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List of Abbreviations

12L: 12D - 12 hour light: 12 hour dark
ALT - Alanine Aminotransferase
ANSA - 1-Amino 2-naphto 4-sulphonic acid
APS - Ammonium Persulphate
AST - Aspartate Aminotransferase
ATP - Adenosine triphosphate

*A. testudineus* - *Anabas testudineus*

BSA - Bovine Serum Albumin
BW - Body weight
Ca$^{2+}$ - Calcium ion
CaCl$_2$ - Calcium chloride
CAT - Catalase
CCl$_4$ - Carbon tetra chloride
CD - Conjugated Dienes
CFTR - Cystic Fibrosis Transmembrane Conductance Regulator
CS - Cell suspension
CUR Box - Curcumin–Boron–Oxalic acid Complex
CURI - Curcumin I,
CURII - Curcumin II
CURIII - Curcumin III
DH - Deep Hole
DMSO - Dimethyl Sulphoxide
DNA - Deoxyribo Nucleic Acid
DPNH - 2, 4 Dinitrophenyl Hydrazine
DTNB - 5, 5-Dithiobis Nitrobenzoic acid
EDTA - Ethylene Diamine Tetra Acetate
EL - Erythrocyte-length
ES - Erythrocyte-size
EW - Erythrocyte-width
FAE - Feed Assimilation Efficiency
FCE - Feed Conversion efficiency
FeSO₄ - Ferrous sulphate
GPx - Glutathione Peroxidase
GR - Glutathione Reductase
GSH - Glutathione (Reduced)
GSSG - Glutathione (oxidized)
H & E - Haematoxyline-Eosine
H₂O₂ - Hydrogen peroxide
HDL - High Density Lipoprotein
HNO₃ - Nitric acid
K⁺ - Potassium ion
KCl - Potassium chloride
KDa - Kilo Dalton
LDL - Low Density Lipoprotein
MCH - Mean Corpuscular Haemoglobin
MCHC - Mean Corpuscular Haemoglobin Concentration
MCV - Mean Corpuscular Volume
MDA - Malondialdehyde
MgCl₂ - Magnesium chloride
MM - Melanocyte Macrophage
MMCs - Melanocyte-Macrophage Centres
MN - Micronucleus
MTT - Methyl Thiazol Tetrazolium
Na⁺ - Sodium ion
Na⁺-K⁺ ATPase - Na⁺-K⁺ dependent Adenosine Triphosphatase
NaCl - Sodium chloride
NADH - Nicotinamide Adenosine Dinucleotide (reduced)
NADPH - Nicotinamide Adenosine Dinucleotide Phosphate (reduced)
NaN₃ - Sodium azide
NaOH - Sodium hydroxide
Nat - Natural curcumin
NL - Erythrocyte-nuclear length
NW - Erythrocyte-nuclear width
O$_2^-$ - Superoxide radical
PAS - Periodic Acid - Schiff's
PCs - Pavement Cells
PUFA - Poly Unsaturated Fatty Acids
RER - Rough Endoplasmic Reticulum
RNA - Ribonucleic Acid
ROS - Reactive Oxygen Species
SB - Shallow Basin
SDS-PAGE - Polyacrylamide Gel Electrophoresis
SDS - Sodium Dodecyl Sulphate
SEM - Scanning Electron Microscopy
SERCA - Sarco(endo)plasmic Reticular Calcium ATPase
SGR - Specific Growth Ratio
SOD - Superoxide Dismutase
Syn - Synthetic Curcumin
TBARS - Thiobarbituric acid Reactive Substances
TBA - Thiobarbituric acid
TBO - Toluidine Blue O
TC - Total Cholesterol
TCA - Trichloro Acetic acid
TCM - Tissue Culture Medium
TEM - Transmission Electron Microscopy
TG - Triglycerides
TLC - Thin Layer Chromatography
TTBS - Tween-Tris buffered Saline
VLDL - Very Low Density Lipoprotein
WBC - White Blood Corpuscle
WC - Wavy Convex