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### ABBREVIATIONS AND SYMBOLS

ВНТ	butylated hydroxytoluene
DCFD	diclofenac diethylammonium
D-MEM	dulbecco's modified eagle's medium
DMSO	dimethyl sulfoxide
DLS	dynamic light scattering
DPPC	l-α-dipalmitoyl phosphatidylcholine
DPPH	1, 1-Diphenyl-2-picryhydracyl
EDTA	ethylenediaminetetraacetic acid
FBS	fetal bovine serum
FeCl <sub>2</sub>	ferrous chloride
h	hour
HPLC	high performance liquid chromatography
J	coupling constant in Hz
IC <sub>50</sub>	concentration providing 50% inhibition
L-NMMA	N <sup>G</sup> -monomethyl-L-arginine
LPS	lipopolysaccharide
α-MSH	α-melanocyte-stimulating hormone
MEM	eagle's minimal essential medium
MTT	3-(4,5-dimethyl-thiazol-2-yl)-2,5-diphenyl-2 <i>H</i> -tetrazolium
	bromide
mg	milligram

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ml	milliliter
mM	millimolar
nm	nanometer
NMR	nuclear magnetic resonance
<sup>1</sup> H NMR	proton nuclear magnetic resonance
<sup>13</sup> C NMR	carbon nuclear magnetic resonance
ODS	octadecyl silica
PBS	phosphate-buffered saline
rpm	revolutions per minute
S	second
SC	stratum corneum
$SC_{50}$	concentration providing 50% scavenging
Span 60	sorbitan monostearate
SRB	sulphorodamine B
TEM	transmission electron microscopy
TLC	thin layer chromatography
Tween 61	polyoxyethylene sorbitan monostearate
VED	viable epidermis and dermis
δ	chemical shift value in ppm
	wavelength in nanometer
/ <sup>µg</sup> ht <sup>C</sup>	microgram hang Mai University
μL	microliter
°C	celcius degree