
LIST OF ABBREVIATIONS

3D	Three-dimensional
APC	Antigen presenting cell
BCR	B-cell receptor
BfR	Bundesinstitut für Risikobewertung/Federal Institute for Risk Assessment
BLAST	Basic local alignment and search tool
bp	Base pairs
BSA	Bovine serum albumin
CC	Chemokine
CD	Cluster of differentiation
cDNA	Complementary DNA
COX	Cyclooxygenase
CPE	Cytopathic effect
Ct	Cycle threshold
DAAD	Deutscher Akademischer Austausch Dienst/German Academic Exchange Service
DCs	Dendritic cells
DFG	Deutscher Forschungsgemeinschaft/German Research Foundation
DMEM	Dulbecco's modified Eagle medium
DMP	Dimethylaminomethyl phenol
DMSO	Dimethylsulfoxide
DNA	Deoxyribonucleic acid
DNase	Deoxyribonuclease
dNTP	2'-deoxynucleoside 5'-triphosphate
DTT	Dithiothreitol
EC	European Commission
ECM	Extracellular matrix
EDTA	Ethylenediaminetetraacetic acid
ER	Endoplasmic reticulum
ERK	Extracellular signal-regulated kinase
DT	Definitive type
dT	Dinucleotide

FACS	Fluorescence-activated cell sorter
FAE	Follicle associated epithelium
FCS	Fetal calf serum
FITC	Fluorescein isothiocyanate
FS	Forward light scatter
x g	Gravity (measurement of centrifugal force)
GFP	Green fluorescent protein
GIC	Golgi intermediate compartments
GIT	Gastrointestinal tract
GTP	Guaninnucleotide-binding
h/hrs	Hour(s)
HBSS	Hanks balanced salt solution
HIV	Human immunodeficiency virus
IEC	Intestinal epithelial cells
IEL	Intestinal epithelial cells
IFN- γ	Interferon gamma
Ig	Immunoglobulin
IL	Interleukin
iNOS	Inducible nitric oxide synthase
IPEC	Intestinal epithelial cell line
KD/kd	Killo dalton
Kg	Killo gram
L (l)	Liter
LAB	Lactic acid bacteria
LP	Lamina propria
LPL	Lamina propria lymphocytes
LPS	Lipopolysaccharide
LR	<i>Lactobacillus reuteri</i>
M	Molar
m	Molal
M-cell	Microfold (membranous) cell
MACS	Magnetic activated cell sorting
MALT	Mucosa associated lymphoid tissue
MCs	Mast cells

Mg	Milli gram
MHC	Major Histocompatibility Complex
min	Minute(s)
ml	Millilitre
mM	Milli Molar
MNA	Methyl Nadic Anhydride
MMLV	Moloney-murine Leukemia virus
mRNA	Messenger RNA
MRP	Multidrug-Resistance-associated protein
MS	Magnetic sorting
MTT	Methyl-thiazol-diphenyltetrazolium bromide
N	Number
NADPH	Nicotinamide adenine dinucleotide phosphate oxidase (Phox)
NCBI	National centre for Biotechnology information
NCIMB	The National Collection of Industrial, Marine and Food Bacteria
NF- κ B	Nuclear factor kappa B
ng	Nanogram
NK	Natural killer
nm	Nano meter
NO	Nitric oxide
NOS	Nitric oxide synthase
OIE	The World Organisation for Animal Health
PBMC	Peripheral blood mononuclear cells
PBS	Phosphate buffered saline
PCR	Polymerase chain reaction
PE	Phycoerythrin
PECAM	Platelet/endothelial cell adhesion molecule
PG	Prostaglandin
PGE	Prostaglandin E
PI	Propidium iodide
p.i.	Post infection
pIgR	Polymeric Ig receptor
PKA	Protein kinase A
PP	Peyer's patches
p.p.	Post-partum

PPL	Peyer's patches lymphocytes
PRRs	Pattern recognition receptors
qRT-PCR	Quantitative real time PCR
ra	Receptor antagonist
RER	Rough endoplasmic reticulum
ROI	Reactive oxygen intermediate
RNA	Ribonucleic acid
Rnase	Ribonuclease
RNIs	Reactive nitrogen intermediates
rpm	Revolutions per minute
RPMI	Roswell Park Memorial Institute
rRNA	Ribosomal RNA
RT	Room temperature
RT-PCR	Reverse transcription PCR
SD	Standard deviation
SER	Smooth endoplasmic reticulum
sIgA	Secretory immunoglobulin A
SPI	<i>Salmonella</i> pathogenicity island
SS	Side light scatter
ST	<i>Salmonella typhimurium</i>
TAE	Tris-acetate-EDTA
TCID	Tissue Culture Infectious Dose
TCR	T-cell receptor
TE	Tris-EDTA
TGE	Transmissible gastroenteritis
TGEV	Transmissible gastroenteritis virus
TGF	Transforming growth factor
Th cell	T helper cell
TLRs	Toll-like receptors
Tr	Regulatory T-cells
TNF	Tumour necrosis factor
UV	Ultraviolet
VWF	Von Willebrand factor