

# LIST OF ABBREVIATIONS

|       |                                          |
|-------|------------------------------------------|
| Ab    | Antibody                                 |
| AI    | adhesion inhibition                      |
| AJ    | adherence junctions                      |
| bp    | Base pair                                |
| BSH   | bile-salt hydrolyses                     |
| CD    | Crohn's disease                          |
| cDNA  | Complementary DNA                        |
| CFU   | colony forming unit                      |
| CI    | competitive inhibition                   |
| Ct    | cycle threshold                          |
| DDBJ  | DNA Data Bank of Japan                   |
| DEPC  | Diethyl pyrocarbonate                    |
| DI    | displacement inhibition                  |
| DMEM  | Dulbecco's modified Eagle's medium       |
| DNA   | Deoxyribonucleic acid                    |
| dNTPs | 2'-deoxynucleotide-5'triphosphates       |
| DPBS  | Dulbecco's phosphate buffer saline       |
| DSS   | Dextran Sodium Sulphate                  |
| EDTA  | Ethylene-diamine tetra acetic acid       |
| EF-Tu | Elongation factor-thermo unstable        |
| EPEC  | Enteropathogenic <i>E. coli</i>          |
| EPS   | Exopolysaccharides                       |
| FBS   | Fetal bovine serum                       |
| FITC  | Fluorescein isothiocyanate               |
| GAPDH | Glyceraldehyde 3-phosphate dehydrogenase |
| GIT   | Gastrointestinal tract                   |
| IBD   | Inflammatory bowel disease               |

|                |                                                  |
|----------------|--------------------------------------------------|
| IEC            | Intestinal epithelial cells                      |
| IFN            | Interferon                                       |
| Ig             | Immunoglobulin                                   |
| IL             | Interleukin                                      |
| JAM            | Junction adhesion molecule                       |
| KDa            | Kilo Dalton                                      |
| LAB            | Lactic acid bacteria                             |
| LB             | Luria broth                                      |
| LGG            | <i>Lactobacillus rhamnosus</i> GG                |
| LPS            | Lipopolysaccharide                               |
| LRM            | Low range DNA molecular weight ruler             |
| LTA            | Lipoteichoic acid                                |
| M              | Molar                                            |
| MAPK           | Mitogen-activated protein kinases                |
| MLCK           | Myosin light chain kinases                       |
| mRNA           | Messenger RNA                                    |
| MRS            | de Man, Rogosa and Sharpe                        |
| Mub            | Mucus-binding protein                            |
| NF- $\kappa$ B | Nuclear factor $\kappa$ B                        |
| PBS            | Phosphate buffer saline                          |
| PCR            | Polymerase chain reaction                        |
| PKC            | Protein kinase C                                 |
| qRT-PCR        | Quantitative real-time polymerase chain reaction |
| RNA            | Ribonucleic acid                                 |
| rpm            | Revolutions per minute                           |
| rRNA           | Ribosomal RNA                                    |
| SD             | Standard deviations                              |
| Taq            | <i>Thermus aquaticus</i>                         |
| TBE            | Tris-Borate EDTA                                 |

|      |                                       |
|------|---------------------------------------|
| TEER | Transepithelial electrical resistance |
| TGF  | Transforming growth factor            |
| TJ   | Tight junction                        |
| TLRs | Toll-like receptors                   |
| TNBS | 2, 4, 6-trinitrobenzenesulfonic acid  |
| TNF  | Tumor necrosis factor                 |
| UC   | Ulcerative colitis                    |
| ZO   | Zonula occludens                      |