D2050	10%
D-10 media Ingredient: DMEM	VWR	45000-304	
D-10 media Ingredient: Fetal Bovine Serum (FBS)	Corning	35-010-CV	10%
D-10 media Ingredient: Penicillin Streptomycin	VWR	45000-652	1%
FastFlow & Low Binding Millipore Express PES Membrane	Millex	SLHPR33RB	For transduction
Genejuice transfection reagent	VWR	80611-356	For transfection
gentleMACS C-tubes	Miltenyi Biotec	130-093-237	For TILs isolation
gentleMACS Octo	Miltenyi Biotec	Quote	For TILs isolation
Hank's Balanced Salt Solution (HBSS - w/o calcium or magnesium)	ThermoFisher	14170120	For TILs isolation
Human IL-15	Peptotech	200-15	For NK cell expansion
Human IL-2	Peptotech	200-02	For NK cell expansion

Irradiated 221-miL21 feeder cells	Generated in Dr. Dongfang Liu's lab		Frozen in cryopreserve media
Lymphocyte Separation Media	Corning	25-072-CV	For TILs isolation
OPTI-MEM	ThermoFisher	31895	For transfection
PE anti-human CD3 clone HIT3a	Biolegend	300308	For flow cytometry
PE/Cy7 anti-human CD56 (NCAM) clone 5.1H11	BioLegend	362509	For flow cytometry
Pegam3 plasmid	Generated in Dr. Dongfang Liu's lab		For transfection
Percoll	GE Healthcare	17089101	For TILs isolation
Peripheral blood mononuclear cells (PBMCs)	New York Blood Center		Isolated from plasma of healthy donors, frozen in cryopreserve media
Phosphate Buffer Saline (PBS)	Corning	21-040-CV	For transduction
pRDF plasmid	Generated in Dr. Dongfang Liu's lab		For transfection
R-10 media Ingredients: RPMI 1640	VWR	45000-404	
R-10 media Ingredient: L-glutamine	VWR	45000-304	1%
R-10 media Ingredient: Penicillin Streptomycin	VWR	45000-652	1%
R-10 media Ingredient: Fetal Bovine Serum (FBS)	Corning	35-010-CV	10%
Retronectin	Generated in Dr. Dongfang Liu's lab	home-made	For transduction
Trypan Blue	Corning	25-900-CI	For cell counting
Untreated 24-well plate	Fisher Scientific	13-690-071	For transduction