

Table S1: Dataset description of SRLV samples analysed in the study.

ID strain	Year	Region	Species	Accession number	Genotypes /subtypes	Reference
SRLV_To1.89	1989	Piemonte	Goat	MH374290	B1	Bertolotti L., et al 2018
1G/SA/98	1998	Sardegna	Goat	FR694915	B1	Giammarioli M. et al 2011
TC2/SA/99	1999	Sardegna	Goat	FR694916	B1	Giammarioli M. et al 2011
414/UM/00	2000	Umbria	Sheep	FR694696	A11	In this study
22803.29.UM.10	2000	Umbria	Goat	FR693817	A11	In this study
It561	2005	Piemonte	Sheep	AY265455	A19	Grego E et al 2005
7008/UM/01	2001	Umbria	Sheep	FR695719	B2	Giammarioli M. et al 2011
74528.6/SA/02	2002	Sardegna	Goat	FR694920	E2	Giammarioli M. et al 2011
74528.13/SA/02	2002	Sardegna	Goat	FR694921	E2	Giammarioli M. et al 2011
Fonni	2003	Sardegna	Sheep	JF502416	B3	Bertolotti L., et al 2011
Volterra	2004	Toscana	Sheep	JF502417	B3	Bertolotti L., et al 2011
It-008g03	2006	Piemonte	Goat	EU010125	A8	Grego E., et al 2007
It-014s03	2006	Piemonte	Sheep	EF676000	B2	Grego E., et al 2007
It-025g02	2006	Piemonte	Goat	EU010124	E1	Grego E., et al 2007
It-026g02	2006	Piemonte	Goat	EF676003	E1	Grego E., et al 2007
It-027g02	2006	Piemonte	Goat	EF676004	E1	Grego E., et al 2007
It-029g02	2006	Piemonte	Goat	EF676005	E1	Grego E., et al 2007
It-030g03	2006	Piemonte	Goat	EF676006	A8	Grego E., et al 2007
It-035s05	2006	Piemonte	Sheep	EF676007	B1	Grego E., et al 2007
It-037s05	2006	Piemonte	Sheep	EF676009	B1	Grego E., et al 2007
It-043g05	2006	Piemonte	Goat	EU010121	B1	Grego E., et al 2007
It-045g05	2006	Piemonte	Goat	EF676013	B1	Grego E., et al 2007
It-047g05	2006	Piemonte	Goat	EU010120	B1	Grego E., et al 2007
It-051g06	2006	Piemonte	Goat	EF676014	E1	Grego E., et al 2007
It-053s01	2006	Piemonte	Sheep	EF676016	A9	Grego E., et al 2007
It-052g06	2006	Piemonte	Goat	EF676015	B1	Grego E., et al 2007
It-090g06	2006	Piemonte	Goat	EF676021	E1	Grego E., et al 2007
It-069s01	2006	Piemonte	Sheep	EF676020	A9	Grego E., et al 2007

It-064s01	2006	Piemonte	Sheep	EF676019	A9	Grego E., et al 2007
It-063s01	2006	Piemonte	Sheep	EF676018	A9	Grego E., et al 2007
It-060s01	2006	Piemonte	Sheep	EF676017	A9	Grego E., et al 2007
32214/UM/06	2006	Umbria	Sheep	FR694691	B3	Giammarioli M. et al 2011
51937/UM/06	2006	Umbria	Goat	FR695064	recombinant A9/A11	In this study
It-103g02	2007	Piemonte	Goat	EF676022	E1	Grego E., et al 2007
It-130g02	2007	Piemonte	Goat	EF676025	E1	Grego E., et al 2007
It-121g02	2007	Piemonte	Goat	EF676024	E1	Grego E., et al 2007
It-104g02	2007	Piemonte	Goat	EF676023	E1	Grego E., et al 2007
04/TO/08	2008	Toscana	Goat	FR694917	B1	Giammarioli M. et al 2011
380/TO/08	2008	Toscana	Goat	FR694918	B1	Giammarioli M. et al 2011
Roccaverano	2008	Piemonte	Goat	EU293537	E1	Reina R. et al 2009
10294/MA/09	2009	Marche	Goat	FR694689	B3	Giammarioli M. et al 2011
10298/MA/09	2009	Marche	Sheep	FR694914	A24	In this study
10308/MA/09	2009	Marche	Sheep	FR694909	recombinant A3/A11	In this study
63088/UM/09	2009	Umbria	Goat	FR694919	B1	Giammarioli M. et al 2011
ME.24/UM/09	2009	Umbria	Goat	FR694912	E2	Giammarioli M. et al 2011
6770/UM/09	2009	Umbria	Goat	FR693815	A11	Giammarioli M. et al 2011
5480.2/SA/09	2009	Sardegna	Sheep	FR694686	B3	Giammarioli M. et al 2011
5480.10/SA/09	2009	Sardegna	Sheep	FR694687	B3	Giammarioli M. et al 2011
36384.1/SA/09	2009	Sardegna	Goat	FR694688	B3	Giammarioli M. et al 2011
06/PI/09	2009	Piemonte	Sheep	FR687200	B2	Giammarioli M. et al 2011
10310/MA/09	2009	Marche	Sheep	FR694910	recombinant A3/A11	In this study
2803.35/UM/10	2010	Toscana	Goat	FR693818	A11	Giammarioli M. et al 2011
5012/UM/10	2010	Umbria	Goat	FR693819	A11	Giammarioli M. et al 2011
6440/UM/10	2010	Umbria	Goat	FR693820	A11	Giammarioli M. et al 2011
1810/UM/10	2010	Umbria	Goat	FR693821	A11	Giammarioli M. et al 2011
2803.34/UM/10	2010	Toscana	Goat	FR693822	A11	Giammarioli M. et al 2011
2797.4/UM/10	2010	Toscana	Sheep	FR694692	A11	Giammarioli M. et al 2011

2607/UM/10	2010	Umbria	Goat	FR693823	A11	Gammarioli M. et al 2011
0222/UM/10	2010	Umbria	Goat	FR693810	A11	Gammarioli M. et al 2011
2798.4/UM/10	2010	Umbria	Goat	FR693812	A11	Gammarioli M. et al 2011
2803.32/UM/10	2010	Toscana	Goat	FR693811	A11	Gammarioli M. et al 2011
2803.42/UM/10	2010	Toscana	Goat	FR693809	A11	Gammarioli M. et al 2011
2803.28/UM/10	2010	Toscana	Goat	FR693808	A11	Gammarioli M. et al 2011
2356/UM/10	2010	Umbria	Goat	FR693824	A11	Gammarioli M. et al 2011
2797.11/UM/10	2010	Toscana	Sheep	FR694693	A11	Gammarioli M. et al 2011
6780/UM/10	2010	Umbria	Goat	FR693816	A11	Gammarioli M. et al 2011
1462/UM/10	2010	Umbria	Goat	FR693814	A11	Gammarioli M. et al 2011
2393/UM/10	2010	Umbria	Goat	FR693813	A11	Gammarioli M. et al 2011
7995/UM/10	2010	Umbria	Goat	FR693832	A11	Gammarioli M. et al 2011
5065/UM/10	2010	Umbria	Goat	FR693831	A11	Gammarioli M. et al 2011
7978/UM/10	2010	Umbria	Goat	FR693830	A11	Gammarioli M. et al 2011
6408/UM/10	2010	Umbria	Goat	FR693829	A11	Gammarioli M. et al 2011
2357/UM/10	2010	Umbria	Goat	FR693827	A11	Gammarioli M. et al 2011
4150/UM/10	2010	Umbria	Goat	FR693828	A11	Gammarioli M. et al 2011
2797.1/UM/10	2010	Toscana	Sheep	FR694694	A11	Gammarioli M. et al 2011
9440/UM/10	2010	Umbria	Goat	FR693826	A11	Gammarioli M. et al 2011
0245/UM/10	2010	Umbria	Goat	FR693825	A11	Gammarioli M. et al 2011
0249/UM/10	2010	Umbria	Goat	FR694690	B3	Gammarioli M. et al 2011
1017/UM/10	2010	Umbria	Goat	FR694908	A9	Gammarioli M. et al 2011
ME.30/UM/10	2010	Umbria	Goat	FR694913	E2	Gammarioli M. et al 2011
2803.25/UM/10	2010	Toscana	Goat	FR694911	E2	Gammarioli M. et al 2011
LaSaz06/UM/10	2010	Umbria	Sheep	FR828809	A9	Gammarioli M. et al 2011
11058/UM/10	2010	Umbria	Sheep	FR828810	B3	Gammarioli M. et al 2011
11067/UM/10	2010	Umbria	Sheep	FR828811	B3	Gammarioli M. et al 2011
11063/UM/10	2010	Umbria	Sheep	FR828812	B3	Gammarioli M. et al 2011

11059/UM/10	2010	Umbria	Sheep	FR828813	B3	Giammarioli M. et al 2011
AN13/MA/10	2010	Marche	Sheep	FR828814	B2	Giammarioli M. et al 2011
PS075/MA/10	2010	Marche	Sheep	FR828815	B3	Giammarioli M. et al 2011
AN10/MA/10	2010	Marche	Sheep	FR828816	B3	Giammarioli M. et al 2011
La1SAZ/UM/10	2010	Umbria	Sheep	FR694695	A11	In this study
76_SI_2011	2011	Sicilia	Goat	LR723571	B1	In this study
77_SI_2011	2011	Sicilia	Goat	LR723578	B1	In this study
78_SI_2011.	2011	Sicilia	Goat	LR723572	B1	In this study
79_SI_2011	2011	Sicilia	Goat	LR723573	B1	In this study
80_SI_2011	2011	Sicilia	Goat	LR723574	B1	In this study
81_SI_2011	2011	Sicilia	Goat	LR723575	B1	In this study
82_SI_2011	2011	Sicilia	Goat	LR723576	B1	In this study
83_SI_2011	2011	Sicilia	Goat	LR723087	B1	In this study
84_SI_2011	2011	Sicilia	Goat	LR723090	B1	In this study
85_SI_2011	2011	Sicilia	Goat	LR723091	B1	In this study
86_SI_2011	2011	Sicilia	Goat	LR723092	B1	In this study
87_SI_2011	2011	Sicilia	Goat	LR723093	B1	In this study
89_LZ_2011	2011	Lazio	Sheep	LR723094	B3	In this study
94 UM_2011	2011	Umbria	Goat	LR723095	B1	In this study
95 UM_2011	2011	Umbria	Goat	LR723096	B1	In this study
96 UM_2011	2011	Umbria	Goat	LR723097	B1	In this study
97 UM_2011	2011	Umbria	Goat	LR723098	B1	In this study
98 TR_2012	2012	Trentino-AltoAdige	Goat	LR723321	B1	In this study
99 TR_2012	2012	Trentino-AltoAdige	Goat	LR723322	B1	In this study
100 TR_2012	2012	Trentino-AltoAdige	Goat	LR723323	B1	In this study
101 TR_2012	2012	Trentino-AltoAdige	Goat	LR723540	B1	In this study
102 TR_2012	2012	Trentino-AltoAdige	Goat	LR723541	B1	In this study
103 TR_2012	2012	Trentino-AltoAdige	Goat	LR723542	B1	In this study
104 TR_2012	2012	Trentino-AltoAdige	Goat	LR723546	B1	In this study

105_TR_2012	2012	Trentino-AltoAdige	Goat	LR723547	B1	In this study
106_TR_2012	2012	Trentino-AltoAdige	Goat	LR723548	B1	In this study
107_TR_2012	2012	Trentino-AltoAdige	Goat	LR723549	B1	In this study
108_TR_2012	2012	Trentino-AltoAdige	Goat	LR723545	B1	In this study
109_TR_2012	2012	Trentino-AltoAdige	Goat	LR723543	B1	In this study
110_TR_2012	2012	Trentino-AltoAdige	Goat	LR723544	B1	In this study
111_SI_2012	2012	Sicilia	Goat	LR723579	A23	In this study
112_TR_2012	2012	Trentino-AltoAdige	Goat	LR723556	B1	In this study
113_TR_2012	2012	Trentino-AltoAdige	Goat	LR723557	A5	In this study
114_TR_2012	2012	Trentino-AltoAdige	Goat	LR723558	B1	In this study
115_TR_2012	2012	Trentino-AltoAdige	Goat	LR723559	B1	In this study
118_TR_2012	2012	Trentino-AltoAdige	Goat	LR723560	B1	In this study
119_TR_2012	2012	Trentino-AltoAdige	Goat	LR723561	B1	In this study
120_TR_2012	2012	Trentino-AltoAdige	Goat	LR723562	B1	In this study
121_TR_2012	2012	Trentino-AltoAdige	Goat	LR723563	B1	In this study
122_TR_2012	2012	Trentino-AltoAdige	Goat	LR723564	B1	In this study
123_TR_2012	2012	Trentino-AltoAdige	Goat	LR723565	B1	In this study
124_TR_2012	2012	Trentino-AltoAdige	Goat	LR723566	B1	In this study
125_TR_2012	2012	Trentino-AltoAdige	Goat	LR723567	B1	In this study
126_TR_2012	2012	Trentino-AltoAdige	Goat	LR723568	B1	In this study
127_TR_2012	2012	Trentino-AltoAdige	Goat	LR723569	B1	In this study
128_TR_2012	2012	Trentino-AltoAdige	Goat	LR723570	B1	In this study
129_TR_2012	2012	Trentino-AltoAdige	Goat	LR723577	B1	In this study
131_SI_2012	2012	Sicilia	Sheep	LR723580	B1	In this study
133_VE_2012	2012	Veneto	Goat	LR723581	B1	In this study
134_SI_2012	2012	Sicilia	Sheep	LR723582	A23	In this study
135_MA_2013	2013	Marche	Goat	LR723583	B1	In this study
138_CA_2013	2013	Calabria	Sheep	LR723584	B3	In this study
140_MA_2014	2014	Marche	Goat	LR732016	B1	In this study

143 UM_2014	2014	Umbria	Goat	LR732017	B1	In this study
144 LO_2014	2014	Lombardia	Goat	LR735686	B1	In this study
145 LO_2014	2014	Lombardia	Goat	LR735687	B1	In this study
146 LO_2014	2014	Lombardia	Goat	LR735688	B1	In this study
147 LO_2014	2014	Lombardia	Goat	LR735689	B1	In this study
151 UM_2014	2014	Umbria	Sheep	LR735691	B3	In this study
152 UM_2014	2014	Umbria	Sheep	LR735692	B3	In this study
155 TO_2014	2014	Toscana	Sheep	LR735693	B3	In this study
158 UM_2014	2014	Umbria	Goat	LR735694	B1	In this study
159 BA_2014	2014	Basilicata	Sheep	LR732018	A3	In this study
160 CA_2014	2014	Calabria	Sheep	LR735695	Unassigned	In this study
174 UM_2015	2015	Umbria	Sheep	LR735696	B3	In this study
179 UM_2015	2015	Umbria	Sheep	LR735697	A19	In this study
180 UM_2015	2015	Umbria	Sheep	LR735698	B1	In this study
181 BA_2015	2015	Basilicata	Sheep	LR735699	B3	In this study
183 PI_2015	2015	Piemonte	Goat	LR735700	B1	In this study
185 VE_2016	2016	Veneto	Goat	LR732244	B1	In this study
186 BA_2016	2016	Basilicata	Sheep	LR732245	B3	In this study
194 VDA_2016	2016	Valle d'Aosta	Goat	LR732246	B1	In this study
196 MA_2016	2016	Marche	Sheep	LR732247	B3	In this study
199 PU_2016	2016	Puglia	Goat	LR732248	B1	In this study
200 LZ_2016	2016	Lazio	Sheep	LR732249	B3	In this study
201 LZ_2016	2016	Lazio	Sheep	LR732250	B3	In this study
202 TO_2016	2016	Toscana	Sheep	LR732251	B2	In this study
208 UM_2016	2016	Umbria	Sheep	LR732252	B2	In this study
211 SA_2016	2016	Sardegna	Goat	LR732253	B1	In this study
219 AB_2016	2016	Abruzzo	Sheep	LR732254	B2	In this study
220 AB_2016	2016	Abruzzo	Sheep	LR732255	B2	In this study
221 AB_2016	2016	Abruzzo	Goat	LR732256	B1	In this study
223 CA_2016	2016	Calabria	Sheep	LR732257	A23	In this study

224_CA_2016	2016	Calabria	Sheep	LR732258	A23	In this study
225_AB_2016	2016	Abruzzo	Goat	LR732259	B1	In this study
226_TO_2016	2016	Toscana	Goat	LR732260	B1	In this study
SRLV001	2017	Piemonte	Sheep	MG554402	B2	Colitti B., et al 2017
SRLV002	2017	Piemonte	Goat	MG554403	A8	Colitti B., et al 2017
SRLV003	2017	Piemonte	Goat	MG554404	A8	Colitti B., et al 2017
SRLV004	2017	Piemonte	Goat	MG554405	A8	Colitti B., et al 2017
SRLV005	2017	Piemonte	Goat	MG554406	A8	Colitti B., et al 2017
SRLV006	2017	Piemonte	Goat	MG554407	A8	Colitti B., et al 2017
SRLV007	2017	Piemonte	Goat	MG554408	A8	Colitti B., et al 2017
SRLV009	2017	Piemonte	Goat	MG554409	A20	Colitti B., et al 2017
SRLV010	2017	Piemonte	Goat	MG554410	B1	Colitti B., et al 2017
SRLV014	2017	Piemonte	Goat	MG554411	B1	Colitti B., et al 2017
SRLV016	2017	Piemonte	Goat	MG554412	B1	Colitti B., et al 2017
SRLV017	2017	Piemonte	Goat	MG554413	B1	Colitti B., et al 2017
SRLV020	2017	Piemonte	Goat	MG554414	B1	Colitti B., et al 2017
SRLV024	2017	Piemonte	Goat	MH374283	A8	Bertolotti L., et al 2018
SRLV025	2017	Piemonte	Goat	MH374284	A8	Bertolotti L., et al 2018
SRLV026	2017	Piemonte	Goat	MH374285	A8	Bertolotti L., et al 2018
SRLV032	2017	Piemonte	Goat	MH374286	A8	Bertolotti L., et al 2018
SRLV038	2017	Piemonte	Sheep	MH374287	A19	Bertolotti L., et al 2018
SRLV042	2017	Piemonte	Sheep	MH374288	B2	Bertolotti L., et al 2018
SRLV_Taccone	2017	Piemonte	Goat	MH374289	B1	Bertolotti L., et al 2018
SRLV_VdA	2017	Piemonte	Goat	MH374291	A8	Bertolotti L., et al 2018
227_PI_2016	2017	Piemonte	Goat	LR732261	B1	In this study
228_EMR_2017	2017	Emilia Romagna	Goat	LR732722	B1	In this study
229_EMR_2017	2017	Emilia Romagna	Goat	LR732723	B1	In this study
230_AB_2017	2017	Abruzzo	Goat	LR732724	B1	In this study
231_PI_2017	2017	Piemonte	Goat	LR732725	B1	In this study
232 UM_2017	2017	Umbria	Goat	LR732726	A20	In this study

235 UM_2017	2017	Umbria	Goat	LR732727	A20	In this study
237 PI_2017	2017	Piemonte	Goat	LR732728	A20	In this study
238 BA_2017	2017	Basilicata	Sheep	LR732729	B3	In this study
239 PI_2017	2017	Piemonte	Sheep	LR732730	B1	In this study
240 LO_2017	2017	Lombardia	Goat	LR732731	B1	In this study
241 UM_2017	2017	Umbria	Sheep	LR732732	B3	In this study
242 PI_2017	2017	Piemonte	Goat	LR732733	B1	In this study
243 UM_2017	2017	Umbria	Sheep	LR732734	B3	In this study
244 MA_2017	2017	Marche	Goat	LR732735	A19	In this study
245 MA_2017	2017	Marche	Goat	LR732736	A19	In this study
246 UM_2017	2017	Umbria	Goat	LR732737	B1	In this study
247 UM_2017	2017	Umbria	Sheep	LR732738	B3	In this study
248 CA_2017	2017	Calabria	Goat	LR732739	B1	In this study
249 PI_2017	2017	Piemonte	Goat	LR732740	A20	In this study
250 UM_2017	2017	Umbria	Sheep	LR732741	A24	In this study
251 PI_2017	2017	Piemonte	Goat	LR732742	B1	In this study
253 BA_2017	2017	Basilicata	Sheep	LR732743	A9	In this study
254 TR_2018	2018	Trentino-AltoAdige	Goat	LR735175	B1	In this study
255 TR_2018	2018	Trentino-AltoAdige	Goat	LR735176	A5	In this study
256 TR_2018	2018	Trentino-AltoAdige	Goat	LR735177	B1	In this study
257 UM_2018	2018	Umbria	Sheep	LR735178	B3	In this study
258 UM_2018	2018	Umbria	Sheep	LR735179	B3	In this study
259 UM_2018	2018	Umbria	Sheep	LR735180	B3	In this study
261 BA_2018	2018	Basilicata	Sheep	LR735181	B3	In this study
262 BA_2018	2018	Basilicata	Sheep	LR735182	B2	In this study
263 BA_2018	2018	Basilicata	Sheep	LR735183	B2	In this study
264 BA_2018	2018	Basilicata	Sheep	LR735184	B2	In this study
265 BA_2018	2018	Basilicata	Sheep	LR735185	B3	In this study
266 BA_2018	2018	Basilicata	Sheep	LR735186	B3	In this study
271 AB_2018	2018	Abruzzo	Sheep	LR735187	B3	In this study

272 UM_2018	2018	Umbria	Goat	LR735188	B1	In this study
281 TO_2018	2018	Toscana	Sheep	LR735191	B3	In this study
276 PI_2018	2018	Piemonte	Goat	LR735189	B1	In this study
277 PI_2018	2018	Piemonte	Goat	LR735190	B1	In this study
282 TO_2018	2018	Toscana	Sheep	LR735192	B3	In this study
283 CA_2018	2018	Calabria	Sheep	LR735193	B2	In this study
284 UM_2018	2018	Umbria	Goat	LR735194	B1	In this study
286 UM_2018	2018	Umbria	Sheep	LR735202	A11	In this study
287 PI_2018	2018	Piemonte	Goat	LR735203	A8	In this study
288 MA_2018	2018	Marche	Goat	LR735204	B1	In this study
289 BA_2018	2018	Basilicata	Goat	LR735205	B1	In this study
290 BA_2018	2018	Basilicata	Sheep	LR735206	B3	In this study
296 UM_2018	2018	Umbria	Sheep	LR735207	B2	In this study
297 LZ_2018	2018	Lazio	Sheep	LR735208	A3	In this study
299 UM_2018	2018	Umbria	Goat	LR735209	B1	In this study
300 UM_2018	2018	Umbria	Goat	LR735210	A9	In this study
302 TO_2018	2018	Toscana	Goat	LR735211	B1	In this study
303 PI_2018	2018	Piemonte	Goat	LR735212	B1	In this study
304 UM_2018	2018	Umbria	Goat	LR735213	B1	In this study
307 LZ_2018	2018	Lazio	Sheep	LR735214	A24	In this study
309 PI_2018	2018	Piemonte	Goat	LR735215	A8	In this study
310 CA_2018	2018	Calabria	Sheep	LR735216	B2	In this study
311 CA_2018	2018	Calabria	Sheep	LR735217	B2	In this study
312 CA_2018	2018	Calabria	Sheep	LR735218	B2	In this study
317 UM_2019	2019	Umbria	Sheep	LR735229	B3	In this study
321 PU_2019	2019	Puglia	Sheep	LR735230	B2	In this study
322 UM_2019	2019	Umbria	Sheep	LR735231	B3	In this study
323 UM_2019	2019	Umbria	Sheep	LR735232	B3	In this study
324 UM_2019	2019	Umbria	Sheep	LR735233	A11	In this study
326 BA_2019	2019	Basilicata	Goat	LR735234	B1	In this study

327_BA_2019	2019	Basilicata	Goat	LR735235	B1	In this study
328 UM_2019	2019	Umbria	Sheep	LR735236	B3	In this study
329_CM_2019	2019	Campania	Goat	LR735237	A20	In this study
332_BA_2019	2019	Basilicata	Sheep	LR735238	A9	In this study
333_BA_2019	2019	Basilicata	Sheep	LR735239	A9	In this study
334_BA_2019	2019	Basilicata	Sheep	LR735240	A9	In this study