

Supplementary Table S1. Detailed summary of all screened samples for hantavirus RNA in this study. AF stands for *Apodemus flavicollis*, AS – *A. sylvaticus*, AA – *A. agrarius*, MA – *Microtus arvalis*, CG – *Clethrionomys glareolus*, SM – *Sorex minutus*, SA – *Sorex araneus*, CL – *Crocidura leucodon*, CS – *Crocidura suaveolens*, NF – *Neomys fodiens*.

Sample code	Locality	District	Year of collection	Host species	Sex	Age	Sampled Tissue	Virus detected, positive tissue
23719AS_BO	Borek	České Budějovice	2016	AS	M	SUB	Lungs, kidneys	-
23720MA_BO	Borek	České Budějovice	2016	MA	M	SUB	LungsLungss, liver, kidneys, spleen, brain, heart	KURV liver, spleen, brain
23721AS_BO	Borek	České Budějovice	2016	AS	F	SUB	Lungs, kidneyskidneyss, brain	KURV lungs
23722AF_BO	Borek	České Budějovice	2016	AF	F	SUB	Lungs, liver, kidneys, brain, heart	-
23723MA_BO	Borek	České Budějovice	2016	MA	M	SUB	Lungs, kidneys, spleen	TULV lungs KURV spleen
23725AS_BO	Borek	České Budějovice	2016	AS	F	AD	Lungs, kidneys	-
23727AS_BO	Borek	České Budějovice	2016	AS	M	AD	Lungs, kidneys, heart	KURV lungs
23728MA_BO	Borek	České Budějovice	2016	MA	F	SUB	Lungs, kidneys	-
23729MA_BO	Borek	České Budějovice	2016	MA	F	SUB	Lungs, kidneys	TULV lungs, kidneys
23920AS_VLT	Vltava	České Budějovice	2017	AS	-	-	Lungs, liver, spleen, brain	-
23921AF_VLT	Vltava	České Budějovice	2017	AF	-	-	Lungs, liver, kidneys, brain	-

23922AS_VLT	Vltava	České Budějovice	2017	AS	-	-	Lungs, liver, kidneys, brain	-
23923AF_VLT	Vltava	České Budějovice	2017	AF	-	-	Lungs, liver, kidneys, brain	-
23924AF_VLT	Vltava	České Budějovice	2017	AF	-	-	Lungs, liver, kidneys, brain	-
23925AF_VLT	Vltava	České Budějovice	2017	AF	-	-	Lungs, liver, kidneys, brain	-
23926AF_VLT	Vltava	České Budějovice	2017	AF	-	-	Lungs, liver, kidneys, brain	-
23927AS_VLT	Vltava	České Budějovice	2017	AS	-	-	Lungs, liver, kidneys, brain	-
23928CG_VLT	Vltava	České Budějovice	2017	CG	-	-	Lungs, liver, kidneys, brain	-
23929AF_VLT	Vltava	České Budějovice	2017	AF	-	-	Lungs, liver, kidneys, brain	-
23930AF_VLT	Vltava	České Budějovice	2017	AF	-	-	Lungs, liver, kidneys, brain	-
23931CG_VLT	Vltava	České Budějovice	2017	CG	-	-	Lungs, liver, kidneys, brain	-
23932AF_VLT	Vltava	České Budějovice	2017	AF	-	-	Lungs, liver, kidneys, brain	-
23933AS_VLT	Vltava	České Budějovice	2017	AS	-	-	Lungs, liver, kidneys, brain	-
23935CG_VLT	Vltava	České Budějovice	2017	CG	-	-	Lungs, liver, kidneys, brain	-
23936CG_VLT	Vltava	České Budějovice	2017	CG	-	-	Lungs, liver, kidneys, brain	-
23937AF_VLT	Vltava	České Budějovice	2017	AF	-	-	Lungs, liver, kidneys, brain	-

23938CG_VLT	Vltava	České Budějovice	2017	CG	-	-	Lungs, liver, kidneys, brain	-
23940CG_VLT	Vltava	České Budějovice	2017	CG	-	-	Lungs, liver, kidneys, brain	-
23941CG_VLT	Vltava	České Budějovice	2017	CG	-	-	Lungs, liver, kidneys, brain	-
1AF_MAN	České Budějovice, Mánesova street no.273/9	České Budějovice	2018	AF	-	-	Lungs, liver, kidneys, spleen, brain, heart	-
2AS_MAN	České Budějovice, Mánesova street no.273/9	České Budějovice	2018	AS	M	-	Lungs, liver, kidneys, spleen, brain, heart	-
3AS_MAN	České Budějovice, Mánesova street no.273/9	České Budějovice	2018	AS	F	-	Lungs, liver, kidneys, spleen, brain, heart	-
4AS_MAN	České Budějovice, Mánesova street no.273/9	České Budějovice	2018	AS	M	-	Lungs, liver, kidneys, spleen, brain, heart	-
5AS_MAN	České Budějovice, Mánesova street no.273/9	České Budějovice	2018	AS	M	-	Lungs, liver, kidneys, spleen, brain, heart	-
6AF_MAN	České Budějovice, Mánesova street no.273/9	České Budějovice	2018	AF	M	-	Lungs, liver, kidneys, spleen, brain, heart	-
7AF_MAN	České Budějovice, Mánesova street no.273/9	České Budějovice	2018	AF	-	-	Lungs, liver, kidneys, spleen, brain, heart	-

8AF_MAN	České Budějovice, Mánesova street no.273/9	České Budějovice	2018	AF	-	-	Lungs, liver, kidneys, spleen, brain, heart	-
10AF_VES	Švábův Hrádek	České Budějovice	2020	AF	M	AD	Lungs, liver, kidneys	TULV lungs
1AF_LUŽ	Lužnice, field station U Zahradníků no. 92	Jindřichův Hradec	2018	AF	-	-	Lungs	-
3CG_LUŽ	Lužnice, field station U Zahradníků no. 92	Jindřichův Hradec	2018	CG	-	-	Lungs	TULV lungs
4CG_LUŽ	Lužnice, field station U Zahradníků no. 92	Jindřichův Hradec	2018	CG	-	-	Lungs	TULV lungs
5CG_LUŽ	Lužnice, field station U Zahradníků no. 92	Jindřichův Hradec	2018	CG	-	-	Lungs	-
6CG_LUŽ	Lužnice, field station U Zahradníků no. 92	Jindřichův Hradec	2018	CG	-	-	Lungs	-
8CG_LUŽ	Lužnice, field station U Zahradníků no. 92	Jindřichův Hradec	2018	CG	-	-	Lungs	-
10CG_LUŽ	Lužnice, field station U Zahradníků no. 92	Jindřichův Hradec	2018	CG	-	-	Lungs	-
11CG_LUŽ	Lužnice, field station U Zahradníků no. 92	Jindřichův Hradec	2018	CG	-	-	Lungs	-
12CG_LUŽ	Lužnice, field station U Zahradníků no. 92	Jindřichův Hradec	2018	CG	-	-	Lungs	-
13CG_LUŽ	Lužnice, field station U Zahradníků no. 92	Jindřichův Hradec	2018	CG	-	-	Lungs	-
14CG_LUŽ	Lužnice, field station U Zahradníků no. 92	Jindřichův Hradec	2018	CG	-	-	Lungs	-
1AS_ZBY	Zbytiny – Koryto	Prachatice	2018	AS	F	JUV	Lungs, liver, kidneys, spleen, brain, heart	-

2AS_ZBY	Zbytiny – Koryto	Prachatice	2018	AS	-	AD	Lungs, liver, kidneys, spleen, brain, heart	-
3AS_ZBY	Zbytiny – Koryto	Prachatice	2018	AS	F	AD	Lungs, liver, kidneys, spleen, brain, heart	-
4AS_ZBY	Zbytiny – Koryto	Prachatice	2018	AS	F	AD	Lungs, liver, kidneys, spleen, brain, heart	-
5AS_ZBY	Zbytiny – Koryto	Prachatice	2018	AS	F	AD	Lungs, liver, kidneys, spleen, brain, heart	-
6CG_ZBY	Zbytiny – Koryto	Prachatice	2018	CG	M	AD	Lungs, liver, kidneys, spleen, brain, heart	-
8CG_ZBY	Zbytiny – Koryto	Prachatice	2018	CG	F	AD	Lungs, liver, kidneys, spleen, brain, heart	-
1AS_KV	Květušín	Český Krumlov	2021	AS	F	-	Lungs, liver, kidneys, spleen, brain, heart	-
2AF_KV	Květušín	Český Krumlov	2021	AF	F	-	Lungs, liver, kidneys, spleen, brain, heart	-
3AF_KV	Květušín	Český Krumlov	2021	AF	F	-	Lungs, liver, kidneys, spleen, brain, heart	-
4MA_KV	Květušín	Český Krumlov	2021	MA	F	-	Lungs, liver, kidneys, spleen, brain, heart	-
5MA_KV	Květušín	Český Krumlov	2021	MA	M	-	Lungs, liver, kidneys, spleen, brain, heart	-
1AF_O	Oldřišov	Opava	2016	AF	F	AD	Lungs, liver, spleen	-
2AA_O	Oldřišov	Opava	2016	AA	-	AD	Lungs, liver, spleen	-
3AS_O	Oldřišov	Opava	2016	AS	-	JUV	Lungs, liver, spleen	-
7AA_O	Oldřišov	Opava	2016	AA	F	AD	Lungs, liver, spleen	KURV liver

8AF_O	Oldřišov	Opava	2016	AF	M	AD	Lungs, liver, spleen	-
9AA_O	Oldřišov	Opava	2016	AA	F	AD	Lungs, liver, spleen	TULV liver
10AA_O	Oldřišov	Opava	2016	AA	F	SUB	Lungs, liver, spleen	KURV liver
11AA_O	Oldřišov	Opava	2016	AA	F	JUV	Lungs, liver, spleen	-
12AA_O	Oldřišov	Opava	2016	AA	F	SUB	Lungs, liver, spleen	-
13AF_O	Oldřišov	Opava	2016	AF	F	AD	Lungs, liver, spleen	-
14AA_O	Oldřišov	Opava	2016	AA	M	SUB	Lungs, liver, spleen	-
15AA_O	Oldřišov	Opava	2016	AA	F	SUB	Lungs, liver, spleen	TULV liver
16AA_O	Oldřišov	Opava	2016	AA	M	AD	Lungs, liver	-
17AA_O	Oldřišov	Opava	2016	AA	F	AD	Lungs, liver	-
18AA_O	Oldřišov	Opava	2016	AA	F	AD	Lungs, liver	-
19AF_O	Oldřišov	Opava	2016	AF	M	AD	Lungs, liver	-
20AA_O	Oldřišov	Opava	2016	AA	M	SUB	Lungs, liver	-
21AF_O	Oldřišov	Opava	2016	AF	M	AD	Lungs	-
22AA_O	Oldřišov	Opava	2016	AA	F	AD	Lungs	-

23AA_O	Oldřišov	Opava	2016	AA	M	SUB	Lungs	-
24AF_O	Oldřišov	Opava	2016	AF	M	AD	Lungs	-
25AA_O	Oldřišov	Opava	2016	AA	M	SUB	Lungs	-
26AA_O	Oldřišov	Opava	2016	AA	F	SUB	Lungs	-
27AA_O	Oldřišov	Opava	2016	AA	F	SUB	Lungs	-
29AA_O	Oldřišov	Opava	2016	AA	F	AD	Lungs	-
30AA_O	Oldřišov	Opava	2016	AA	M	SUB	Lungs	-
31AA_O	Oldřišov	Opava	2016	AA	F	AD	Lungs	-
32AF_O	Oldřišov	Opava	2016	AF	F	AD	Lungs	-
33AA_O	Oldřišov	Opava	2016	AA	F	SUB	Lungs	-
34AA_O	Oldřišov	Opava	2016	AA	F	AD	Lungs	-
35AA_O	Oldřišov	Opava	2016	AA	M	AD	Lungs	-
36AA_O	Oldřišov	Opava	2016	AA	F	AD	Lungs	-
37AA_O	Oldřišov	Opava	2016	AA	F	SUB	Lungs	-
38AF_O	Oldřišov	Opava	2016	AF	F	AD	Lungs	-

39AA_O	Oldřišov	Opava	2016	AA	-	-	Lungs	-
40AA_O	Oldřišov	Opava	2016	AA	M	AD	Lungs, liver, brain	KURV lungs, liver, brain
41AA_O	Oldřišov	Opava	2016	AA	M	SUB	Lungs, liver, spleen	-
42AA_O	Oldřišov	Opava	2016	AA	M	SUB	Lungs, liver, spleen	-
43AA_O	Oldřišov	Opava	2016	AA	M	AD	Lungs, liver, spleen	KURV spleen
44AA_O	Oldřišov	Opava	2016	AA	M	SUB	Lungs, spleen	-
45MA_O	Oldřišov	Opava	2016	MA	F	AD	Lungs	-
46AA_O	Oldřišov	Opava	2016	AA	F	AD	Lungs, spleen	-
47AF_O	Oldřišov	Opava	2016	AF	F	AD	Lungs	-
48AA_Ř	Oldřišov, sugar beet field between Oldřišov and Opava	Opava	2016	AA	M	SUB	Lungs, spleen	TULV spleen
49AA_Ř	Oldřišov, sugar beet field between Oldřišov and Opava	Opava	2016	AA	M	AD	Lungs, liver, spleen, brain	KURV lungs, liver, spleen, brain
50AF_Ř	Oldřišov, sugar beet field between Oldřišov and Opava	Opava	2016	AF	M	AD	Lungs, spleen	-
51AA_Ř	Oldřišov, sugar beet field between Oldřišov and Opava	Opava	2016	AA	M	SUB	Lungs	-
52AA_H	Opava, weed hill near the Hillova street	Opava	2016	AA	F	AD	Lungs, liver, spleen, brain	KURV lungs

								TULV liver
53AA_H	Opava, weed hill near the Hillova street	Opava	2016	AA	F	JUV	Lungs, spleen	-
54AA_H	Opava, weed hill near the Hillova street	Opava	2016	AA	F	AD	Lungs, spleen	-
55AA_H	Opava, weed hill near the Hillova street	Opava	2016	AA	M	AD	Lungs, liver, spleen	KURV spleen
56AA_H	Opava, weed hill near the Hillova street	Opava	2016	AA	F	AD	Lungs, liver, spleen, brain	TULV lungs, liver
1AA_V	Varnsdorf	Děčín	2018/2019	AA	-	-	Lungs, liver, kidneys, heart	-
3AA_V	Varnsdorf	Děčín	2018/2019	AA	-	-	Lungs, liver, kidneys, heart	-
4MA_V	Varnsdorf	Děčín	2018/2019	MA	-	-	Lungs, liver, kidneys, heart	-
6CG_V	Varnsdorf	Děčín	2018/2019	CG	-	-	Lungs, liver, kidneys, heart	-
9AF_V	Varnsdorf	Děčín	2018/2019	AF	-	-	Lungs, liver, kidneys, heart	-
1AA_VAR	Varnsdorf	Děčín	2018/2019	AA	-	-	Lungs	-
7AA_VAR	Varnsdorf	Děčín	2018/2019	AA	-	-	Lungs	-
12AA_VAR	Varnsdorf	Děčín	2018/2019	AA	-	-	Lungs	-
15AA_VAR	Varnsdorf	Děčín	2018/2019	AA	-	-	Lungs	-
01AF_VES	Vestec, Biocev	Praha-západ	2020	AF	M	AD	Lungs, liver, kidneys	-

02AF_VES	Vestec, Biocev	Praha-západ	2020	AF	M	AD	Lungs, liver, kidneys	-
03AF_VES	Vestec, Biocev	Praha-západ	2020	AF	M	AD	Lungs, liver, kidneys	-
04AF_VES	Vestec, Biocev	Praha-západ	2020	AF	M	AD	Lungs, liver, kidneys	-
05AF_VES	Vestec, Biocev	Praha-západ	2020	AF	M	AD	Lungs, liver, kidneys	-
06AF_VES	Vestec, Biocev	Praha-západ	2020	AF	M	AD	Lungs, liver, kidneys	-
01MI_VES	Vestec, Biocev	Praha-západ	2020	MA	M	AD	Lungs, liver, kidneys	TULV lungs, liver, kidneys
02MI_VES	Vestec, Biocev	Praha-západ	2020	MA	M	AD	Lungs, liver, kidneys	TULV lungs, liver, kidneys
03MI_VES	Vestec, Biocev	Praha-západ	2020	MA	M	AD	Lungs, liver, kidneys	TULV liver
04MI_VES	Vestec, Biocev	Praha-západ	2020	MA	M	AD	Lungs, liver, kidneys	TULV lungs
05MI_VES	Vestec, Biocev	Praha-západ	2020	MA	M	AD	Lungs, liver, kidneys	TULV lungs, liver, kidneys
06MI_VES	Vestec, Biocev	Praha-západ	2020	MA	M	AD	Lungs, liver, kidneys	TULV lungs, liver, kidneys
07MI_VES	Vestec, Biocev	Praha-západ	2020	MA	M	AD	Lungs, liver, kidneys	TULV lungs, liver, kidneys
08MI_VES	Vestec, Biocev	Praha-západ	2020	MA	M	AD	Lungs, liver, kidneys	TULV lungs, liver, kidneys

09MI_VES	Vestec, Biocev	Praha-západ	2020	MA	M	AD	Lungs, liver, kidneys	TULV lungs, liver, kidneys
09AF_VES	Vestec, Biocev	Praha-západ	2020	AF	M	AD	Lungs	-
11AS_VES	Vestec, Biocev	Praha-západ	2020	AS	M	AD	Lungs, liver, kidneys	-
12AF_VES	Vestec, Biocev	Praha-západ	2020	AF	M	AD	Lungs, liver, kidneys	TULV lungs
1AS_VES	Vestec, Biocev	Praha-západ	2020	AS	F	AD	Lungs	-
2AS_VES	Vestec, Biocev	Praha-západ	2020	AS	F	AD	Lungs	-
1MIC_VES	Vestec, Biocev	Praha-západ	2020	MA	F	AD	Lungs, liver, kidneys	TULV lungs, kidneys
2MIC_VES	Vestec, Biocev	Praha-západ	2020	MA	F	AD	Lungs, liver, kidneys	TULV lungs, liver, kidneys
4MIC_VES	Vestec, Biocev	Praha-západ	2020	MA	F	AD	Lungs, liver, kidneys	TULV lungs
5MIC_VES	Vestec, Biocev	Praha-západ	2020	MA	F	AD	Lungs, liver, kidneys	TULV lungs
07AF_VES	Vestec, near the Shell gas station	Praha-západ	2020	AF	F	AD	Lungs, liver, kidneys	-
08AS_VES	Vestec, near the Shell gas station	Praha-západ	2020	AS	M	AD	Lungs, liver, kidneys	TULV liver
3MIC_VES	Vestec, near the Shell gas station	Praha-západ	2020	MA	F	AD	Lungs	-
6MIC_VES	Dolní Břežany	Praha-západ	2020	MA	F	AD	Lungs, liver, kidneys	TULV lungs

14AS_VES	Dolní Břežany	Praha-západ	2020	AS	F	AD	Lungs, liver, kidneys	TULV lungs
6AS_VES	Dolní Břežany	Praha-západ	2020	AS	F	AD	Lungs	-
7MIC_VES	Dolní Břežany	Praha-západ	2020	MA	F	AD	Lungs, liver, kidneys	TULV lungs, liver, kidneys
23934SM_VLT	Vltava	České Budějovice	2017	SM	-	-	Lungs, liver, kidneys, brain	-
5SA	Biology Centre CAS	České Budějovice	2020	SA	-	-	Lungs, liver, brain	SWSV Lungs, liver, brain
7SA	Zbytiny – Koryto	Prachatice	2018	SA	-	-	Lungs, liver, kidneys, spleen, brain, heart	SWSV heart
1CL	Semtěš	Karlovy Vary	2019	CL	-	-	Lungs, liver, heart	
2CS	Volenice	Strakonice	2019	CS	-	-	Lungs, brain, heart	-
2NF_LUŽ	Lužnice, field station U Zahradníků no. 92	Jindřichův Hradec	2018	NF	-	-	Lungs	-
9NF_LUŽ	Lužnice, field station U Zahradníků no. 92	Jindřichův Hradec	2018	NF	-	-	Lungs	-
3CS	Hoděmyšl	Příbram	2019	CS	-	-	Lungs, brain, heart	
4SA	Podmokly	Plzeň-sever	2019	SA	-	-	Lungs, brain, heart	ASIV Lungs, brain, heart
2SA_VAR	Varnsdorf	Děčín	2018	SA	-	-	Lungs, liver, kidneys, heart	-

Supplementary Table S2. Details of the L segment sequences used for the phylogenetic analyses. Sequences obtained in this study are highlighted in bold. AMRV – Amur virus ; ASIV – Asikkala virus; DOBV – Dobrava virus, KURV – Kurkino virus; SAAV – Saaremaa virus; SOCV – Sochi virus, HTNV – Hantaan virus; PUUV – Puumala virus; SEOV – Seoul virus; SWSV – Seewis virus; TATV - Tatenale virus; TULV – Tula virus;

Orthohantavirus	L segment GenBank Accession Number	Origin	Species of the host	Tissue
AMRV	JX119008	China, Jilin Changbai	<i>Apodemus peninsulae</i>	n.a.
ASIV	NC043068	Czech Republic, Beskydy	<i>Sorex minutus</i>	n.a.
	C880349	Germany	<i>S. minutus</i>	
	ON243817	Czech Republic, Podmokly	<i>Sorex araneus</i> 4SA	lungs, heart
DOBV	KF039740	Turkey, Istanbul	<i>Homo sapiens</i>	serum
	KF177176	Serbia, Ravanica	<i>Glis glis</i>	n.a.
	KF425497	Serbia, Tara Mt. tourist complex	<i>Apodemus flavicollis</i>	n.a.
	KT315630	Turkey, Igneada Region	<i>A. flavicollis</i>	lungs
	KT315631	Turkey, Igneada Region	<i>A. flavicollis</i>	lungs
	KY649165	Serbia	<i>H. sapiens</i>	
	MK605641	Czech Republic, Domašov nad Bystřicí	<i>H. sapiens</i>	HFRS serum
	MK605649	Czech Republic, Ostrava	<i>H. sapiens</i>	HFRS serum
	MK605651	Czech Republic, Karolinka	<i>H. sapiens</i>	HFRS serum
	MK605659	Czech Republic, Dolni Netcice	<i>H. sapiens</i>	HFRS serum

	MK605660	Czech Republic, Nedasov	<i>H. sapiens</i>	HFRS serum
	MK605664	Czech Republic, Jindřichov u Šumperka	<i>H. sapiens</i>	HFRS serum
	MK605679	Czech Republic, Čeladná	<i>A. flavicollis</i>	lungs
KURV	KF536031	Germany, Stockelsdorf	<i>H. sapiens</i>	HFRS serum
	KF536033	Germany, Neuruppin	<i>H. sapiens</i>	HFRS serum
	KF536035	Germany, Richtenberg	<i>H. sapiens</i>	HFRS serum
	KJ182938	Germany	<i>Apodemus agrarius</i>	lungs
	MK605642	Czech Republic, Josefovce	<i>H. sapiens</i>	HFRS serum
	MK605644	Czech Republic, Velka Kras	<i>H. sapiens</i>	HFRS serum
	MK605646	Czech Republic, Cernotin	<i>H. sapiens</i>	HFRS serum
	MK605647	Czech Republic, Ostrava	<i>H. sapiens</i>	HFRS serum
	MK605655	Czech Republic, Klimkovice	<i>H. sapiens</i>	HFRS serum
	MK605656	Czech Republic, Bohuslavice u Hlučína	<i>H. sapiens</i>	HFRS serum
	MK605661	Czech Republic, Velké Heraltice	<i>H. sapiens</i>	HFRS serum
	MK605665	Czech Republic, Šenov u Nového Jičína	<i>H. sapiens</i>	HFRS serum
	MK605680	Czech Republic, Petrovice	<i>A. agrarius</i>	lungs
	ON243806	Czech Republic, Oldřišov	<i>A. agrarius</i> 7AA	liver

	ON243807	Czech Republic, Oldřišov	<i>A. agrarius</i> 10AA	liver
	ON243808	Czech Republic, Oldřišov	<i>A. agrarius</i> 40AA	lungs, liver, brain
	ON243809	Czech Republic, Oldřišov	<i>A. agrarius</i> 43AA	spleen
	ON243810	Czech Republic, Oldřišov, sugar beet field	<i>A. agrarius</i> 49AA	lungs, liver, spleen, brain
	ON243811	Czech Republic, Opava, weed hill near the Hillova street	<i>A. agrarius</i> 55AA	spleen
	ON243813	Czech Republic, České Budějovice, Borek	<i>Apodemus sylvaticus</i> 23721AS	lungs
	ON243812	Czech Republic, České Budějovice, Borek	<i>Microtus arvalis</i> 23720MA	spleen, brain
	ON243814	Czech Republic, České Budějovice, Borek	<i>M. arvalis</i> 23723MA	spleen
SAAV	AJ410618	Estonia, Saaremaa Island	<i>A. agrarius</i>	n.a.
SOCV	KM192209	Russia, Krasnodar Region	<i>Apodemus ponticus</i>	n.a.
	KU529945	Russia	<i>H. sapiens</i>	HFRS serum
HTNV	EU837270	China, Guizhou	<i>H. sapiens</i>	Vero E6 cells
PUUV	KX815401	Poland, Telesnica Oszwarowa	<i>Clethrionomys glareolus</i>	lungs
SEOV	KX064268	France, Turckheim	<i>H. sapiens</i>	serum
SWSV	JQ425313	Czech Republic, České Budějovice	<i>S. araneus</i>	n.a.
	JQ425317	Slovakia, Košice	<i>S. araneus</i>	n.a.

	KF974361	Japan, Hokkaido	<i>Sorex caecutiens</i>	lungs
	MT560038	Russia, Tomsk Oblast	<i>S. araneus</i>	lungs
	KY651062	Finland	<i>S. araneus</i>	lungs
	ON243815	Czech Republic, České Budějovice, Biology Centre CAS	<i>S. araneus</i> 5SA	lungs, liver, brain
	ON243816	Czech Republic, Zbytiny - Koryto	<i>S. araneus</i> 7SA	heart
TATV	JX316008	United Kingdom	<i>Microtus agrestis</i>	lungs
TULV	FJ495100	Slovenia, Sestrze	<i>M. agrestis</i>	lungs
	FJ495101	Slovenia, Hodos	<i>M. arvalis</i>	lungs
	FJ495102	Slovenia, Sred ob Dravi	<i>Microtus subterraneus</i>	lungs
	HQ728459	Germany	<i>Arvicola amphibius</i>	lungs
	HQ728464	Germany	<i>M. arvalis</i>	lungs
	KC522413	Czech Republic, Opava	<i>H. sapiens</i>	plasma
	KU297981	France, Chevru	<i>H. sapiens</i>	serum
	MK073348	Czech Republic	<i>M. arvalis</i>	lungs
	MK073356	Czech Republic	<i>M. arvalis</i>	lungs
	MK073366	Czech Republic	<i>M. arvalis</i>	lungs
	MK073367	Czech Republic	<i>M. arvalis</i>	lungs

	MK386155	Czech Republic	<i>M. arvalis</i>	lungs
	MK386156	Czech Republic	<i>M. arvalis</i>	lungs
	MK605685	Czech Republic, Beskydy	<i>M. agrestis</i>	lungs
	MT514295	Germany	<i>M. arvalis</i>	lungs
	MT514299	Germany	<i>M. arvalis</i>	lungs
	ON243799	Czech Republic, Oldřišov	<i>A. agrarius</i> 9AA	liver
	ON243800	Czech Republic, Oldřišov	<i>A. agrarius</i> 15AA	liver
	ON243801	Czech Republic, Oldřišov, sugar beet field	<i>A. agrarius</i> 48AA	spleen
	ON243805	Czech Republic, Opava, weed hill near the Hillova street	<i>A. agrarius</i> 52AA	liver
	ON243802	Czech Republic, Opava, weed hill near the Hillova street	<i>A. agrarius</i> 56AA	lungs
	ON243792	Czech Republic, Vestec, Biocev	<i>A. flavicollis</i> 12AF	lungs
	ON243788	Czech Republic, Vestec, near the Shell gas station	<i>A. sylvaticus</i> 8AS	liver
	ON243793	Czech Republic, Dolní Břežany	<i>A. sylvaticus</i> 14AS	lungs
	ON243780	Czech Republic, Lužnice	<i>C. glareolus</i> 3CG	lungs
	ON243781	Czech Republic, Lužnice	<i>C. glareolus</i> 4CG	lungs
	ON243803	Czech Republic, České Budějovice, Borek	<i>M. arvalis</i> 23723MA	lungs

	ON243804	Czech Republic, České Budějovice, Borek	<i>M. arvalis</i> 23729MA	lungs, kidneys
	ON243778	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 1MI	lungs, liver, kidneys
	ON243779	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 2MI	lungs, liver, kidneys
	ON243782	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 3MI	liver
	ON243783	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 4MI	lungs
	ON243784	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 5MI	lungs, liver, kidneys
	ON243785	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 6MI	liver
	ON243786	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 7MI	liver
	ON243787	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 7MI	lungs, kidneys
	ON243789	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 8MI	liver
	ON243790	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 8MI	lungs, kidneys
	ON243791	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 9MI	lungs, liver, kidneys
	ON243794	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 1MIC	lungs, kidneys
	ON243795	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 2MIC	lungs, liver, kidneys
	ON243796	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 5MIC	lungs

	ON243797	Czech Republic, Dolní Břežany	<i>M. arvalis</i> 6MIC	lungs
	ON243798	Czech Republic, Dolní Břežany	<i>M. arvalis</i> 7MIC	lungs, liver, kidneys

Supplementary Table S3. Details of the M segment sequences used for the phylogenetic analyses. Sequences obtained in this study are highlighted in bold.). DOBV – Dobrava virus, SAAV – Saaremaa virus; SOCV – Sochi virus, HTNV – Hantaan virus; SWSV – Seewis virus; TULV – Tula virus;

Orthohantavirus	M segment GenBank Accession Number	Origin	Species of the Host	Tissue
Dobrava-Belgrade orthohantavirus (virus not specified)	AY961616	Slovakia	<i>Apodemus agrarius</i>	Vero E6 cells
	EU188453	Russia, Lipetsk	<i>A. agrarius</i>	Vero E6 cells
	JQ026205	Germany, Greifswald	<i>Apodemus flavicollis</i>	lungs
	KF536034	Germany, Neuruppin	<i>Homo sapiens</i>	HFRS serum
	ON243777	Czech Republic, Oldřišov	<i>A. agrarius</i> 40AA	lungs
DOBV	AY168577	Slovakia, East Slovakia	<i>A. flavicollis</i>	lungs
	KT885042	Slovenia, Stamforrad	<i>A. flavicollis</i>	Vero E6 cells
SAAV	AJ616855	Denmark, Lolland	<i>A. agrarius</i>	lungs
	FN813293	Croatia, Migalovci	<i>A. flavicollis</i>	lungs
SOCV	JF920149	Russia	<i>H. sapiens</i>	HFRS serum
HTNV	KU207185	South Korea	<i>A. agrarius</i>	lungs
SWSV	GQ293139	Hungary	<i>Sorex araneus</i>	liver
	JX990967	Poland, Boginia	<i>S. araneus</i>	lungs
	KM201415	Russia	<i>Sorex caecutiens</i>	lungs
	MT951408	Russia	<i>S. caecutiens</i>	n.a.
TULV	MH649271	Turkey, Palandoken	<i>Microtus obscurus</i>	lungs
	MK386142	Germany	<i>Microtus arvalis</i>	lungs

	MK386143	Czech Republic	<i>M. arvalis</i>	lungs
	MK386144	Czech Republic	<i>M. arvalis</i>	lungs
	MK386148	Czech Republic	<i>M. arvalis</i>	lungs
	MT514285	Germany	<i>M. arvalis</i>	lungs
	ON653433	Czech Republic, České Budějovice, Švábův Hrádek	<i>A. flavicollis</i> 10AF	lungs
	ON653442	Czech Republic, Vestec, near the Shell gas station	<i>Apodemus sylvaticus</i> 8AS	liver
	ON653435	Czech Republic, Dolní Břežany	<i>A. sylvaticus</i> 14AS	lungs
	ON653441	Czech Republic, České Budějovice, Borek	<i>M. arvalis</i> 23723MA	lungs
	ON653425	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 1MI	lungs, liver, kidneys
	ON653426	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 2MI	lungs
	ON653427	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 4MI	lungs
	ON653428	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 5MI	lungs
	ON653429	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 6MI	lungs, liver, kidneys
	ON653430	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 7MI	lungs, liver, kidneys
	ON653431	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 8MI	lungs, liver, kidneys
	ON653432	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 9MI	lungs, liver
	ON653436	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 1MIC	lungs, liver
	ON653437	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 2MIC	lungs, liver
	ON653438	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 4MIC	lungs

	ON653439	Czech Republic, Vestec, Biocev	<i>M. arvalis</i> 6MIC	lungs
	ON653440	Czech Republic, Dolní Břežany	<i>M. arvalis</i> 7MIC	lungs, liver, kidneys
	ON653434	Czech Republic, Vestec, Biocev	<i>A. flavicollis</i> 12AF	lungs

Supplementary table S4. Tissue tropism – prevalence of detected hantaviruses in different host tissues. TULV – Tula virus; KURV – Kurkino virus; SWSV – Seewis virus; ASIV – Asikkala virus

Host species	Orthohantavirus	Lungs	Liver	Kidneys	Spleen	Brain	Heart
<i>Microtus arvalis</i>	TULV	100% (17/17)	66.7% (10/15)	64.7% (11/17)	n.a.	n.a.	n.a.
	KURV	0% (0/2)	100% (1/1)	0% (0/2)	100% (2/2)	100% (1/1)	0% (0/1)
<i>Clethrionomys glareolus</i>	TULV	100% (2/2)	n.a.	n.a.	n.a.	n.a.	n.a.
	KURV	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
<i>Apodemus agrarius</i>	TULV	20.0% (1/5)	100% (4/4)	n.a.	20.0% (1/5)	0% (0/2)	n.a.
	KURV	42.9% (3/7)	57.1% (4/7)	n.a.	50.0% (3/6)	66.7% (2/3)	n.a.
<i>Apodemus flavicollis</i>	TULV	100% (2/2)	0% (0/2)	0% (0/2)	n.a.	n.a.	n.a.
	KURV	0% (0/2)	0% (0/2)	0% (0/2)	n.a.	n.a.	n.a.
<i>Apodemus sylvaticus</i>	TULV	50.0% (1/2)	50.0% (1/2)	0% (0/2)	n.a.	n.a.	n.a.
	KURV	100% (2/2)	n.a.	0% (0/2)	n.a.	0% (0/1)	0% (0/1)
<i>Sorex araneus</i>	SWSV	50.0% (1/2)	50.0% (1/2)	0% (0/1)	0% (0/1)	50.0% (1/2)	100% (1/1)
	ASIV	100% (1/1)	n.a.	n.a.	n.a.	100% (1/1)	100% (1/1)