

Field Name	Field Contents			
HBEpC	Human bronchial epithelial cells - cells derived from the human lung tissues. The bronchial epithelium is a complex structure involving goblet, ciliated, and basal cells			
H1N1(WSN)	Influenza virus A/ WSN/33 virus strain derived from the WS/33 that does not require trypsin.			
H9N1 (1P10)	Influenza virus A is a aerosol forming influenza virus			
H9N1(1WF10)	Influenza virus A is non-aerosol forming influenza virus			
RT-PCR	Real time Polymerase chain reaction used for the detection of RNA.			
PBS	Phosphate buffered saline pH 7			
MOI	Multiplicity of infection (MOI) is referring to the number of virions that are added per cell during infection			
Ct	Cycle threshold values, the number of cycles required for the fluorescent signal to cross the threshold.			
Pg/ml	Picogram/milliliter; concentration of specific protein per volume of liquid.			
AGO	Argonaute-immunoprecipitation - Co-immunoprecipitation of AGO proteins with associated RNAs using argonaute 1, 2, 3, antibodies			
ISO	Immunoprecipitation using iso-antibody			
RIPA	Radioimmunoprecipitation assay buffer used for the protein lysis			
SDS-PAGE	10% SDS-polyacrylamide gels for the separation of proteins			
Fold Change	It is a measure describing how much a quantity changes between a control and a treatment group. Fold change values less than one (the control sample) indicate a downregulation of expression and the fold downregulated is the negative inverse of the fold change. Fold change values greater than one (the control sample) indicate the fold upregulation of expression.			
Transfection	The process of artificially introducing nucleic acids (DNA or RNA) into cells, utilizing lipofectamine (lipid mediated). Such introductions of foreign nucleic acid using various chemical, biological, or physical methods can result in a change of the properties of the cell, allowing the study of gene function and protein expression in the context of the cell.			
Gene expression	Transfection is performed to express a protein of interest in cultured cells.			
microRNA	A microRNA (miRNA) is a small single-stranded non-coding RNA molecule (containing about 22 nucleotides).			
Mock	Mock infected cells			
Power analysis	p = 0.05, Number of samples 95% confidence			
Control -1	Control mock infected, experiment in duplicate done on day1			
Control -2	Control mock infected, experiment in duplicate done on day2			
Control -3	Control mock infected, experiment in duplicate done on day3			

T1	Cells infected with influenza virus H1N1 or H9N1, experiment done in duplicate on day 1			
T2	Cells infected with influenza virus H1N1 or H9N1, experiment done in duplicate on day 2			
T3	Cells infected with influenza virus H1N1 or H9N1, experiment done in duplicate on day 3			
SCR-Mimic	Scrambled control mimic treated HBEpCs showing gene expression in fold change			
Mimic	Mimic sequences of miRNA treated HBEpCs showing gene expression in fold change			
SCR-Inhibitor	Scrambled control inhibitor treated HBEpCs showing gene expression in fold change			
Inhibitor	Inhibitor sequences of miRNA treated HBEpCs showing gene expression in fold change			
WSN-1	Influenza virus H1N1 sample 1			
WSN-2	Influenza virus H1N1 sample 2			
WSN-3	Influenza virus H1N1 sample 3			
ND	Not detected			
1WF10-1	Influenza virus H9N1 (1WF10) sample 1			
1WF10-2	Influenza virus H9N1 (1WF10) sample 2			
1WF10-3	Influenza virus H9N1 (1WF10) sample 3			
IP10-1	Influenza virus H9N1 (1P10) sample 1			
IP10-2	Influenza virus H9N1 (1P10) sample 2			
IP10-3	Influenza virus H9N1 (1P10) sample 3			
Mock-1	Mock infected control sample 1			
Mock-2	Mock infected control sample 2			
Mock-3	Mock infected control sample 3			
C+H1N1	Control cells infected with H1N1			
D+H1N1	Defensin plasmid overexpressing cells infected with H1N1			
Cq	quantitation cycle, basic result of a qPCR			
dCq	Normalized_dCq_values (normalizer assays mean Cq – assay Cq (sample))			
GAPDH	Glyceraldehyde-3-phosphate dehydrogenase			
HPRT1	Hypoxanthine phosphoribosyltransferase 1			
HMBS	Hydroxymethylbilane Synthase			
hBD1	Defensin beta 1 protien			
DEFB1	Defensin beta 1 gene			
BCL-XL	B-cell lymphoma-extra-large, encoded by the BCL2-L1 gene			
Non-HOX	Non-homeobox			
TBP	TATA box binding protein			
PGK1	Phosphoglycerate Kinase 1			
UBC	Ubiquitin C			

PPIA	Peptidylprolyl Isomerase A			
ARNT	Aryl hydrocarbon receptor nuclear translocator			
ATF1	Activating transcription factor 1			
ATF2	Activating transcription factor 2			
ATF3	Activating transcription factor 3			
ATF4	Activating transcription factor 4 (tax-responsive enhancer element B67)			
CEBPA	CCAAT/enhancer binding protein (C/EBP), alpha			
CEBPB	CCAAT/enhancer binding protein (C/EBP), beta			
CEBPG	CCAAT/enhancer binding protein (C/EBP), gamma			
CREB1	CAMP responsive element binding protein 1			
CREBBP	CREB binding protein			
CTNNB1	Catenin (cadherin-associated protein), beta 1, 88kDa			
DR1	Down-regulator of transcription 1, TBP-binding (negative cofactor 2)			
E2F1	E2F transcription factor 1			
E2F6	E2F transcription factor 6			
EGR1	Early growth response 1			
ELK1	ELK1, member of ETS oncogene family			
ESR1	Estrogen receptor 1			
ETS1	V-ets erythroblastosis virus E26 oncogene homolog 1 (avian)			
ETS2	V-Ets erythroblastosis virus E26 oncogene homolog 2 (avian)			
FOS	Fos Proto-Oncogene, AP-1 Transcription Factor Subunit			
FOXA2	Forkhead box A2			
FOXO1	Forkhead box O1			
GATA1	GATA binding protein 1 (globin transcription factor 1)			
GATA2	GATA binding protein 2			
GATA3	GATA binding protein 3			
GTF2B	General transcription factor IIB			
GTF2F1	General transcription factor IIF, polypeptide 1, 74kDa			
HAND1	Heart and neural crest derivatives expressed 1			
HAND2	Heart and neural crest derivatives expressed 2			
HDAC1	Histone deacetylase 1			
HIF1A	Hypoxia inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor)			
HNF4A	Hepatocyte nuclear factor 4, alpha			
HOXA5	Homeobox A5			
HSF1	Heat shock transcription factor 1			
ID1	Inhibitor of DNA binding 1, dominant negative helix-loop-helix protein			
IRF1	Interferon regulatory factor 1			

JUN	Jun proto-oncogene			
JUNB	Jun B proto-oncogene			
MAX	MYC associated factor X			
MEF2A	Myocyte enhancer factor 2A			
MEF2B	Myocyte enhancer factor 2B			
MEF2C	Myocyte enhancer factor 2C			
NFAT5	Nuclear factor of activated T-cells 5, tonicity-responsive			
NFATC1	Nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 1			
NFATC2	Nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2			
NFATC3	Nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 3			
NFATC4	Nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 4			
NFKB1	Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1			
NFYB	Nuclear transcription factor Y, beta			
NR3C1	Nuclear receptor subfamily 3, group C, member 1 (glucocorticoid receptor)			
PPARA	Peroxisome proliferator-activated receptor alpha			
PPARG	Peroxisome proliferator-activated receptor gamma			
RB1	Retinoblastoma 1			
REL	REL V-rel reticuloendotheliosis viral oncogene homolog			
RELA	V-rel reticuloendotheliosis viral oncogene homolog A			
RELB	RELB V-rel reticuloendotheliosis viral oncogene homolog B			
SMAD1	SMAD family member 1			
SMAD4	SMAD family member 4			
SMAD5	SMAD family member 5			
SMAD9	SMAD family member 9			
SP1	Sp1 transcription factor			
SP3	Sp3 transcription factor			
STAT1	Signal transducer and activator of transcription 1, 91kDa			
STAT2	Signal transducer and activator of transcription 2, 113kDa			
STAT3	Signal transducer and activator of transcription 3 (acute-phase response factor)			
STAT4	Signal transducer and activator of transcription 4			
STAT5A	Signal transducer and activator of transcription 5A			
STAT5B	Signal transducer and activator of transcription 5B			
STAT6	STAT6 Signal transducer and activator of transcription 6			
TBP	TATA box binding protein			
HNF1A	HNF1 Homeobox A			

TCF7L2	Transcription Factor 7 Like 2			
TFAP2A	Transcription factor AP-2 alpha (activating enhancer binding protein 2 alpha)			
TGIF1	TGFB-induced factor homeobox 1			
TP53	Tumor protein p53			