Supplementary Table 1. List of early genes induced after 2 h HK bacteria treatment of IPEC-J2 cells, and their association to biological processes and KEGG pathways.

	GO biological processes																		KEGG pathways						
gene symbol	acute inflammatory response GO:0002526	cell activation GO:0001775	cell migration GO:0016477	chemotaxis GO:0006935	cytokine production GO:0001816	defense response GO:0006952	immune response GO:0006955	inflammatory response GO:0006954	JAK-STAT cascade GO:0007259	regulation of cell death GO:0010941	regulation of cell proliferation GO:0042127	regulation of response to stress GO:0080134	response to bacterium GO:0009617	response to cytokine GO:0034097	response to virus GO:0009615	response to wounding GO:0009611	tissue remodeling GO:0048771	type I IFN-med. signaling pathway GO:0060337	Chemokine signaling pathway	Cytokine-cytokine receptor interaction	Cytosolic DNA-sensing pathway	Jak-STAT signaling pathway	NOD-like receptor signaling pathway	RIG-I-like receptor signaling pathway	Toll-like receptor signaling pathway
CCL2		x	x	x	x	x	x	x	x	x	x		x	x		x			x	x			x		
CCL4			x	x	x	x	x	x							x	x			x	x	x				x
CCL5	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			x	x	x		x		x
CD274		x			x		x				x														
CD40		x			x	x	x	x	x	x	x				x	x				x					x
CEBPD																									
CFLIP																									
CYP1A1													x		x	x									
CYR61			x	x						x	x					x									
GADD45A																									
HAS3																									
ICAM-1																									
IL12B		x	x		x	x	x	x	x	x	x	x	x	x	x	x	x			x		x		x	x
IL19					x		x			x										x		x			
IL23A		x	x	x	x	x	x	x	x		x	x	x		x	x	x			x		x			
IL6	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			x	x	x	x		x
IRF1		x			x	x	x		x	x	x	x		x	x	x		x							
MFSD2A																									
MYC										x	x	x				x						x			
PIAP																									
PLAU			x	x							x	x				x									
PLET																									
RHOV																									
SLC2A6																									
SOCS3						x	x		x	x		x		x				x				x			
SPP1			x	x		x		x		x		x				x	x								x
STAT5A		x			x	x	x	x	x	x	x	x		x		x	x					x			
TIPARP																									
VCAM1	x	x	x	x		x	x	x			x			x		x									

Supplementary Table 2. List of late genes induced after 24 h HK bacteria treatment of IPEC-J2 cells, and their association to biological processes and KEGG pathways.

	GO biological processes																		KEGG pathways						
gene symbol	acute inflammatory response GO:0002526	cell activation GO:0001775	cell migration GO:0016477	chemotaxis GO:0006935	cytokine production GO:0001816	defense response GO:0006952	immune response GO:0006955	inflammatory response GO:0006954	JAK-STAT cascade GO:0007259	regulation of cell death GO:0010941	regulation of cell proliferation GO:0042127	regulation of response to stress GO:0080134	response to bacterium GO:0009617	response to cytokine GO:0034097	response to virus GO:0009615	response to wounding GO:0009611	tissue remodeling GO:0048771	type I IFN-med. signaling pathway GO:0060337	Chemokine signaling pathway	Cytokine-cytokine receptor interaction	Cytosolic DNA-sensing pathway	Jak-STAT signaling pathway	NOD-like receptor signaling pathway	RIG-I-like receptor signaling pathway	Toll-like receptor signaling pathway
AFP																									
ANKRD37																									
DDIT4			x			x				x					x										
DDX58			x		x	x	x					x			x						x			x	
FETUIN																									
GDF15																									
IFIT1						x	x					x		x	x			x							
IFITM1			x			x	x				x			x	x			x							
ISG12(A)																									
MADCAM			x				x																		
MX2						x	x							x	x			x							
OASL						x	x							x	x			x							
ORM1	x					x		x								x									
PAG6																									
PPP1R3C																									

Supplementary Table 3. List of genes induced after both 2 h and 24 h HK bacteria treatment of IPEC-J2 cells, and their association to biological processes and KEGG pathways.

	GO biological processes																		KEGG pathways						
gene symbol	acute inflammatory response GO:0002526	cell activation GO:0001775	cell migration GO:0016477	chemotaxis GO:0006935	cytokine production GO:0001816	defense response GO:0006952	immune response GO:0006955	inflammatory response GO:0006954	JAK-STAT cascade GO:0007259	regulation of cell death GO:0010941	regulation of cell proliferation GO:0042127	regulation of response to stress GO:0080134	response to bacterium GO:0009617	response to cytokine GO:0034097	response to virus GO:0009615	response to wounding GO:0009611	tissue remodeling GO:0048771	type I IFN-med. signaling pathway GO:0060337	Chemokine signaling pathway	Cytokine-cytokine receptor interaction	Cytosolic DNA-sensing pathway	Jak-STAT signaling pathway	NOD-like receptor signaling pathway	RIG-I-like receptor signaling pathway	Toll-like receptor signaling pathway
AMCF-II																									
C3	x				x	x	x	x				x				x									
CCL20				x		x	x	x					x			x			x	x					
CHI3L1					x	x		x						x		x									
CSF2		x			x		x		x	x	x		x							x		x			
CXCL10			x	x		x	x	x			x		x		x	x			x	x	x			x	x
CXCL2	x		x	x		x	x	x					x			x			x	x			x		
CYP3A29																									
CYP3A46																									
IL1A	x				x	x	x	x		x	x	x		x		x				x					
IL8		x	x	x		x	x	x			x		x	x		x			x	x			x	x	x
LTB					x		x													x					
NFKBIA					x	x	x			x	x	x	x						x		x		x	x	x
PGLYRP2		x			x	x	x					x	x												
RGS4																									
S100A8	x		x	x	x	x	x	x		x		x	x			x									
S100A9			x	x	x	x	x	x		x		x	x			x									
SAA2	x					x		x								x									