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## Abbreviations

5-HT - 5-hydroxytryptamine

AA - Antioxidant activity

ABTS - 2,2'-azino-bis-3-ethylbenzothiazoline-6-Sulfonucacid

ADA - Adenosine deaminase

ADME - Absorption, distribution, metabolism and excretion

ADMET - Absorption, distribution, metabolism, excretion and toxicity

ALK - Anaplastic lymphoma kinase

ALP - Alkaline phosphatase

ALT - Alanine transaminase

AST - Aspartate transaminase

ATI - Alveolar type I

ATII - Alveolar type II

B(a)P - Benzo(a)pyrene

Bak - Bcl-2 antagonist killer 1

Bax - Bcl2-associated x protein

Bcl-2 - B-cell lymphoma 2

CNS - Central nervous system

Cox-2 - Cyclooxygenase-2

DCIP - Dichlorophenolindophenol

DFT - Density functional theory

DNA - Deoxyribonucleotide

DPPH - 2,2-Diphenyl-1-picryl-hydrazyl-hydrate

EGCG - Epigallocatechingallate

EGFR - Epidermal growth factor receptors

EML4-ALK - Echinoderm microtubule-associated Protein like 4-anaplastic lymphoma kinase

EPM - Elevated plus maze

ER $\alpha$  - Estrogen receptor-alpha

ER $\beta$  - Estrogen receptor-beta

FHIT - Fragile histidine triad protein

FT-IR - Fourier transform infrared spectroscopy

GGT - Gamma glutamyl transferase

GPCR - G-protein coupled receptors

H<sub>0</sub> - Null hypothesis

H<sub>2</sub>O<sub>2</sub> - Hydrogen peroxide

H<sub>A</sub> - Alternate hypothesis

HA - Hydrogen atoms

HAEPA - Hydroalcoholic extract of *Plectranthus amboinicus*

HBA - Hydrogen bond acceptors

HBD - Hydrogen bond donors

HER-2 - Human epithelial growth factor receptor

Herg - Human- ether- a-go-go-related gene

HIA - Human intestinal absorption

HPLC - High pressure liquid chromatography

HPTLC - High performance thin layer chromatography

HUMO - Highest occupied molecular orbital

HX - Hypoxanthine

Kras - Kirsten rat sarcoma viral oncogene homolog

Lbs - Lamellar bodies

LDH - Lactate dehydrogenase

LUMO - Lowest occupied molecular orbital

MCL 1 - Myeloid leukemia 1

MDCK - Madin-darby canine kidney

MDM 2 - Mouse double minute 2 homolog

MR - Molecular reactivity

MTT - 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide

MW - Molecular weight

NCCS - National Center for Cell Sciences

NK- $\kappa$ B - Nuclear Factor kappa-light-chain-enhancer of activated B cells

NMR - Nuclear magnetic resonance

NSCLC - Non small cell lung carcinoma

PA – Paclitaxel

PBS - Phosphate-buffered saline

PI - Propidium iodide

PI3K - Phosphatidylinositol-3-kinase

PNP - Purine nucleoside phosphorylase

RASSF1 - Ras association domain-containing protein 1

RB - Rotatable bonds

RBC - Red blood corpuscles

ROS - Reactive Oxygen Species

RSA - Radical scavenging activity

RT-PCR - Reverse transcription - polymerase chain Reaction

SAF – Syringic acid fraction

SCLC - Small cell lung cancer

SES - Socio-economic status

SGOT - Serum glutamine oxaloacetate transaminase

SSC - Squamous carcinoma cell

TCM - Traditional chinese medicinal

TFC - Total flavonoid content

TLC - Thin Layer Chromatography

TNF $\alpha$  - Tumour Necrosis Factor alpha

TP - Total polyphenols

TPSA - Total polar surface area

UV - Ultraviolet

WBC - White blood corpuscles

XAN - Xanthine

XOD - Xanthine oxidase