



**Nancy Laboratory for Rabies and
Wildlife**

UNIT : Lyssavirus

European Union Reference Laboratory

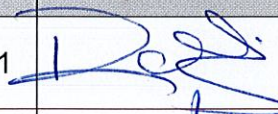
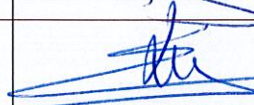
for Rabies

PROFICIENCY TEST FOR RABIES DIAGNOSIS

COMPLEMENTARY REPORT

Session : 11-2021

Complementary report - Version 0

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The complementary report is designed to provide the participating laboratories with additional informative analysis to the 2021 rabies diagnosis proficiency test. Irrespective of the conclusions, these informative analyses cannot be considered as a performance assessment.

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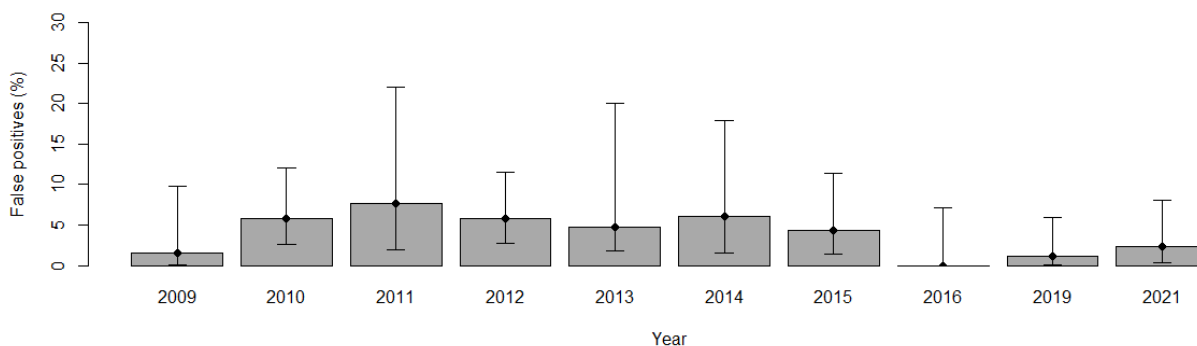
1. THE FLUORESCENT ANTIBODY TEST

Three hundred ninety FAT results were provided and 5 false results were reported: 3 false negative and 2 false positive results (Table 1 and table 2). Evolution of FAT results among inter-laboratory test sessions are indicated in Figure 1.

Table 1: FAT results per strain.

	n of analysis with discrepant results / total analysis	% of analysis with discrepant results and 95 CI
Total	5/390	1.3 [0.4 – 3.0]
Negative samples	2/88	2.3 [0.3 – 8.0]
Positive samples	3/302	1.0 [0.2 – 2.9]
RABV samples	1/176	0.6 [0.0 – 3.1]
CVS 27	1/44	2.3 [0.0 – 12.0]
RABV Greece	0/44	0 [0.0 – 8.0]
RABV Dog Es	0/44	0 [0.0 – 8.0]
Vaccinal strain	0/44	0 [0.0 – 8.0]
EBLV-1	0/42	0 [0.0 – 8.4]
BBLV	2/41	4.9 [0.0 – 16.5]
DUVV	0/43	0 [0.0 – 8.2]

A)



B)

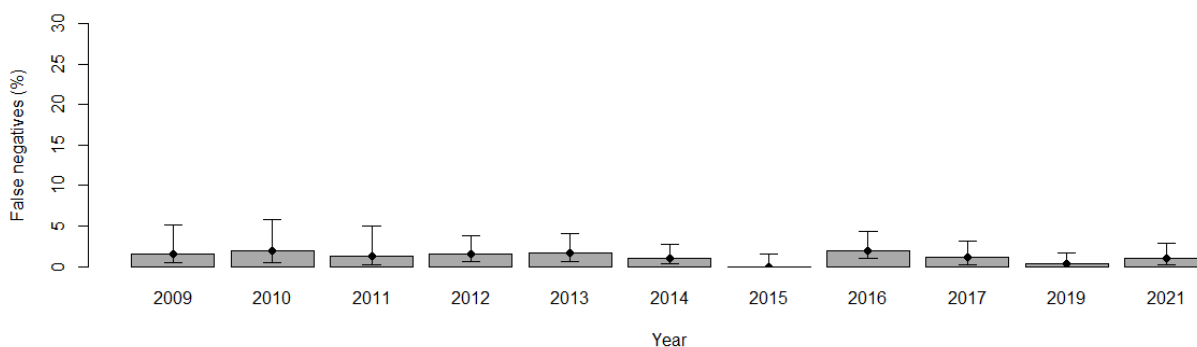


Figure 1: Evolution of false results reported in the inter-laboratory test. A: on negative samples (proportion of false positive results); B: on positive samples (proportion of false negative results).

Table 2: Results of the FAT tests.

Pink box: positive result. Green box: negative result. Grey box: result not considered: the result is not considered as the laboratory declared unabilities to detect the considered virus species (indicated in column 2-7 of the table) or Mix samples (included to avoid collusion).

Lab code	ABLV	BBLV	DUVV	EBLV-1	EBLV-2	RABV	Negative 1		Negative 2		RABV Greece		CVS 27		RABV Dog Es		BBLV		EBLV-1b		DUVV		Vaccinal strain		MIX	
L02	x	x	x	x	x	x	21060294	Negative	21060201	Negative	21060298	Positive	21060208	Positive	21060252	Positive	21060265	Positive	21060238	Positive	21060291	Positive	21060217	Positive	21060268	Positive
L03	x	x	x	x	x	x	21060374	Negative	21060370	Negative	21060337	Positive	21060329	Positive	21060324	Positive	21060394	Positive	21060372	Positive	21060338	Positive	21060382	Positive	21060375	Positive
L05						x	21060500	Negative	21060504	Negative	21060505	Positive	21060517	Positive	21060501	Positive	21060547	Positive	21060553	Positive	21060502	Positive	21060511	Positive	21060546	Positive
L06	x	x	x	x	x	x	21060686	Negative	21060650	Negative	21060684	Positive	21060685	Positive	21060636	Positive	21060680	Positive	21060623	Positive	21060663	Positive	21060600	Positive	21060639	Positive
L07	x	x	x	x	x	x	21060780	Negative	21060794	Negative	21060742	Positive	21060787	Positive	21060704	Positive	21060719	Positive	21060751	Positive	21060706	Positive	21060736	Positive	21060735	Positive
L08	x	x	x	x	x	x	21060859	Negative	21060867	Negative	21060817	Positive	21060869	Positive	21060816	Positive	21060805	Positive	21060874	Positive	21060833	Positive	21060824	Positive	21060889	Positive
L10						x	21061016	Negative	21061075	Negative	21061045	Positive	21061091	Positive	21061030	Positive	21061062	Positive	21061007	Positive	21061020	Positive	21061073	Positive	21061074	Positive
L11	x	x	x	x	x	x	21061156	Negative	21061135	Negative	21061120	Positive	21061164	Positive	21061174	Positive	21061147	Positive	21061121	Positive	21061130	Positive	21061110	Positive	21061145	Positive
L12	x	x	x	x	x	x	21061242	Negative	21061296	Negative	21061264	Positive	21061200	Positive	21061222	Positive	21061201	Positive	21061209	Positive	21061209	Positive	21061241	Positive	21061275	Positive
L13	x	x	x	x	x	x	21061322	Negative	21061309	Negative	21061308	Positive	21061389	Positive	21061380	Positive	21061335	Positive	21061355	Positive	21061388	Positive	21061360	Positive	21061313	Positive
L14	x	x	x	x	x	x	21061464	Negative	21061462	Negative	21061455	Positive	21061478	Positive	21061477	Positive	21061479	Positive	21061409	Positive	21061400	Positive	21061433	Positive	21061443	Positive
L15	x	x	x	x	x	x	21061566	Negative	21061559	Negative	21061540	Positive	21061546	Positive	21061508	Positive	21061501	Positive	21061582	Positive	21061591	Positive	21061524	Positive	21061533	Positive
L16	x	x	x	x	x	x	21061674	Negative	21061640	Negative	21061699	Positive	21061612	Positive	21061679	Positive	21061600	Positive	21061689	Positive	21061675	Positive	21061666	Positive	21061620	Positive
L17	x	x	x	x	x	x	21061706	Negative	21061772	Negative	21061710	Positive	21061757	Positive	21061785	Positive	21061766	Positive	21061717	Positive	21061764	Positive	21061761	Positive	21061746	Positive
L18	x	x	x	x	x	x	21061870	Negative	21061867	Negative	21061817	Positive	21061864	Positive	21061884	Positive	21061892	Positive	21061874	Positive	21061863	Positive	21061810	Positive	21061813	Positive
L20	x	x	x	x	x	x	21062046	Negative	21062025	Negative	21062088	Positive	21062091	Positive	21062045	Positive	21062087	Positive	21062097	Positive	21062071	Positive	21062019	Positive	21062048	Positive
L22	x	x	x	x	x	x	21062234	Negative	21062200	Negative	21062266	Positive	21062219	Positive	21062283	Positive	21062289	Positive	21062212	Positive	21062215	Positive	21062205	Positive	21062260	Positive
L23	x	x	x	x	x	x	21062306	Negative	21062386	Negative	21062388	Positive	21062371	Positive	21062387	Positive	21062394	Positive	21062398	Positive	21062374	Positive	21062305	Positive	21062382	Positive
L24	x	x	x	x	x	x	21062407	Negative	21062455	Negative	21062495	Positive	21062456	Positive	21062430	Positive	21062452	Positive	21062437	Positive	21062400	Positive	21062449	Positive	21062458	Positive
L25	x	x	x	x	x	x	21062533	Negative	21062550	Negative	21062593	Positive	21062521	Positive	21062553	Positive	21062560	Positive	21062583	Positive	21062515	Positive	21062523	Positive	21062580	Positive
L26	x	x	x	x	x	x	21062653	Negative	21062682	Negative	21062625	Positive	21062600	Positive	21062648	Positive	21062614	Positive	21062622	Positive	21062601	Positive	21062681	Positive	21062616	Positive
L28	x	x	x	x	x	x	21062857	Negative	21062843	Negative	21062882	Positive	21062875	Positive	21062801	Positive	21062807	Positive	21062871	Positive	21062841	Positive	21062814	Positive	21062874	Positive
L29	x	x	x	x	x	x	21062928	Negative	21062967	Negative	21062974	Positive	21062930	Positive	21062951	Positive	21062921	Positive	21062979	Positive	21062957	Positive	21062935	Positive	21062948	Positive
L30	x	x	x	x	x	x	21063078	Negative	21063059	Negative	21063086	Positive	21063047	Positive	21063093	Positive	21063087	Positive	21063019	Positive	21063010	Positive	21063084	Positive	21063041	Positive
L31	x	x	x	x	x	x	21063140	Positive	21063168	Negative	21063177	Positive	21063188	Negative	21063146	Positive	21063122	Positive	21063160	Positive	21063115	Positive	21063112	Positive	21063141	Positive
L32	x	x	x	x	x	x	21063253	Negative	21063244	Negative	21063297	Positive	21063293	Positive	21063243	Positive	21063291	Positive	21063206	Positive	21063299	Positive	21063233	Positive	21063210	Positive
L33	x	x	x	x	x	x	21063321	Negative	21063353	Negative	21063350	Positive	21063306	Positive	21063311	Positive	21063326	Positive	21063307	Positive	21063378	Positive	21063301	Positive	21063394	Positive
L35	x	x	x	x	x	x	21063516	Negative	21063511	Negative	21063545	Positive	21063578	Positive	21063523	Positive	21063591	Positive	21063557	Positive	21063504	Positive	21063515	Positive	21063532	Positive
L36						x	21063691	Negative	21063656	Negative	21063685	Positive	21063606	Positive	21063692	Positive	21063617	Positive	21063673	Positive	21063679	Positive	21063675	Positive	21063609	Positive
L38	x	x	x	x	x	x	21063890	Negative	21063810	Negative	21063836	Positive	21063814	Positive	21063830	Positive	21063843	Positive	21063852	Positive	21063837	Positive	21063842	Positive	21063804	Positive
L41	x	x	x	x	x	x	21064122	Negative	21064184	Negative	21064154	Positive	21064141	Positive	21064126	Positive	21064159	Positive	21064123	Positive	21064110	Positive	21064158	Positive	21064116	Positive
L42						x	21064224	Negative	21064227	Negative	21064286	Positive	21064294	Positive	21064237	Positive	21064232	Positive	21064277	Positive	21064210	Positive	21064226	Positive	21064207	Positive
L44	x	x	x	x	x	x	21064400	Negative	21064426	Negative	21064445	Positive	21064490	Positive	21064447	Positive	21064451	Positive	21064452	Positive	21064447	Positive	21064426	Positive	21064428	Positive
L46	x	x	x	x	x	x	21064630	Negative	21064674	Negative	21064605	Positive	21064683	Positive	21064648	Positive	21064626	Positive	21064600	Positive	21064644	Positive	21064618	Positive	21064615	Positive
L47	x	x	x	x	x	x	21064719	Negative	21064765	Negative	21064707	Positive	21064768	Positive	21064780	Positive	21064708	Positive	21064770	Positive	21064778	Positive	21064731	Positive	21064735	Positive
L48	x	x	x	x	x	x	21064892	Negative	21064872	Negative	21064854	Positive	21064851	Positive	21064868	Positive	21064800	Positive	21064841	Positive	21064875	Positive	21064805	Positive	21064888	Positive
L49	x	x	x	x	x	x	21064990	Negative	21064993	Negative	21064980	Positive	21064944	Positive	21064951	Positive	21064932	Positive	21064992	Positive	21064949	Positive	21064947	Positive	21064938	Positive
L50	x	x	x	x	x	x	21065065	Negative	21065098	Negative	21065011	Positive	21065048	Positive	21065068	Positive	21065099	Negative	21065047	Positive	21065078	Positive	21065072	Positive	21065040	Positive
L51	x	x	x	x	x	x	21065198	Negative	21065169	Negative	21065143	Positive	21065128	Positive	21065195	Positive	21065125	Positive	21065130	Positive	21065158	Positive	21065131	Positive	21065172	Positive
L52	x	x	x	x	x	x	21065224	Negative	21065231	Negative	21065207	Positive	21065299	Positive	21065213	Positive	21065294	Positive	21065240	Positive	21065225	Positive	21065212	Positive	21065264	Positive
L54	x	x	x	x	x	x	21065464	Negative	21065451	Negative	21065443	Positive	21065496	Positive	21065436	Positive	21065444	Positive	21065400	Positive	21065481	Positive	21065494	Positive	21065435	Positive
L55	x	x	x	x	x	x	21065542	Negative	21065510	Negative	21065505	Positive	21065524	Positive	21065535	Positive	21065570	Positive	21065563	Positive	21065504	Positive	21065554	Positive	21065507	Positive
L56						x	21065675	Negative	21065647	Positive	21065697	Positive	21065695	Positive	21065694	Positive	21065610	Negative	21065668	Positive	21065676	Positive	21065679	Positive	21065682	Positive
L57	x	x	x	x	x	x	21065767	Negative	21065773	Negative	21065714	Positive	21065777	Positive	21065749	Positive	21065742	Positive	21065778	Positive	21065701	Positive	21065768	Positive	21065723	Positive

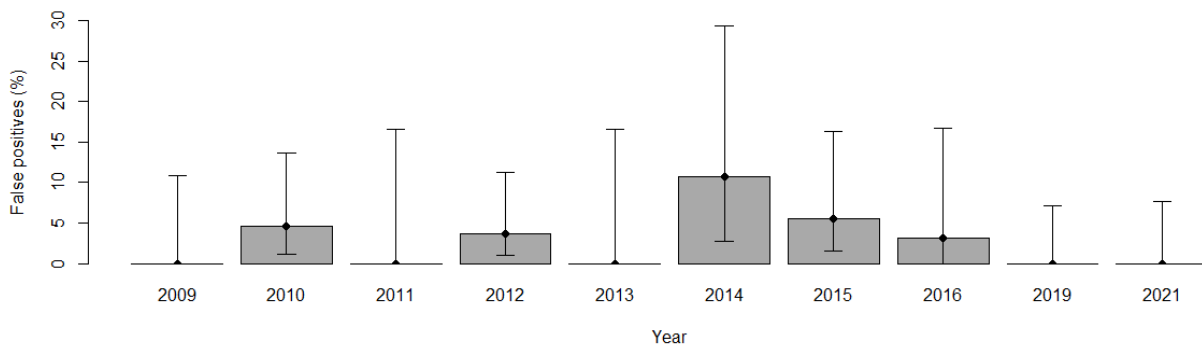
2. THE RABIES TISSUE CULTURE INFECTION TEST

Two hundred and five conventional RTCIT results were provided and 14 false results were reported, all being false negative results (Table 3 and table 4). Evolution of RTCIT results among inter-laboratory test sessions are indicated in Figure 2.

Table 3: RTCIT results per strain.

	n of analysis with discrepant results / total analysis	% of analysis with discrepant results and 95 CI
Total	14/205	6.8 [3.8 – 11.2]
Negative samples	0/46	0 [0.0 – 7.7]
Positive samples	14/159	8.8 [4.9 – 14.3]
RABV samples	8/92	8.7 [3.8 – 16.4]
CVS 27	0/23	0 [0.0 – 14.8]
RABV Greece	4/23	17.4 [5.0 – 38.8]
RABV Dog Es	2/23	8.7 [1.1 – 28.0]
Vaccinal strain	2/23	8.7 [1.1 – 28.0]
EBLV-1	2/22	9.1 [1.1 – 29.2]
BBLV	1/22	4.5 [0.1 – 22.8]
DUVV	3/23	13.0 [2.8 – 33.6]

A)



B)

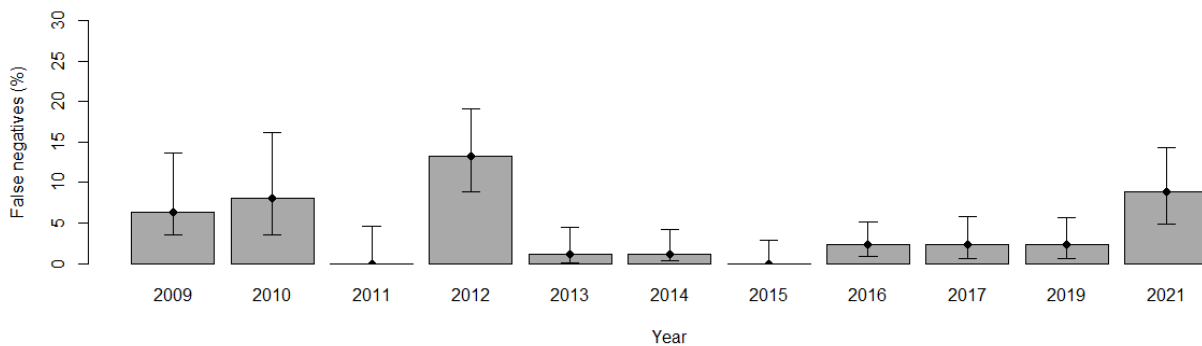


Figure 2: Evolution of false results reported in the inter-laboratory test. A: on negative samples (proportion of false positive results); B: on positive samples (proportion of false negative results).

Table 4: Results of the RTCIT tests.

Pink box: positive result. Green box: negative result. Grey box: result not considered: the result is not considered as the laboratory declared unabilities to detect the considered virus species (indicated in column 2-7 of the table) or Mix samples (included to avoid collusion).

Lab code	ABLV	BBLV	DUVV	EBLV-1	EBLV-2	RABV	Negative 1		Negative 2		RABV Greece		CVS 27		RABV Dog Es		BBLV		EBLV-1b		DUVV		Vaccinal strain		MIX	
L02	x	x	x	x	x	x	21060294	Negative	21060201	Negative	21060298	Positive	21060208	Positive	21060252	Positive	21060265	Positive	21060238	Positive	21060291	Positive	21060217	Positive	21060268	Positive
L03	x	x	x	x	x	x	21060374	Negative	21060370	Negative	21060337	Positive	21060329	Positive	21060324	Positive	21060394	Positive	21060372	Positive	21060338	Positive	21060382	Positive	21060375	Positive
L06	x	x	x	x	x	x	21060686	Negative	21060650	Negative	21060684	Positive	21060685	Positive	21060636	Positive	21060680	Positive	21060623	Positive	21060663	Positive	21060600	Positive	21060639	Positive
L07	x	x	x	x	x	x	21060780	Negative	21060794	Negative	21060742	Positive	21060787	Positive	21060704	Positive	21060719	Positive	21060751	Positive	21060706	Positive	21060736	Positive	21060735	Positive
L08	x	x	x	x	x	x	21060859	Negative	21060867	Negative	21060817	Negative	21060869	Positive	21060816	Positive	21060805	Positive	21060874	Positive	21060833	Negative	21060824	Positive	21060889	Negative
L10		x	x	x		x	21061016	Negative	21061075	Negative	21061045	Negative	21061091	Positive	21061030	Positive	21061062	Positive	21061007	Positive	21061020	Positive	21061073	Positive	21061074	Positive
L11	x	x	x	x	x	x	21061156	Negative	21061135	Negative	21061120	Positive	21061164	Positive	21061174	Positive	21061147	Positive	21061121	Positive	21061130	Positive	21061110	Positive	21061145	Positive
L13	x	x	x	x	x	x	21061322	Negative	21061309	Negative	21061308	Positive	21061389	Positive	21061380	Positive	21061335	Positive	21061355	Positive	21061388	Positive	21061360	Positive	21061313	Positive
L14	x	x	x	x	x	x	21061464	Negative	21061462	Negative	21061455	Positive	21061478	Positive	21061477	Positive	21061479	Positive	21061409	Positive	21061400	Positive	21061433	Negative	21061443	Positive
L15	x	x	x	x	x	x	21061566	Negative	21061559	Negative	21061540	Positive	21061546	Positive	21061508	Positive	21061501	Positive	21061582	Positive	21061591	Positive	21061524	Positive	21061533	Positive
L18	x	x	x	x	x	x	21061870	Negative	21061867	Negative	21061817	Positive	21061864	Positive	21061884	Positive	21061892	Negative	21061874	Negative	21061863	Negative	21061810	Negative	21061813	Positive
L20	x	x	x	x	x	x	21062046	Negative	21062025	Negative	21062088	Positive	21062091	Positive	21062045	Positive	21062087	Positive	21062097	Positive	21062071	Positive	21062019	Positive	21062048	Positive
L29	x	x	x	x	x	x	21062928	Negative	21062967	Negative	21062974	Positive	21062930	Positive	21062951	Positive	21062921	Positive	21062979	Positive	21062992	Positive	21062957	Positive	21062948	Positive
L32	x	x	x	x	x	x	21063253	Negative	21063244	Negative	21063297	Positive	21063293	Positive	21063243	Positive	21063291	Positive	21063206	Positive	21063299	Positive	21063233	Positive	21063210	Positive
L33	x	x	x	x	x	x	21063321	Negative	21063353	Negative	21063350	Positive	21063306	Positive	21063311	Positive	21063326	Positive	21063307	Positive	21063378	Positive	21063301	Positive	21063394	Positive
L35	x	x	x	x	x	x	21063516	Negative	21063511	Negative	21063545	Positive	21063578	Positive	21063523	Positive	21063591	Positive	21063557	Positive	21063504	Positive	21063515	Positive	21063532	Positive
L41	x	x	x	x	x	x	21064122	Negative	21064184	Negative	21064154	Positive	21064141	Positive	21064126	Positive	21064159	Positive	21064123	Negative	21064110	Positive	21064158	Positive	21064116	Positive
L42						x	21064224	Negative	21064227	Negative	21064286	Negative	21064294	Positive	21064237	Negative	21064232	Negative	21064277	Positive	21064210	Negative	21064226	Positive	21064207	Negative
L44	x	x	x	x	x	x	21064400	Negative	21064426	Negative	21064445	Positive	21064490	Positive	21064497	Positive	21064471	Positive	21064452	Positive	21064447	Positive	21064449	Positive	21064428	Positive
L46	x	x	x	x	x	x	21064630	Negative	21064674	Negative	21064605	Negative	21064683	Positive	21064648	Negative	21064626	Positive	21064600	Positive	21064644	Positive	21064618	Positive	21064615	Negative
L51	x	x	x	x	x	x	21065198	Negative	21065169	Negative	21065143	Positive	21065128	Positive	21065195	Positive	21065125	Positive	21065130	Positive	21065158	Positive	21065131	Positive	21065172	Positive
L52	x	x	x	x	x	x	21065224	Negative	21065231	Negative	21065207	Positive	21065299	Positive	21065213	Positive	21065294	Positive	21065240	Positive	21065225	Positive	21065212	Positive	21065264	Positive
L54	x	x	x	x	x	x	21065464	Negative	21065451	Negative	21065443	Positive	21065496	Positive	21065436	Positive	21065444	Positive	21065400	Positive	21065481	Positive	21065494	Positive	21065435	Positive

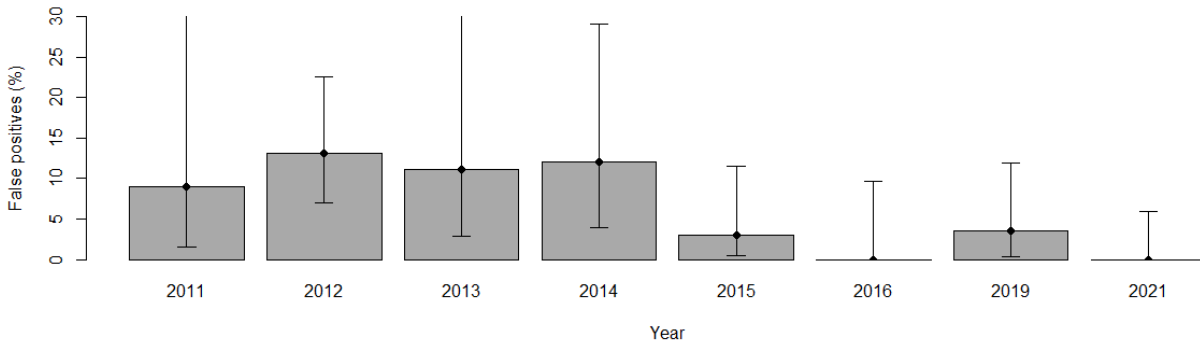
3. THE CONVENTIONAL REVERSE TRANSCRIPTASE POLYMERASE CHAIN REACTION

Two hundred sixty five conventional RT-PCR results were provided and 5 false results were reported, all being false negative results (Table 5 and table 6). Evolution of conventional RT-PCR results among inter-laboratory test sessions are indicated in Figure 3.

Table 5: Conventional RT-PCR results per strain.

	n of analysis with discrepant results / total analysis	% of analysis with discrepant results and 95 CI
Total	5/265	1.9 [0.6 – 4.3]
Negative samples	0/60	0 [0.0 – 6.0]
Positive samples	5/205	2.4 [0.8 – 5.6]
RABV samples	4/120	3.3 [0.9 – 8.3]
CVS 27	2/30	6.7 [0.8 – 22.1]
RABV Greece	0/30	0 [0.0 – 11.6]
RABV Dog Es	1/30	3.3 [0.0 – 17.2]
Vaccinal strain	1/30	3.3 [0.0 – 17.2]
EBLV-1	1/29	3.4 [0.0 – 17.8]
BBLV	0/28	0 [0.0 – 12.3]
DUVV	0/28	0 [0.0 – 12.3]

A)



B)

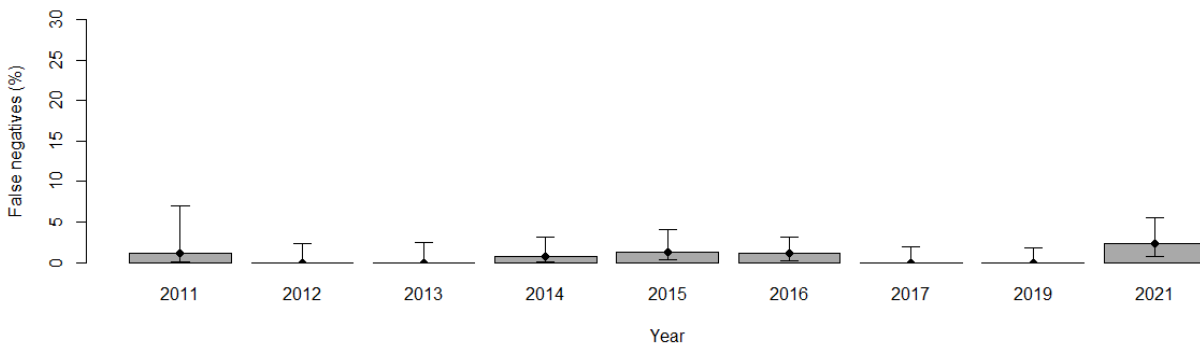


Figure 3: Evolution of false results reported in the inter-laboratory test. A: on negative samples (proportion of false positive results); B: on positive samples (proportion of false negative results).

Table 6: Results of the RT-PCR tests.

Pink box: positive result. Green box: negative result. Grey box: result not considered: the result is not considered as the laboratory declared unabilities to detect the considered virus species (indicated in column 2-7 of the table) or Mix samples (included to avoid collusion).

Lab code	ABLV	BBLV	DUW	EBLV-1	EBLV-2	RABV	Negative 1			Negative 2			RABV Greece		CVS 27		RABV Dog Es				
L02	x	x	x	x	x	x	21060294	Negative		21060201	Negative		21060298	Positive	RABV	21060208	Positive	RABV	21060252	Positive	RABV
L03	x	x	x	x	x	x	21060374	Negative		21060370	Negative		21060337	Positive	RABV	21060329	Positive	RABV	21060324	Positive	RABV
L06				x	x	x	21060686	Negative		21060650	Negative		21060684	Positive	RABV	21060685	Positive		21060636	Positive	RABV
L07	x	x	x	x	x	x	21060780	Negative		21060794	Negative		21060742	Positive		21060787	Positive		21060704	Positive	
L08	x	x	x	x	x	x	21060859	Negative		21060867	Negative		21060817	Positive	RABV	21060869	Positive	RABV	21060816	Positive	RABV
L11	x	x	x	x	x	x	21061156	Negative		21061135	Negative		21061120	Positive	RABV	21061164	Positive	RABV	21061174	Positive	RABV
L13	x	x	x	x	x	x	21061322	Negative		21061309	Negative		21061308	Positive	RABV	21061389	Positive	RABV	21061380	Positive	RABV
L14	x	x	x	x	x	x	21061464	Negative		21061462	Negative		21061455	Positive	RABV	21061478	Positive	RABV	21061477	Positive	RABV
L15	x	x	x	x	x	x	21061566	Negative		21061559	Negative		21061540	Positive	RABV	21061546	Positive	RABV	21061508	Positive	RABV
L16	x	x	x	x	x	x	21061674	Negative		21061640	Negative		21061699	Positive	RABV	21061612	Positive	RABV	21061679	Positive	RABV
L17	x	x	x	x	x	x	21061706	Negative		21061772	Negative		21061710	Positive	RABV	21061757	Positive	RABV	21061785	Positive	RABV
L18	x	x	x	x	x	x	21061870	Negative		21061867	Negative		21061817	Positive	RABV	21061864	Positive	RABV	21061884	Positive	RABV
L20	x	x	x	x	x	x	21062046	Negative		21062025	Negative		21062088	Positive	RABV	21062091	Positive	RABV	21062045	Positive	RABV
L26	x	x	x	x	x	x	21062653	Negative		21062682	Negative		21062625	Positive	RABV	21062600	Positive	RABV	21062648	Positive	RABV
L28	x	x	x	x	x	x	21062857	Negative		21062843	Negative		21062882	Positive		21062875	Positive		21062801	Positive	
L29	x	x	x	x	x	x	21062928	Negative		21062967	Negative		21062974	Positive		21062930	Positive		21062951	Positive	
L30	x	x	x	x	x	x	21063078	Negative		21063059	Negative		21063086	Positive		21063047	Positive		21063093	Positive	
L31	x	x	x	x	x	x	21063140	Negative		21063168	Negative		21063177	Positive		21063188	Negative		21063146	Positive	
L33	x	x	x	x	x	x	21063321	Negative		21063353	Negative		21063350	Positive	RABV	21063306	Positive	RABV	21063311	Positive	RABV
L35	x	x	x	x	x	x	21063516	Negative		21063511	Negative		21063545	Positive	RABV	21063578	Positive	RABV	21063523	Positive	RABV
L38	x	x	x	x	x	x	21063890	Negative		21063810	Negative		21063836	Positive		21063814	Positive		21063830	Positive	
L41	x	x	x	x	x	x	21064122	Negative		21064184	Negative		21064154	Positive	RABV	21064141	Positive	RABV	21064126	Positive	RABV
L42	x	x	x	x	x	x	21064224	Negative		21064227	Negative		21064286	Positive		21064294	Positive		21064237	Positive	
L46		x	x	x		x	21064630	Negative		21064674	Negative		21064605	Positive	RABV	21064683	Positive	RABV	21064648	Positive	RABV
L51	x	x	x	x	x	x	21065198	Negative		21065169	Negative		21065143	Positive	RABV	21065128	Positive	RABV	21065195	Positive	RABV
L52	x	x	x	x	x	x	21065224	Negative		21065231	Negative		21065207	Positive		21065299	Positive		21065213	Positive	
L54	x	x	x	x	x	x	21065464	Negative		21065451	Negative		21065443	Positive	RABV	21065496	Positive	RABV	21065436	Positive	RABV
L55	x	x	x	x	x	x	21065542	Negative		21065510	Negative		21065505	Positive	RABV	21065524	Positive	RABV	21065535	Positive	RABV
L56						x	21065675	Negative		21065647	Negative		21065697	Positive		21065695	Negative		21065694	Negative	
L57	x	x	x	x	x	x	21065767	Negative		21065773	Negative		21065714	Positive	RABV	21065777	Positive	RABV	21065749	Positive	RABV

Table 6: Results of the RT-PCR tests.

Pink box: positive result. Green box: negative result. Grey box: result not considered: the result is not considered as the laboratory declared unabilities to detect the considered virus species (indicated in column 2-7 of the table) or Mix samples (included to avoid collusion).

Lab code	ABLV	BBLV	DUVV	EBLV-1	EBLV-2	RABV	BBLV			EBLV-1b			DUVV			Vaccinal strain			MIX	
L02	x	x	x	x	x	x	21060265	Positive	BBLV	21060238	Positive	EBLV-1	21060291	Positive	DUVV	21060217	Positive	RABV	21060268	Positive
L03	x	x	x	x	x	x	21060394	Positive	BBLV	21060372	Positive	EBLV-1	21060338	Positive	DUVV	21060382	Positive	RABV	21060375	Positive
L06				x	x	x	21060680	Positive		21060623	Positive	EBLV-1	21060663	Positive		21060600	Positive	RABV	21060639	Positive
L07	x	x	x	x	x	x	21060719	Positive		21060751	Positive		21060706	Positive		21060736	Positive		21060735	Positive
L08	x	x	x	x	x	x	21060805	Positive	BBLV	21060874	Positive	EBLV-1	21060833	Positive	DUVV	21060824	Positive	RABV	21060889	Positive
L11	x	x	x	x	x	x	21061147	Positive	BBLV	21061121	Positive	EBLV-1	21061130	Positive	DUVV	21061110	Positive	RABV	21061145	Positive
L13	x	x	x	x	x	x	21061335	Positive	BBLV	21061355	Positive	EBLV-1	21061388	Positive	DUVV	21061360	Positive	RABV	21061313	Positive
L14	x	x	x	x	x	x	21061479	Positive	BBLV	21061409	Positive	EBLV-1	21061400	Positive	DUVV	21061433	Positive	RABV	21061443	Positive
L15	x	x	x	x	x	x	21061501	Positive	BBLV	21061582	Positive	EBLV-1	21061591	Positive	DUVV	21061524	Positive	RABV	21061533	Positive
L16	x	x	x	x	x	x	21061600	Positive	BBLV	21061689	Positive	EBLV-1	21061675	Positive	DUVV	21061666	Positive	RABV	21061620	Positive
L17	x	x	x	x	x	x	21061766	Positive	BBLV	21061717	Positive	EBLV-1	21061764	Positive	DUVV	21061761	Positive	RABV	21061746	Positive
L18	x	x	x	x	x	x	21061892	Positive	BBLV	21061874	Positive	EBLV-1	21061863	Positive	DUVV	21061810	Positive	RABV	21061813	Positive
L20	x	x	x	x	x	x	21062087	Positive	BBLV	21062097	Positive	EBLV-1	21062071	Positive	DUVV	21062019	Positive	RABV	21062048	Positive
L26	x	x	x	x	x	x	21062614	Positive	BBLV	21062622	Positive	EBLV-1	21062601	Positive	DUVV	21062681	Positive	RABV	21062616	Positive
L28	x	x	x	x	x	x	21062807	Positive		21062871	Positive		21062841	Positive		21062814	Positive		21062874	Positive
L29	x	x	x	x	x	x	21062921	Positive		21062979	Positive		21062992	Positive		21062957	Positive		21062948	Positive
L30	x	x	x	x	x	x	21063087	Positive		21063019	Positive		21063010	Positive		21063084	Positive		21063041	Positive
L31	x	x	x	x	x	x	21063122	Positive		21063160	Negative		21063115	Positive		21063112	Positive		21063141	Positive
L33	x	x	x	x	x	x	21063326	Positive	BBLV	21063307	Positive	EBLV-1	21063378	Positive	DUVV	21063301	Positive	RABV	21063394	Positive
L35	x	x	x	x	x	x	21063591	Positive	BBLV	21063557	Positive	EBLV-1	21063504	Positive	DUVV	21063515	Positive	RABV	21063532	Positive
L38	x	x	x	x	x	x	21063843	Positive		21063852	Positive		21063837	Positive		21063842	Positive		21063804	Positive
L41	x	x	x	x	x	x	21064159	Positive	BBLV	21064123	Positive	EBLV-1	21064110	Positive	DUVV	21064158	Negative		21064116	Positive
L42	x	x	x	x	x	x	21064232	Positive		21064277	Positive		21064210	Positive		21064226	Positive		21064207	Positive
L46		x	x	x		x	21064626	Positive	BBLV	21064600	Positive	EBLV-1	21064644	Positive	DUVV	21064618	Positive	RABV	21064615	Positive
L51	x	x	x	x	x	x	21065125	Positive	BBLV	21065130	Positive	EBLV-1	21065158	Positive	BBLV	21065131	Positive	RABV	21065172	Positive
L52	x	x	x	x	x	x	21065294	Positive		21065240	Positive		21065225	Positive		21065212	Positive		21065264	Positive
L54	x	x	x	x	x	x	21065444	Positive	BBLV	21065400	Positive	EBLV-1	21065481	Positive	DUVV	21065494	Positive	RABV	21065435	Positive
L55	x	x	x	x	x	x	21065570	Positive	BBLV	21065563	Positive	EBLV-1	21065504	Positive	DUVV	21065554	Positive	RABV	21065507	Positive
L56						x	21065610	Negative		21065668	Negative		21065676	Positive		21065679	Positive		21065682	Positive
L57	x	x	x	x	x	x	21065742	Positive	BBLV	21065778	Positive	EBLV-1	21065701	Positive	DUVV	21065768	Positive	RABV	21065723	Positive

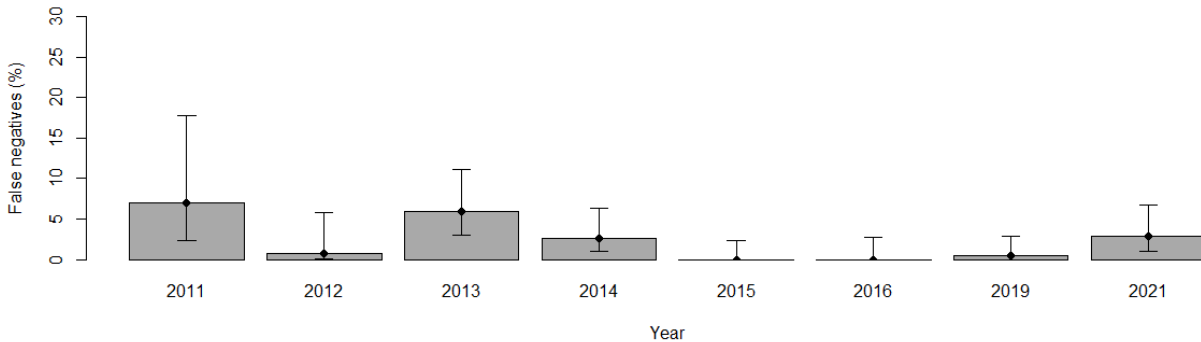
4. THE REAL TIME REVERSE TRANSCRIPTASE POLYMERASE CHAIN REACTION

Two hundred twenty two Real Time RT-PCR results were provided and 6 false results were detected: one on false negative and 5 false positive results (Table 7 and table 8). Evolution of conventional RT-PCR results among inter-laboratory test sessions are indicated in Figure 3.

Table 7: Real Time RT-PCR results per strain.

	n of samples with different results / total analysis	% of analysis with discrepant results and 95 CI
Total	6/226	2.7 [1.0 – 5.7]
Negative samples	1/56	1.8 [0.0 – 9.6]
Positive samples	5/170	2.9 [1.0 – 6.7]
RABV samples	4/108	3.7 [1.0 – 8.0]
CVS 27	3/27	11.1 [2.4 – 29.2]
RABV Greece	0/27	0 [0.0 – 12.8]
RABV Dog Es	1/27	3.7 [0.0 – 19.0]
Vaccinal strain	0/27	0 [0.0 – 12.8]
EBLV-1	1/24	4.2 [0.1 – 21.1]
BBLV	0/20	0 [0.0 – 16.8]
DUVV	0/18	0 [0.0 – 18.5]

A)



B)

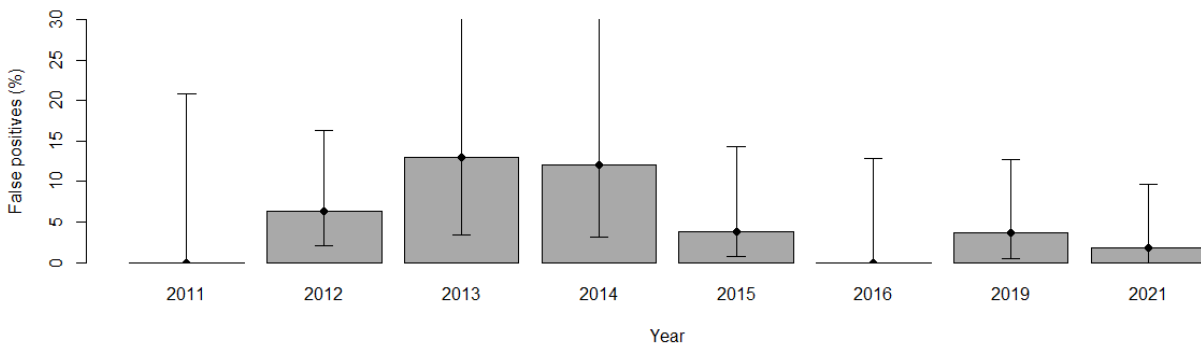


Figure 4: Evolution of false results reported in the inter-laboratory test. A: on negative samples (proportion of false positive results); B: on positive samples (proportion of false negative results).

Table 8: Results of the RT-qPCR tests.

Pink box: positive result. Green box: negative result. Grey box: result not considered: the result is not considered as the laboratory declared unabilities to detect the considered virus species (indicated in column 2-7 of the table) or Mix samples (included to avoid collusion).

Lab code	ABLV	BBLV	DUVV	EBLV-1	EBLV-2	RABV	Negative 1			Negative 2			RABV Greece		CVS 27			RABV Dog Es			
L02	x	x	x	x	x	x	21060294	Negative		21060201	Negative		21060298	Positive		21060208	Positive		21060252	Positive	
L03	x	x	x	x	x	x	21060374	Negative		21060370	Negative		21060337	Positive		21060329	Positive		21060324	Positive	
L06				x	x	x	21060686	Negative		21060650	Negative		21060684	Positive	RABV	21060685	Positive		21060636	Positive	RABV
L08	x	x	x	x	x	x	21060859	Negative		21060867	Negative		21060817	Positive		21060869	Positive		21060816	Positive	
L10		x	x	x		x	21061016	Negative		21061075	Negative		21061045	Positive	RABV	21061091	Positive	RABV	21061030	Positive	RABV
L14		x	x	x	x	x	21061464	Negative		21061462	Negative		21061455	Positive	RABV	21061478	Positive	RABV	21061477	Positive	RABV
L15						x	21061566	Negative		21061559	Negative		21061540	Positive	RABV	21061546	Positive	RABV	21061508	Positive	RABV
L16		x					21061674	Negative		21061640	Negative		21061699	Negative		21061612	Negative		21061679	Negative	
L17				x		x	21061706	Negative		21061772	Negative		21061710	Positive	RABV	21061757	Positive	RABV	21061785	Positive	RABV
L18	x	x	x	x	x	x	21061870	Negative		21061867	Negative		21061817	Positive	RABV	21061864	Positive	RABV	21061884	Positive	RABV
L20	x	x	x	x	x	x	21062046	Negative		21062025	Negative		21062088	Positive		21062091	Positive		21062045	Positive	
L24						x	21062407	Negative		21062455	Negative		21062495	Positive	RABV	21062456	Positive	RABV	21062430	Positive	RABV
L28	x	x	x	x	x	x	21062857	Negative		21062843	Negative		21062882	Positive		21062875	Positive		21062801	Positive	
L29				x	x	x	21062928	Negative		21062967	Negative		21062974	Positive	RABV	21062930	Positive	RABV	21062951	Positive	RABV
L31	x	x	x	x	x	x	21063140	Negative		21063168	Negative		21063177	Positive		21063188	Negative		21063146	Positive	
L32	x	x	x	x	x	x	21063253	Negative		21063244	Negative		21063297	Positive		21063293	Positive		21063243	Positive	
L33	x	x	x	x	x	x	21063321	Negative		21063353	Negative		21063350	Positive		21063306	Positive		21063311	Positive	
L35	x	x	x	x	x	x	21063516	Negative		21063511	Negative		21063545	Positive		21063578	Positive		21063523	Positive	
L36				x	x	x	21063691	Negative		21063656	Negative		21063685	Positive	RABV	21063606	Positive	RABV	21063692	Positive	RABV
L46	x	x	x	x	x	x	21064630	Negative		21064674	Negative		21064605	Positive	RABV	21064683	Positive	RABV	21064648	Positive	RABV
L48	x	x	x	x	x	x	21064892	Negative		21064872	Negative		21064854	Positive	RABV	21064851	Positive	RABV	21064868	Positive	RABV
L49	x	x	x	x	x	x	21064990	Negative		21064993	Negative		21064980	Positive		21064944	Positive		21064951	Positive	
L51		x		x		x	21065198	Negative		21065169	Negative		21065143	Positive	RABV	21065128	Negative		21065195	Positive	RABV
L52	x	x	x	x		x	21065224	Negative		21065231	Negative		21065207	Positive	RABV	21065299	Positive	RABV	21065213	Positive	RABV
L54	x	x	x	x	x	x	21065464	Negative		21065451	Negative		21065443	Positive	RABV	21065496	Positive	RABV	21065436	Positive	RABV
L55	x	x	x	x	x	x	21065542	Negative		21065510	Negative		21065505	Positive	RABV	21065524	Positive	RABV	21065535	Positive	RABV
L56						x	21065675	Negative		21065647	Positive		21065697	Positive		21065695	Negative		21065694	Negative	
L57				x	x	x	21065767	Negative		21065773	Negative		21065714	Positive	RABV	21065777	Positive	RABV	21065749	Positive	RABV

Table 8: Results of the RT-qPCR tests.

Pink box: positive result. Green box: negative result. Grey box: result not considered: the result is not considered as the laboratory declared unabilities to detect the considered virus species (indicated in column 2-7 of the table) or Mix samples (included to avoid collusion).

Lab code	ABLV	BBLV	DUVV	EBLV-1	EBLV-2	RABV	BBLV			EBLV-1b			DUVV			Vaccinal strain		MIX		
L02	x	x	x	x	x	x	21060265	Positive		21060238	Positive		21060291	Positive		21060217	Positive		21060268	Positive
L03	x	x	x	x	x	x	21060394	Positive		21060372	Positive		21060338	Positive		21060382	Positive		21060375	Positive
L06				x	x	x	21060680	Positive		21060623	Positive	EBLV-1	21060663	Positive		21060600	Positive	RABV	21060639	Positive
L08	x	x	x	x	x	x	21060805	Positive		21060874	Positive		21060833	Positive		21060824	Positive		21060889	Positive
L10		x	x	x		x	21061062	Positive	BBLV	21061007	Positive	EBLV-1	21061020	Positive	DUVV	21061073	Positive	RABV	21061074	Positive
L14		x	x	x	x	x	21061479	Positive	BBLV	21061409	Positive	EBLV-1	21061400	Positive	DUVV	21061433	Positive	RABV	21061443	Positive
L15						x	21061501	Negative		21061582	Negative		21061591	Negative		21061524	Positive	RABV	21061533	Positive
L16		x					21061600	Positive	BBLV	21061689	Negative		21061675	Negative		21061666	Negative		21061620	Negative
L17				x		x	21061766	Positive	RABV	21061717	Positive	EBLV-1	21061764	Negative		21061761	Positive	RABV	21061746	Positive
L18	x	x	x	x	x	x	21061892	Positive	BBLV	21061874	Positive	EBLV-1	21061863	Positive	DUVV	21061810	Positive	RABV	21061813	Positive
L20	x	x	x	x	x	x	21062087	Positive		21062097	Positive		21062071	Positive		21062019	Positive		21062048	Positive
L24						x	21062452	Negative		21062437	Negative		21062400	Negative		21062449	Positive	RABV	21062458	Positive
L28	x	x	x	x	x	x	21062807	Positive		21062871	Positive		21062841	Positive		21062814	Positive		21062874	Positive
L29				x	x	x	21062921	Negative		21062979	Positive	EBLV-1	21062992	Negative		21062957	Positive	RABV	21062948	Positive
L31	x	x	x	x	x	x	21063122	Positive		21063160	Negative		21063115	Positive		21063112	Positive		21063141	Positive
L32	x	x	x	x	x	x	21063291	Positive		21063206	Positive		21063299	Positive		21063233	Positive		21063210	Positive
L33	x	x	x	x	x	x	21063326	Positive		21063307	Positive		21063378	Positive		21063301	Positive		21063394	Positive
L35	x	x	x	x	x	x	21063591	Positive		21063557	Positive		21063504	Positive		21063515	Positive		21063532	Positive
L36				x	x	x	21063617	Positive	RABV	21063673	Positive	EBLV-1	21063679	Positive	RABV	21063675	Positive	RABV	21063609	Positive
L46	x	x	x	x	x	x	21064626	Positive	BBLV	21064600	Positive	EBLV-1	21064644	Positive	DUVV	21064618	Positive	RABV	21064615	Positive
L48	x	x	x	x	x	x	21064800	Positive	BBLV	21064841	Positive	EBLV-1	21064875	Positive	DUVV	21064805	Positive	RABV	21064888	Positive
L49	x	x	x	x	x	x	21064932	Positive		21064992	Positive		21064949	Positive		21064947	Positive		21064938	Positive
L51		x		x		x	21065125	Positive	BBLV	21065130	Positive	EBLV-1	21065158	Positive	BBLV	21065131	Positive	RABV	21065172	Negative
L52	x	x	x	x		x	21065294	Positive	BBLV	21065240	Positive	EBLV-1	21065225	Positive	DUVV	21065212	Positive	RABV	21065264	Positive
L54	x	x	x	x	x	x	21065444	Positive	BBLV	21065400	Positive	EBLV-1	21065481	Positive	DUVV	21065494	Positive	RABV	21065435	Positive
L55	x	x	x	x	x	x	21065570	Positive		21065563	Positive	EBLV-1	21065504	Positive		21065554	Positive	RABV	21065507	Positive
L56						x	21065610	Negative		21065668	Positive		21065676	Positive		21065679	Positive		21065682	Negative
L57				x	x	x	21065742	Negative		21065778	Positive	EBLV-1	21065701	Negative		21065768	Positive	RABV	21065723	Negative