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LIST OF ABBREVIATIONS AND SYMBOLS

| | |
|-----------------|---|
| ACTH | Adrenocorticotropic hormone |
| AP | Activating protein |
| 5-ASA | 5-Aminosalicylic acid |
| bFGF | Basic fibroblast growth factor |
| bid | Twice a day |
| BH ₄ | Tetrahydrobiopterin |
| Bp | Base pair |
| BSA | Bovine serum albumin |
| CaM | Calmodulin |
| cAMP | Cyclic adenosine monophosphate |
| CD4 | Cluster of differentiation 4 |
| CCK | Cholecystokinin |
| CGRP | Calcitonin gene-related peptide |
| CMC | Carboxymethylcellulose |
| CINC | Cytokine-induced neutrophil chemoattractant |
| COX | Cyclooxygenase |
| DMSO | Dimethyl sulfoxide |
| DNA | Desoxiribonucleic acid |
| cDNA | Complementary desoxiribonucleic acid |
| dNTP | Deoxynucleotide triphosphate |
| DSS | Dextran sulfate sodium |
| DTT | Dithiothreitol |
| ECL | Enterochromaffin-like |
| EDTA | Ethylenediaminetetraacetic acid |
| EGF | Epidermal growth factor |
| EtOAc | Ethyl acetate |
| FAD | Flavin adenine dinucleotide |
| FBS | Fetal bovine serum |

LIST OF ABBREVIATIONS AND SYMBOLS (CONTINUED)

| | |
|---------------------------------------|---|
| FMN | Flavin mononucleotide |
| g | Gram |
| GSH | Reduced glutathione |
| h | Hour |
| HBSS | Hank's balanced salt solution |
| H&E | Hematoxylin and Eosin |
| HGF | Hepatocyte growth factor |
| HI | Healing index |
| HIV | Human immunodeficiency virus |
| H ⁺ K ⁺ -ATPase | Hydrogen-potassium ion adenosine triphosphate |
| H ₂ O ₂ | Hydrogen peroxide |
| HOCl | Hypochlorous |
| HRP-conjugate | Horseradish peroxidase-conjugate |
| <i>i.d.</i> | Intraduodenal injection |
| IgA | Immunoglobulin A |
| IgG | Immunoglobulin G |
| <i>i.j.</i> | Intrajejunal injection |
| I-κB | Inhibitory protein kappa |
| IKK | IκB kinase |
| IL | Interleukin |
| IL-1ra | Interleukin-1 receptor |
| <i>i.p.</i> | Intraperitoneal injection |
| kg | Kilogram |
| KGF | Keratinocyte growth factor |
| L | Litre |
| LPS | Lipopolysaccharide |
| LTs | Leukotrienes |
| M | Molar |

LIST OF ABBREVIATIONS AND SYMBOLS (CONTINUED)

| | |
|------------------------------|---|
| mg | Milligram |
| min | Minute |
| ml | Millilitre |
| mm | Millimetre |
| mM | Millimolar |
| m.p | Melting point |
| MPO | Myeloperoxidase |
| MRI | Mucosal regeneration index |
| NADH | Reduced form of nicotinamide adenine dinucleotide |
| NADPH | Reduced form of nicotinamide-adenine dinucleotide phosphate |
| NSAIDs | Non-steroidal anti-inflammatory drugs |
| NF- κ B | Nuclear factor kappa B |
| NO | Nitric Oxide |
| NO ₂ [·] | Nitrogen dioxide |
| NOS | Nitric oxide synthase |
| cNOS | Constitutive nitric oxide synthase |
| eNOS | Endothelial nitric oxide synthase |
| iNOS | Inducible nitric oxide synthase |
| nNOS | Neural nitric oxide synthase |
| O ₂ ^{·-} | Superoxide anion |
| od | Once a day |
| OH [·] | Hydroxyl radical |
| OONO [·] | Peroxynitrite |
| PBS | Phosphate buffer saline |
| PGs | Prostaglandins |
| PGL ₂ | Prostacyclin |
| PKC | Protein kinase C |
| PMSF | Phenylmethylsulfonylfluoride |

LIST OF ABBREVIATIONS AND SYMBOLS (CONTINUED)

| | |
|---------------|---|
| <i>p.o.</i> | Per oral |
| RNA | Ribonucleic acid |
| mRNA | Messenger ribonucleic acid |
| r RNA | Ribosomal ribonucleic acid |
| ROS | Reactive oxygen species |
| RSNO | S-nitrosothiols |
| RT-PCR | Reverse-transcribed polymerase chain reaction |
| <i>s.c.</i> | Subcutaneous injection |
| SDS | Sodium dodecyl sulphate |
| SEM | Standard error of mean |
| SH- | Sulfhydryl bond |
| SLPI | Secretory leukocyte proteinase inhibitor |
| SOD | Superoxide dismutase |
| SST | Somatostatin |
| TBS-T | Tris-buffer saline-Tween 20 |
| TGF- α | Transforming growth factor alpha |
| TGF- β | Transforming growth factor beta |
| Th1 | T helper cell type 1 |
| TNBS | Hapten 2,4,6-trinitrobenzene sulphonic acid |
| TNF | Tumor necrosis factor |
| TXA | Thromboxane A |
| μ Eq | Microequivalence |
| μ g | Microgram |
| μ m | Micrometre |
| μ M | Micromolar |
| UI | Ulcer index |
| VIP | Vasoactive intestinal polypeptide |
| wt/vol | Weight by volume |

LIST OF ABBREVIATIONS AND SYMBOLS (CONTINUED)

w/w

Weight by weight