شبكة المعلومات الجامعية

بسم الله الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
علي هذه الأفلام قد أعدت دون أية تغيرات

يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of 15-25- c and relative humidity 20-40%

بعض الوثائـــــــق الاصليـــــة تالفـــة

بالرسالة صفحات لم ترد بالاصل

INTERLEUKIN 12 IN PATIENTS WITH CHRONIC HEPATITIS C

Thesis
Submitted to the Faculty of Medicine
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MASTER OF TROPICAL MEDICINE AND HYGIENE

BY

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List of abbreviations

Ab	Antibody
Ag	Antigen
ALT	Alanine transaminase
APC	Antigen presenting cell
AST	Aspartate transaminase
CSFs	Colony stimulating factors
CTL	Cytotoxic T lymphocyte
E	Envelope
EBV	Epstein Barr virus
ELISA	Enzyme linked immunosorbent assay
GM-CSF	Granulocyte monocyte-colony stimulating factor
HAI	Hepatitis activity index
HBV	Hepatitis B virus
HCC	Hepatocellular carcinoma
HCV	Hepatitis C virus
HCV LPs	HCV like particles
HIV	Human immunodeficiency virus
HLA	Human leucocytic antigen
HVR	Hypervariable region
IFN	Interferon
Ig	Immunoglobulin
IL	Interleukin
IRES	Internal ribosomal entry site
KDa	Kilo Dalton
LCMV	Lymphocytic choriomeningitis virus

LCR	Ligase chain reaction
LM	Listeria monocytogens
LPS	Lipopolysaccharides
M	Molar
MCMV	Murine cytomegalovirus
M-CSF	Mast cell growth factor
MHC	Major histocompatibility complex
mRNA	Messenger RNA
MW	Molecular weight
NC	Non coding
NK	Natural killer
nM	Nano-mole
ORF	Open reading frame
PBMC	Peripheral blood mononuclear cell
PCR	Polymerase chain reaction
PDGF	Platelet derived growth factor
pg	Picogram
PHA	Phytohaemagglutination antigen
pM	Pico-mole
rHu-IL	Recombinant human interleukin
RIBA	Recombinant immunoblot assay
SF	Steel factor
STDs	Sexually transmitted diseases
Tc	T-cytotoxic
TGF	Transforming growth factor
Th	T helper
TNF	Tumor necrosis factor

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Introduction & Literature review

Cytokines

A few decades ago, properties of the immune system that distinguish it from other body defenses, seemed impenetrable mysteries. However, in recent years, they began to yield to research and a great deal is now understood about them. Moreover, it is now recognized that each person's immune system is continually evolving in response to its environment and experience, as individual cells communicate and cooperate with one another to control their own proliferation, differentiation and immunologic functions [1].

Over the past few years, it has become clear that an array of regulatory proteins produced and secreted by lymphocytes and other cells have a role in orchestrating immune activity. These hormones like proteins are called cytokines. Unlike endocrine hormones, they are not produced by specialized glands but, rather, by a variety of different tissues and individual cells [2].

Cytokines are a complex network of intercellular signaling protein mediators constituting a communication system, which coordinates activity of different cells and tissues within the body, thus regulating local and systemic immune and inflammatory responses as well as wound healing, hematopoiesis, and many other biological processes [3].

To date, over 100 structurally dissimilar and genetically unrelated cytokines have been identified. Most are peptides or glycoproteins with molecular weights (MW) ranging between 6000 and 60,000 kDa. They are extremely potent compounds that act at concentrations of 10^{-9}-10^{-15} M by binding to specific surface receptors on target cells [4].

Nomenclature:

When immune cytokines were first studied, a distinction was made between those that were thought to be produced by lymphocytes therefore called lymphokines, and those produced by monocytes or macrophages, thus named monokines. However, further work then revealed that many cytokines formerly designated as lymphokines or monokines could also be synthesized by cells of other lineages. In most cases, these terms are no longer applicable in this restrictive sense and are now generally avoided [5].

An additional complication became evident when it was found that some activities previously ascribed to different molecules on the basis of quite diverse biological assays could in fact be mediated by the same cytokine. Accordingly, a new nomenclature system was then adopted in an attempt to rationalize the data. The term interleukin (IL) was proposed for any molecule that communicated between leukocytes (inter-leukocytes) [6].