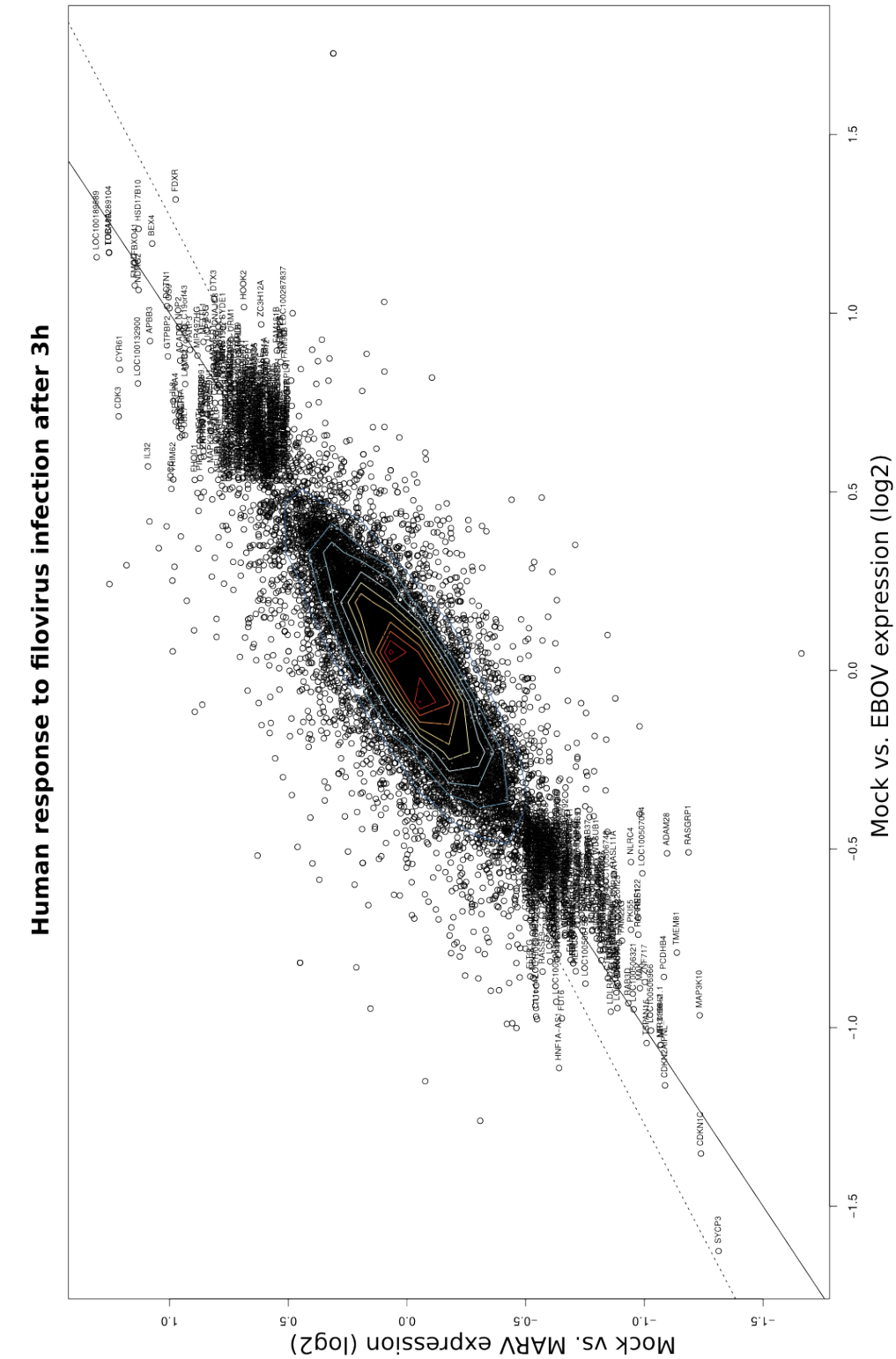
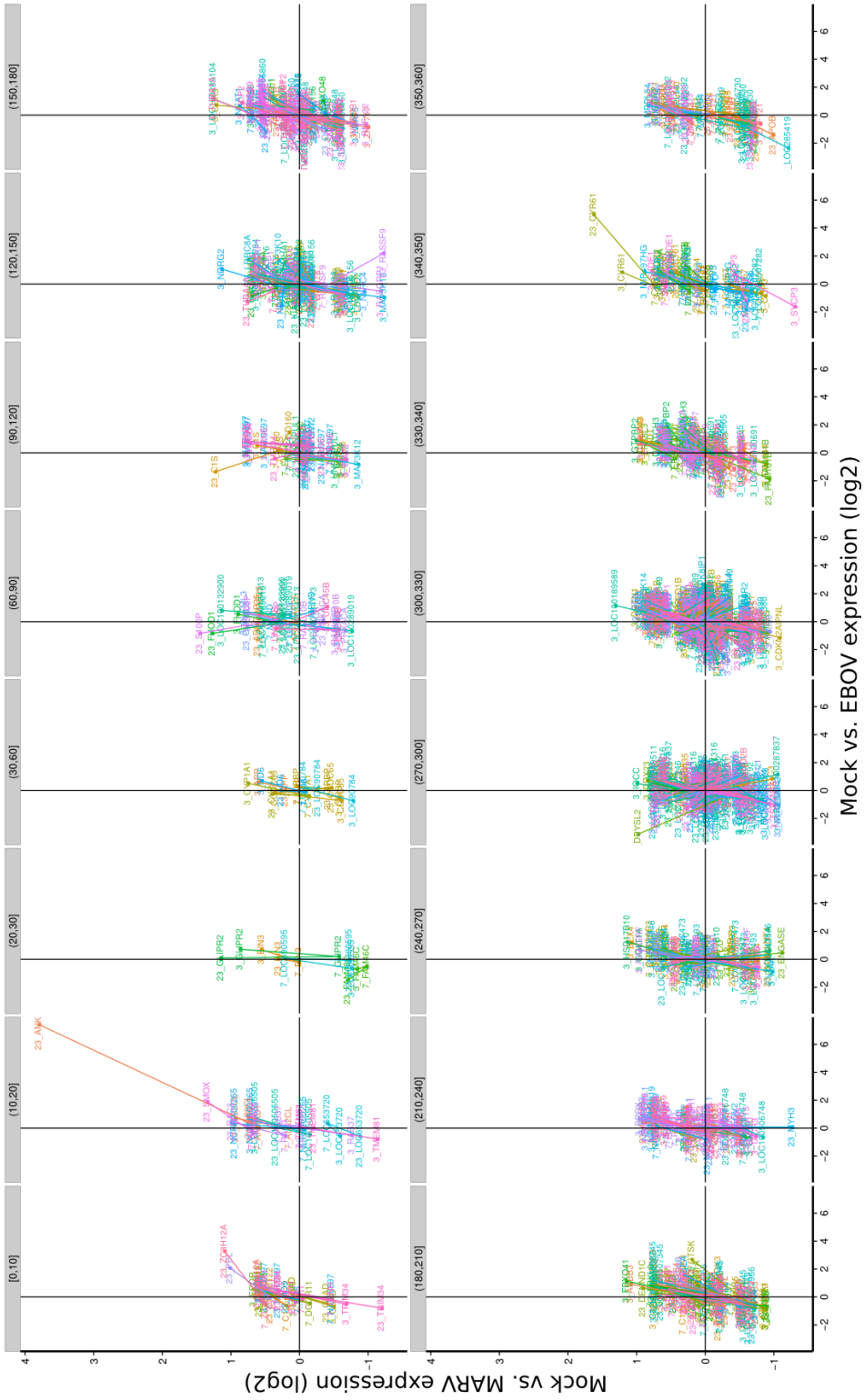
Scatterplot



Supplementary Figure 1: Scatterplot showing the $\log_2$ expression fold changes of coding and non-coding RNAs in human cells 3 h after EBOV and MARV infection, respectively. Outliers are labeld.

Groupplot



Supplementary Figure 2: **Timeseries human 3h p.i. with EBOV or MARV.** Human genes that have a similar or approximately time-course with respect to their differential expression are grouped. The angle defined by the differential expression 3 h p.i. was used for the grouping.

Supplementary Table 1: : **Common features of filovirus infection.** To compare the differential expression of Mock/EBOV and Mock/MARV in human and bat cells, log2 fold changes as computed by `DEseq` were visualized using scatter plots. Outliers (highly up-/down-regulated genes during both, EBOV and MARV infection in human and bat cells) were collected and further investigated based on the different scatter plots (see electronical Supplement) and listed here with their function. If publications concerning the immune response and/or viruses could be found for a gene, the corresponding `Pubmed` identifiers (PMID) were additionally listed. bold – interesting outliers with known relation to the immune response and/or viruses.

Gene	Function	PMID
	Human up-regulated 3 h p.i.	
FDXR	Ferredoxin reductase; mitochondrial flavoprotein; initiates electron transport for cytochromes P450 receiving electrons from NADPH	
BEX4	Nerve Growth Factor Receptor-Associated Protein	
NDRG2	belongs to the alpha/beta hydrolase superfamily; may play a role in neurite outgrowth; may be involved in glioblastoma carcinogenesis	24383128
CYR61	**matricellular protein; *CYR61* is highly expressed at sites of inflammation and wound repair, and is associated with diseases involving chronic inflammation and tissue injury; wound healing and fibrosis**	15890942 22129992
CDK3	cyclin-dependent kinase; involved in cell cycle control; promotes entry into S phase and promote exit from G0	21067790
IL32	**Interleukin 32; cytokine that may play a role in innate and adaptive immune responses; related to many viruses**	24553842 24579465 20889550
TUBA1A	tubulin; found in morphologically differentiated neurologic cells	
HSD17B10	Hydroxysteroid (17-Beta) Dehydrogenase 10; functions in mitochondrial tRNA maturation; it may contribute to the neuronal dysfunction associated with Alzheimer disease	18984158 9338779
APBB3	member of the APBB protein family; binds to the intracellular domain of the Alzheimer's disease beta-amyloid precursor protein (APP) as well as to other APP-like proteins; related to inflammation and neurological disease	23064081
DCTN1	encodes the largest subunit of dynactin; involved in a diverse array of cellular functions, including ER-to-Golgi transport, the centripetal movement of lysosomes and endosomes, spindle formation, chromosome movement, nuclear positioning, and axonogenesis	
OS9	Osteosarcoma Amplified 9; lectin which functions in ER quality control and ER-associated degradation (ERAD)	25010283
GTPBP2	GTP binding protein 2; *GTPBP1* was shown to be upregulated by Interferon Gamma	
DTX3	functions as an E3 ubiquitin ligase; tight-binding, strong inhibitor of several G1 cyclin/Cdk complexes and a negative regulator of cell proliferation; related to Notch signaling and neurogenesis	11226752
LOC100189589	*DCTN1-AS1*; *DCTN1* antisense RNA 1; ncRNA	
	Human down-regulated 3 h p.i.	
SYCP3	synaptonemal complex protein 3; this gene encodes an essential structural component of the synaptonemal complex; this complex is involved in synapsis, recombination and segregation of meiotic chromosomes	
CDKN1C	Cyclin-Dependent Kinase Inhibitor; tight-binding, strong inhibitor of several G1 cyclin/Cdk complexes and a negative regulator of cell proliferation	
CDKN2AIPNL	CDKN2A Interacting Protein N-Terminal Like	
MAP3K10	MAP kinase	

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Supplementary Table 1 – continued from previous page

Gene	Function	PMID
PCDHB4	neural cadherin-like cell adhesion proteins; interact in a homophilic manner to specify differential cell-cell connections	
mi3198-2	(=NR_039851.1?); identification of new microRNAs in paired normal and tumor tissue suggests a dual role for the *ERBB2*/*HER2* gene	
TSPAN16	tetraspanin 16; transmembrane protein; no function specified	
PCDHB4	potential calcium-dependent cell-adhesion protein; may be involved in the establishment and maintenance of specific neuronal connections in the brain	
TMEM81	transmembrane protein 81	
ZNF717	zinc finger protein 717	23912677
MAK	male Germ Cell-Associated Kinase; essential for the regulation of ciliary length and required for the long-term survival of photoreceptors	
RAB3D	member of RAS oncogene family; critical for secretory granule maturation (here neuropeptides and hormones are stored)	
LOC100506966	reported as an uncaracterized ncRNA, WITHDRAWN	