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### LIST OF ABBREVIATIONS AND SYMBOLS

 $[\alpha]_{D}$  specific rotation

 $\delta$  chemical shift (in ppm)

ε molar extinction coefficient

 $\lambda_{\max}$  maximum wavelength

 $V_{\rm max}$  maximum wave number

ACh acetylcholine

AChE acetylcholinesterase

AChE-I's acetylcholinesterase inhibitors

AD Alzheimer's disease

ATCI acetylthiocholine iodide

BChE butyrylcholinesterase

br broad (for NMR signals)

c concentration

CoMFA comparative molecular field analysis

CoMSIA comparative molecular similarity indices analysis

COSY correlation spectroscopy

d doublet (for NMR signals)

DEPT distortioness enhancement by polarization transfer

dmA delta milliabsorption

DTNB 5,5'-dithiobis[2-nitrobenzoic acid]

EIMS electron-impact mass spectroscopy

ESIMS electro-sprayed ionization mass spectroscopy

HMBC heteronuclear multiple-bond multiple-quantum coherence

HMQC heteronuclear multiple-quantum coherence

HPLC high pressure liquid chromatography

HREIMS high-resolution electron-impact mass spectroscopy

IC<sub>50</sub> inhibitory concentration at 50% of tested subject

IR infrared

### LIST OF ABBREVIATIONS AND SYMBOLS (cont.)

J coupling constant

 $K_{\rm m}$  Michaelis constant

m multiplet (for NMR signals)

m/z mass-over-charge ratio

MIC minimum inhibitory concentration

MS mass spectroscopy

NMR nuclear magnetic resonance

QSAR quantitative structure-activity relationship

s singlet (for NMR signals)

SE standard error

SRB sulphorhodamine B

t triplet (for NMR signals)

TLC thin layer chromatography

 $t_{\mathrm{R}}$  retention time

UV ultraviolet-visible

 $V_{\text{max}}$  maximum velocity

w/v weight by volume