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**TRIAL FOR PREPARATION OF BIVALENT OIL
ADJUVANT FMD VACCINE.**

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LIST OF ABBREVIATIONS

AEI	Acetylenimine
Al(OH)₃	Aluminum hydroxide
AS	Aluminum hydroxide gel-Saponin
AWB	Amplified Western Blot assay
BE	Binary ethylenimine
BEI	Binary ethylenimine
BHK₂₁	Baby hamster Kidney cell Clone 21
BTT	Bovine Tongue Tissue
C_{pro}	Cleavage Proteinase
CD	Cellular Debris
CD	Cellular Debris
CD4⁺, CD4⁺ b, CD4⁺	Cluster of differentiation
cDNA	Complementary DNA
CF	Cystic Fibrosis
CFA	Complete Freund's Adjuvant
CFT	Complement Fixation Test
CMI	Cell Mediated Immune response
COX-2	Cyclooxygenase-2
CPE	Cytopathic Effect
CTL	Cytotoxic T-Lymphocyte
CY	Cyclophosphamide
D.W.	Distilled Water

DDW	Double Distilled Water
Dex	Dexamethasone
DHS	Delayed Hypersensitivity
DNA	Deoxyribonucleic Acid
DOE	Double Oil Emulsion
dpv	Day post vaccination
DTH	Delayed Type Hypersensitivity
ELISA	Enzyme linked immuno-sorbant assay

EOC	Epithelial Ovarian Cancer
EU	European Union
FMD	Foot and Mouth Disease
FMDV	Foot and Mouth Disease Virus
GPP₅₀	Guinea Pigs Protective Dose Fifty
GRAS	Generally Regarded As Safe
GS	Panax Ginseng
GSS	Ginsenosides
H₂O₂	Hydrogen peroxide
I/P	Intraperitoneal
IBRS-2	Instituto Biologico Rim Sunio
ID	Intradermal
ID₅₀	Infective Dose Fifty
IFA	Incomplete Freund's Adjuvant
IFN	Interferon
IG	Immunoglobulin
Ig	Immunoglobulin
IgG	immunoglobulin-G
IL	Interleukin
IM	Intramuscular
IMS	Immunosol
iNOS	Inducible Nitric Oxide Synthetase
kDa	Kilo Dalton

L^{pro}	Leader Proteinase
LD₅₀	Lethal dose fifty
LP ELISA	Liquid Phase Blocking Sandwich ELISA
LPB ELISA	Liquid Phase Blocking Sandwich ELISA
LPBE	Liquid Phase Blocking Sandwich ELISA
LPE	Liquid Phase Blocking Sandwich ELISA
M	Molar
μl	Micro Liter
mm	Millimicron
MAb	Monoclonal Antibody
MEM	Minimum essential media
MEM	Modified Eagle's Medium
mg	milligram
MHC	Major Histocompatibility Complex
MLD₅₀	Mice lethal dose 50
MPT	Mouse Protection Test
MPT	Micro Plate Test
MTS	Mitochondrial Staining Reagent (tetrazolium)
MVPK	Mengeling-Vaughn Porcine Kidney
MW	Molecular Weight
NaCl	Sodium chloride
NK	Natural Killer-cell activity
NO	Nitric Oxide
NS	Non-Structural
NSP	Non-Structural Protein
NSPs	Non-Structural Proteins
O/W	Oil-in-Water
OD	Optical density
OIE	Office International des Epizooties
OIE	Office International des Epizooties

OPD	Orthophenyldiamine
ORF	Open Reading Frame
OVA	Ovalbumin
PBL	Peripheral blood leukocyte
PBMC	Peripheral Blood Mononuclear Cells
PBS	Phosphate buffer saline
PD₅₀	Protective dose fifty
PMNs	Polymorphonuclear Leukocytes
PBS	Phosphate Buffer Saline
PBS-BAL	Phosphate Buffer Saline-Bovine Albumin
PEDF	Pigment Epithelium-Derived Factor
PEG	Polyethylene glycol
PGM	Peptidoglycan Monomer
PMN	Polymorphonuclear Leukocyte
PMNL	Polymorphonuclear Leucocytes
PNS	Panax Notoginseng Saponins
PPT	Protopanaxatriol
pSINCP	Sindbis virus-derived plasmid replicon
RH	Relative Humidity
RNA	Ribonucleic Acid
RNAP	RNA Polymerase
rpm	Revolution per minute
RPMI-1640	Rowser Park Memorial Institute, 1640
RT-PCR	Reverse-Transcriptase-Polymerase Chain Reaction
SAT	South Africa Territories
SN	Serum Neutralization
SNT	Serum neutralization test
T₄-S-GPDS	T ₄ bacteriophage nanoparticle surface gene-protein display system
TCID₅₀	Tissue culture infected dose fifty

Th	T -helper lymphocyte
TNF-alpha	Tumor Necrosis Factor-Alpha
USA	United States of America
VIA	Virus infected associated
VN	Virus neutralization
VNT	Virus neutralization test
VP	Viral protein
VSVRI	Veterinary serum and vaccine research institute
W/O	Water in Oil
W/O/W	Water in Oil in Water
wpv	Week post vaccination
WRL	World reference laboratory of foot and mouth disease