TRANSFORMING GROWTH FACTOR BETA 1 AND CHRONIC LIVER DISEASES Thesis Submitted for the Partial Julfillment of the Master Degree in Medical Microbiology and Immunology Nehad Mohamed Sayed Abd El Fattah Supervised by Prof. Dr. Taghreed Hamed Taha El-Khashab Professor of Microbiology and Immunology Faculty of Medicine - Ain Shams University Tenunionica D Dr. Mervat Abd El-Hamid Mohamed Assistant Professor of Microbiology and Immunology Faculty of Medicine - Ain Shams University Dr. Mohamed Kamal Shaker Assistant Professor of Tropical Medicine Faculty of Medicine - Ain Shams University **Faculty of Medicine**

توبره برمن



السائقة

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List of Abbreviations

ADCC: Antibody dependent cell mediated cytotoxicity

AFP: Alpha-fetoprotein

AML: Acute myeloblastic leukemia

C3: Complement 3

CAH: Chronic active hepatitis
CD: Cluster differentiation
CDK: Cyclin dependent kinase

CDKIs: Cyclin dependent kinase inhibitors

CLH: Chronic lobular hepatitis
CPH: Chronic persistent hepatitis
CTL: Cytotoxic T lymphocytes

DNA: Deoxyribonucleic acid

E-coli: Escherichia coli
ECM: Extracellular matrix
EGF: Epidermal growth factor

ELISA: Enzyme linked immunosorbant assay

FGF: Fibroblast growth factor
Hb sAg: Hepatitis B surface antigen

HBV: Hepatitic B virus

HCC: Hepatocellular carcinoma HCV Ab: Hepatiis C virus antibody

HCV: Hepatitis C virus

HGF: Hepatocyte growth factor

HIV: Human immunodeficiency virus

HRP: Horse radish peroxidase

Ig: Immunoglobulin IL: Interleukin

INFy: Interferon gamma

Kd: Kilo dalton

LAK: Lymphocyte activated killer

LKM-1: Liver kidney microsomal-1 antibody

MDC: Minimal detectable concentration MHC: Major histocompatibility complex

mRNA: Messenger Ribonucleic acid

MS: Multiple sclerosis
NK: Natural killer

NMR: Nuclear magnetic resonance NS3: Non-structural protein (3)

OD: Optical density
P.T.: Prothrombin time

PBMC: Peripheral blood mononuclear cells

PDGF: Platelet derived growth factor S. bil.: Serum bilirubin

S.alb.: Serum albumin
SF: Scatter factor

SGOT: Serum glutamic oxaloacetate transaminase

SGPT: Serum glutamate pyruvic transaminase TGF- α : Transforming graveth factor also

TGF-α: Transforming grwoth factor alpha TGF-β: Transforming grwoth factor beta

Th1: T helper type 1 Th2: T helper-2

TIMPs: Tissue inhibitors of metallo proteinases

TMB: Tetramethyle benzidine TNF: Tumor necrosis factor

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