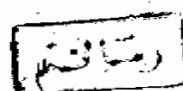


GENE THERAPY AND HAEMATOPOIETIC PROGENITOR CELLS

Essay



Submitted For Partial Fulfillment of
The Master Degree in Clinical and Chemical Pathology

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خَلَقَ الْإِنْسَانَ مِنْ عَلَقٍ

اقْرَأْ وَرَبُّكَ الْأَكْرَمُ

الَّذِي عَلَّمَ بِالْقَلَمِ

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LIST OF ABBREVIATION

A	: Adenine
α	: Alpha
AAV	: Adeno-associated virus
ADA	: Adenosine deaminase
AIDS	: Acquired immune deficiency syndrome
ALL	: Acute lymphoblastic leukemia
AML	: Acute myeloblastic leukemia
Apr	: Ampicillin resistance
β	: Beta
BFU-E	: Burst forming unit-erythroid
BMT	: Bone marrow transplantation
pb	: Base pair
C	: Cytosine
CD	: Cluster of differentiation
c-DNA	: Complementary deoxy ribonucleic acid
CFTR	: Cystic fibrosis transmembrane conductance regulator
CFU-GM	: Colony forming unit-granulocyte/macrophage
CFU-S	: Colony forming unit-spleen
CLL	: Chronic lymphocytic leukemia
CML	: Chronic myeloid leukemia
CNS	: Central nervous system
COS	: Cohesive end sites
δ	: Delta
DNA	: Deoxyribonucleic acid
ϵ	: Epsilon
E Coli	: Escherichia coli
Eco R	: Escherichia coli restriction endonuclease
ENV	: Envelop proteins
Epo	: Erythropoietin
5-Fu	: 5-fluorouracil
γ	: Gamma
GaG	: Structural proteins
GP	: Glycoprotein

Hb	:	Hemoglobin
Hb A	:	Adult hemoglobin
HD	:	Hodgkin disease
Hb F	:	Fetal hemoglobin
HIV	:	Human immunodeficiency virus
HLA	:	Human leukocytic antigen
HM	:	Hematopoietic microenvironment
hn. RNA	:	heterogenous ribonucleic acid
HSA	:	Heat stable antigen
HSC	:	Hematopoietic stem cell
IL	:	Interleukin
ITRs	:	Inverted terminal repeats
Kb	:	Kilo base
λ	:	Lambda
L.C.H.	:	Langerhans cell histiocytosis
L.C.R.	:	Locus control region
L.D.L.	:	Low density lipoprotein
L.D.L.-R	:	Low density lipoprotein-Receptor
L.I.F.	:	Leukemia inhibitory factor
lin.	:	lineage
L.T.C.	:	Long-term bone marrow culture
L.T.R.	:	Long terminal repeat
Mb	:	Mega base
M.D.R.	:	Multiple drug resistance
M.E.L.	:	Murine erythroleukemia cell line
M.H.C.	:	Major histocompatibility complex
M.L.P.	:	Major late promoter.
m-RNA	:	messenger-ribonucleic acid
Neo R	:	Neomycine resistance
N.I.H.	:	National institute of health
P	:	Phosphate
P.B.P.C	:	Peripheral blood progenitor cell
P.C.R.	:	Polymerase chain reaction
ph	:	Philadelphia
Pol	:	Polymerase
r.AAV	:	Recombinant adeno-associated virus
R.B.C.	:	Red blood corpuscle

List of Abbreviation

R.N.A.	:	Ribonucleic acid
r-RNA	:	Ribosomal-ribonucleic acid
S.C.D.	:	Sickle cell disease
S.C.I.D.	:	Severe combined immunodeficiency disease
sn-RNA	:	Small nuclear ribonucleic acid
T	:	Thymine
t	:	translocation
T.A.R.	:	TAT activating region
Tcr	:	Tetracycline resistance
T.I.Ls	:	Tumor infiltrating lymphocytes
t-k	:	Thymidine kinase
T.N.F.	:	Tumor necrosis factor
t-PA	:	Tissue plasminogen activator
t-RNA	:	transfer ribonucleic acid
v W.D.	:	Von Willebrand disease
V.W.F.	:	Von Willebrand factor
W.G.A.	:	Wheat-germ agglutinin
ψ	:	Psi
ζ	:	Zeta