

Abbreviations and Acronyms

Following are the abbreviations and acronyms that has been used in this thesis

ALT	Alanine Transaminases
ANOVA	Analysis of Variance
APC	Allo Phycocyanin
APCs	Antigen-presenting cells
CBMCs	Cord Blood Mononuclear cells
ccc DNA	Covalently closed circular DNA
CCR	Chemokine receptor
CD	Cluster of Differentiation
CHB	Chronic Hepatitis B
CMV	Cytomegalovirus
CTL	Cytotoxic T lymphocyte
CTLA-4	Cytotoxic T lymphocyte Antigen-4
DNA	Deoxy Ribonucleic Acid
EBV	Epstein–Barr virus
ER	Endoplasmic Reticulum
FACS	Fluorescence-activated cell sorting
FITC	Fluorocein Isothiocyanate
HBcAg	Hepatitis B core antigen
HBeAg	Hepatitis B e antigen

HBIG	Hepatitis B immunoglobulin
HBsAg	Hepatitis B surface antigen
HBV	Hepatitis B virus
HCC	Hepatocellular Carcinoma
HIV	Human immunodeficiency Virus
IFN γ	Interferron gamma
IL	Interleukin
IU	International unit
Kb	Kilo- basepair
LCMV	Lymphocytic choriomeningitis virus
MHC	Major Histocompatibility Complex
NK cells	Natural Killer cells
PBMCs	Peripheral Blood Mononuclear cells
PD-1	Programme death -1
PE	Phyco-erythrin
pg-RNA	pre- genomc Ribonucleic Acid
PMA	Phorbol 12-myristate 13-acetate
RT-PCR	Real Time PCR
SE	Standard Error
TALL-1	TNF- and ApoL-related leukocyte expressed ligand-1
TCR	T Cell receptor
Th-1	T helper 1

Th-2	T helper 2
TLR	Toll-like receptor
TNF- α	Tumor Necrosis Factor Alpha
WHO	World Health Organization
WHV	Woodchuck Hepatitis Virus
ζ	Zeta
μg	Micro Gram
mM	Mili Molar
mg	Mili Gram
ml	Mili Liter
M	Molar/Molarity
N	Normal/Normality
ng	Nano Gram
gm	Gram
$^{\circ}\text{C}$	Degree Centigrade
bp	Base Pair
α	Alpha
μl	Micro Liter