

## 6 Abbreviations

### **Abbreviation**

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#### **Viruses**

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BCoV	Bovine coronavirus
BtCoV	Bat coronavirus
CMV	Cytomegalovirus
FIPV	Feline Infectious Peritonitis Virus
HCoV-HKU1	Human coronavirus HKU1
HCoV-NL63	Human coronavirus NL63
HCoV-229E	Human coronavirus 229E
HCoV-OC43	Human coronavirus OC43
HIV	Human Immunodeficiency Virus
IBV	Infectious Bronchitis Virus
MHV	Murine Hepatitis Virus
PEDV	Porcine Epidemic Diarrhea Virus
SARS-CoV	SARS coronavirus
SL-CoV	SARS-like coronavirus
TGEV	Transmissible Gastroenteritis Virus

#### **Others**

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A	Adenine
aa	Amino acid
ACE2	Angiotensin converting enzyme 2
Act	Actin
AMC	Academic Medical Center
Anti-M	Antiserum against M protein
Anti-N	Antiserum against N protein
Anti-ORF3	Antiserum against ORF3 protein
APS	Ammoniumperoxodisulfate
Aqua dest.	Water (distilled by Millipore)
Aqua mol.	Water (molecular grade)
ATCC	American Tissue and Cell Culture Collection
BK	BestKeeper
Bp	Base pair
BSA	Bovine serum albumin
C	Cytosine
cDNA	Complementary (copy) DNA
CEA	Carcinogenic embryonic antigen
Charité	Charité University Hospital Berlin
CIP	Calf intestine alkaline phosphatase
cLSM	Confocal laser scanning microscope
CMC	Carboxymethyl-cellulose sodium salt
Co-IP	Co-immunoprecipitation
CoV	Coronavirus

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CPE	Cytopathogenic effect
C <sub>T</sub>	Threshold cycle
C-terminus	Carboxyl-terminus
Cy3	Cyanine-3
Cy5	Cyanine-5
Cys	Cysteine
°C	Degree Celsius
d	Day
DC-SIGN	Dendritic cell specific ICAM-3-grabbing non-integrin
ddNTP	Didesoxynucleoside triphosphate
dNTP	Desoxynucleoside triphosphate
DMEM	Dulbecco's Modified Eagles Medium
DMSO	Dimethylsulfoxid
DNA	Desoxyribonucleic acid
do	Donkey
dpi	Days post infection
DRC	Democratic Republic of Congo
DTT	Dithiothreolin
<i>E. coli</i>	<i>Escherichia coli</i>
e.g.	<i>Exempli gratia</i> (for example)
E protein	Envelope protein
ECACC	European Collection of Cell Cultures
EDTA	Ethylendiamine tetraacetic acid
EGFP	Enhanced green fluorescent protein
ELISA	Enzyme-linked immunosorbent assay
Endo H	Endoglycosidase H
ER	Endoplasmatic reticulum
ER buffer	Endotoxin removal buffer
ERGIC	ER-Golgi intermediate compartment
FACS	Fluorescent activated cell sorter
Fc	Conserved part of an antibody
FCS	Fetal calf serum
Fig.	Figure
FITC	Fluorescein isothiocyanate
g	Gramme
G	Guanine
(x) g	Centrifugal force (9.81 m/s <sup>2</sup> )
G6P	Glucose 6-phosphate dehydrogenase
GAPDH	Glyceraldehyde 3-phosphate dehydrogenase
ge	Genome equivalent
GFP	Green fluorescent protein
g mRNA	Genomic mRNA
go	Goat
h	Hour
h.c.	Heavy chain
HCoV	Human coronavirus
HE	Hemagglutinin esterase

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His	Histidine
HR	Heptad repeat region
HRP	Horseradish peroxidase
IC	Intermediate Compartment
ID	Identification
i.e.	<i>Id est</i> (that is)
IFA	Immunofluorescence assay
IIFT	Indirect Immunofluorescence test
IP	Immunoprecipitation
IPTG	Isopropyl $\beta$ -D-thiogalactosidase
kb	Kilo base
kDa	Kilo Dalton
KLH	Keyhole limpet hemocyanin
L	Liter
l.c.	Light chain
L13	Ribosomal protein L13
lacI repressor	Lactose repressor
LB medium	Luria Bertani Medium
M	Molar
M protein	Membrane protein
mAb	Monoclonal antibody
mA	Milli ampère
MCS	Multiple cloning site
ME	$\beta$ -mercaptoethanol
MESB	$\beta$ -mercaptoethanol sample buffer
MGB	Minor groove binder
min	Minute
mL	Milliliter
mM	Millimolar
MOI	Multiplicity of infection
MOPS	(3-[N-Morpholino] propane-sulfonic acid)
mRNA	Messenger RNA
mu	Murine/mouse
$\mu$ g	Microgram
$\mu$ L	Microliter
n	Amount
N protein	Nucleocapsid protein
n.d.	Not done
N-glycosylation	Through N-Acetylglucosamine glycosylated asparagine
NICD	National Institute of Communicable Diseases
Ni-NTA column	Nickel nitrilotriacetic acid column
nm	Nanometer
NSP	Non-structural protein
nt	Nucleotide
N-terminus	Amino-terminus
OD	Optical density
O-glycosylation	Through N-Acetylgalactosamine glycosylated serine or threonine

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ORF	Open reading frame
ORF3 protein	Open reading frame 3 protein
PAA	Polyacrylamide
pAb	Polyclonal antibody
PBMC	Peripheral blood mononuclear cells
PBS	Phosphate buffered saline
PCMV	Eukaryotic CMV promotor
PCR	Polymerase chain reaction
PFA	Paraformaldehyde
PFU	Plaque forming units
pH	<i>Potentia hydrogenii</i> (concentration of hydrogen ions in solutions)
pi	Post infection
pI	Isoelectric point
PI	Propidium iodide
PLA	Phospholipase A2
PPI	Peptidyl prolyl isomerase A
PVDF	Polyvinylidenefluoride
rb	Rabbit
RBS	Ribosomal binding site
RFS	Ribosomal frame shift
RIPA	Radioactive immunoprecipitation assay
RKI	Robert Koch-Institut
RNA	Ribonucleic acid
RPII	RNA polymerase II
rpm	Revolutions per minute
RPMI 1640	Roswell Park Memorial Institute (cell culture medium)
RSA	Republic of South Africa
RT	Reverse transcriptase
s	Second
S protein	Spike protein
SARS	Severe acute respiratory syndrome
SD	Standard deviation
SDS	Sodium dodecylsulfate
SDS-PAGE	SDS-polyacrylamide gel electrophoresis
sg mRNA	Subgenomic mRNA
SL-CoV	SARS-like coronavirus
S.O.B.	Super optimal broth
S.O.C.	Super optimal broth with catabolite repression (by added glucose)
SS	Silver staining
SV40	Simian Virus 40
T	Thymine
TAE buffer	Tris acetate EDTA buffer
TBE buffer	Tris borate EDTA buffer
TBP	Tata Box binding protein
TEMED	N,N,N',N'-tetramethyl ethylenediamine
TE buffer	Tris EDTA buffer
TM	Transmembrane domain

Tm	Melting temperature
TMB	Tetramethylbenzidine
TOPO	Topoisomerase
Tris	Tris hydroxymethyl aminomethane
TRS	Transcription regulating sequence
Tub	$\alpha$ -tubulin
U	Uracil
UTR	Untranslated region
V	Volts
VLP	Virus like particles
VNT	Virus neutralization test
w/v	Weight per volume
WB	Western blot
WHO	World Health Organisation
$\beta$ 2M	$\beta$ 2-microglobulin