Chemical and Biological Characterization of Components from *Aloe arborescens* Miller with Biological Modifier Response

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5-FU	5-fluorouracil
ACP	Acid soluble polysaccharide fraction
ALT	Alanine transferase
ALP	Alkaline soluble polysaccharide fraction
AOM	Azoxymethane
BAW	Solvent system; butanol: acetic acid: water
BOP	N-nitrosobis (2-oxopropyl)amine
CC	Column chromatography
COSY	Correlation spectroscopy
CPase	Carboxypeptidase
D	Polydispersity index
Da	Dalton
DB	Degree of branch
DCM	Dichloromethane
DEAE-cellulose	Diethylaminoethyl cellulose
DEAE-sephadex	Diethylaminoethyl sephadex
DEAE-toyopearl	Diethylaminoethyl toyopearl
DEMSO	Dimethylsulphoxide
Dept-C^{13}-NMR	Distortionless enhancement by polarization transfer C^{13}-NMR
DMH	Dimethylhydrazine
DMN	Dimethylnitrosamine
DPPH	2,2-diphenyl-1-picrylhydrazyl
DS	Degree of substitute (DS)
ELISA	Enzyme linked immunosorbent assay
ENNG	Ethyl-N'-nitro-N-nitrosoguanidine
ESI-MS	Electrospray ionization mass spectrometry

List of Abbreviations

FID	Flame ionization detector
FT-IR	Fourier transform infrared spectroscopy
GC	Gas chromatography
GC-MS	Gas chromatography-mass spectrometry
GLC	Gas liquid chromatography
GPC	Gel permeation chromatography
GSH	Glutathione
Hb	Haemoglobin
HepG2 cell line	Human liver cancer cell line
HCOOH	Formic acid
HIO4	Periodic acid
HMBC	Heteronuclear multiple bond correlation
HPGPC	High performance gel permeation chromatography
HPLC	High performance liquid chromatography
HPTLC	High performance thin layer chromatography
HSQC	Heteronuclear single quantum coherence
Hz	Hertz
IC_{50}	Lethal concentration of the sample, which causes the death of 50%
IFN-γ	Inferon-gamma
IL- 2	Interleukin 2
IL-10	Interleukin 10
IL-12	Interleukin 12
IL-6	Interleukin 6
KDa	Kilo-dalton
LC/ESI/MS/MS	Liquid chromatography-electrospray ionization- tandem mass spectrometry
LPS	lipopolysaccharides

List of Abbreviations

MALDI	Matrix-assisted laser desorption/ ionization spectroscopy
MCF7 cell line	Human breast adenocarcinoma cell line
Mn	Number-average molecular weight
MTT	(3-(4, 5-dimethylthiazol)-2, 5-diphenyl tetrazolium bromide
M.wt	Weight-average molecular weight
NaBH4	Sodium borohydride
NBT	Nitroblue tetrazolium chloride
NK	Natural killer cells
O6-MeG	O-6-methylguanine
One-way ANOVA	One-way analysis of variance
ORAC assay	Oxygen-radical absorbing capacity
PC3 cell line	Human prostate cancer cell line
PBS-BSA-EDTA	Phosphate buffer-bovine serum albumin ethylene diaminetetraacetic acid
PHA	Phytohaemaggltutinin
PMBC	Peripheral blood mononuclear cell
QR	Quinone reductase
R_f	Retardation factor
SEM	Scanning electron microscopy
SPhMs	Secondary phenol metabolites
SRB	Sulphorhodamine
Sz	Streptozotocin
TEARS	Thiobarbituric acid reactive substances
TEM	Transmission electron microscopy
TFA	Trifloroacetic acid
TGF-β	Transforming growth factor beta
TLC	Thin layer chromatography

List of Abbreviations

TNF-α	Tumor necrosis factor-alpha
TPA	Tetradecanoylphorbol-13-acetate
UV-Vis spectrophotometer	Ultraviolet-visible spectrophotometer
VLC	Vacuum liquid chromatography
WAP	Water soluble polysaccharide fraction
WBCs	White blood cells
WHO	World health organization
WISH	Normal epithelial cells

Introduction