

**Supplemental Table S5.** Details of individual isolates

Isolate	Year	Host	Country	Region	Location	<sup>a</sup> Isolate collection	Clade	Serogroup (by sequence)	AprV2/B2 type	Presumptive disease phenotype	Justification for allocation of presumptive disease phenotype
CS287	1977	Sheep	Australia	Victoria		Monash Univ.	2	G	R	Unknown	-
CS310	1978	Sheep	Australia	New South Wales		Monash Univ.	2	G	R	Unknown	-
CS311	1978	Sheep	Australia	New South Wales		Monash Univ.	2	B	R	Unknown	-
JIR1204	-	Sheep	Australia	New South Wales		Monash Univ.	2	I	-	Unknown	-
VCS1001	1974	Sheep	Australia	New South Wales	Yass	Monash Univ.	1	A	Y	Virulent	Disease state - severe footrot
HA322	-	Sheep	Australia	Victoria	Hamilton	Monash Univ.	1	F	Y	Virulent	
AC3466	1991	Sheep	Australia	Western Australia		Monash Univ.	1	B	Y	Unknown	-
AC3486	1991	Sheep	Australia	Western Australia		Monash Univ.	1	E	Y	Unknown	-
AC3488	1991	Sheep	Australia	Western Australia		Monash Univ.	2	E	R	Unknown	-
VCS1703A	1990	Sheep	Australia	New South Wales	Mt Hunter	Monash Univ.	1	G	Y	Virulent	Disease state - severe footrot
AC3597	-	Sheep	Australia	Western Australia	Albany	Monash Univ.	2	H	R	Unknown	-
AC3629	-	Sheep	Australia	Western Australia	Albany	Monash Univ.	2	B	R	Unknown	-
CS101	-	Sheep	Australia	Victoria		Monash Univ.	2	B	R	Benign	
AC293	-	Sheep	Australia	Western Australia	Albany	Monash Univ.	1	B	Y	Unknown	-
CS94A	1972	Sheep	Australia			Monash Univ.	1	B	Y	Unknown	-
CS182A	1982	Sheep	Australia			Monash Univ.	1	A	Y	Unknown	-
CS193	1980	Sheep	Australia			Monash Univ.	1	B	Y	Unknown	-
CS219C	-	Sheep	Australia			Monash Univ.	1	G	Y	Unknown	-
CS247	1978	Sheep	Australia			Monash Univ.	1	G	Y	Unknown	-
CS254	1978	Sheep	Australia			Monash Univ.	1	A	Y	Unknown	-
C305	-	Sheep	Australia			Monash Univ.	2	C	R	Unknown	-
VCS1172	1978	Sheep	Australia	New South Wales	Moss Vale	Univ. Sydney	1	D	Y	Virulent	Disease state - severe footrot; Elastase positive
05-061-1-6	2005	Sheep	Australia	Tasmania	King Island	Univ. Sydney	1	A	Y	Virulent	Disease state - severe footrot; Elastase positive
05-061-25-8	2005	Sheep	Australia	Tasmania	King Island	Univ. Sydney	1	E	Y	Virulent	Disease state - severe footrot; Elastase positive
05-061-39-1	2005	Sheep	Australia	Tasmania	King Island	Univ. Sydney	1	G	Y	Virulent	Disease state - severe footrot; Elastase positive

08-251-8-1	2008	Sheep	Australia	Tasmania	King Island	Univ. Sydney	1	M	Y	Virulent	Disease state - severe footrot; Elastase positive
09-096-6-1	2009	Sheep	Australia	Tasmania	King Island	Univ. Sydney	1	M	Y	Virulent	Disease state - severe footrot; Elastase positive
10-058-1-3	2010	Sheep	Australia	Tasmania	King Island	Univ. Sydney	1	C	Y	Virulent	Disease state - severe footrot; Elastase negative
11-163-4-1	2011	Sheep	Australia	Tasmania	King Island	Univ. Sydney	1	M	Y	Virulent	Disease state - severe footrot; Elastase negative
06-057-6-8	2006	Sheep	Australia	South Australia	Kangaroo Island	Univ. Sydney	1	B	Y	Virulent	Disease state - severe footrot; Elastase negative
08-011-4-1	2008	Sheep	Australia	South Australia	Kangaroo Island	Univ. Sydney	1	E	Y	Virulent	Disease state - footrot; Elastase positive
11-139-7-1	2011	Sheep	Australia	South Australia	Kangaroo Island	Univ. Sydney	1	C	Y	Virulent	Disease state - footrot; Elastase positive
VCS1008	1974	Sheep	Australia	Victoria		Univ. Sydney	1	C	Y	Virulent	Disease state - severe footrot; Elastase positive
VCS1137	1978	Sheep	Australia	New South Wales	Bathurst	Univ. Sydney	1	E	Y	Virulent	Disease state - severe footrot; Elastase positive
VCS1017	1975	Sheep	Australia	New South Wales	Forbes	Univ. Sydney	1	F	Y	Virulent	Disease state - severe footrot; Elastase positive
VCS1687	1978	Sheep	Australia	New South Wales	Bigga	Univ. Sydney	1	H	Y	Virulent	Disease state - severe footrot; Elastase positive
VCS1623	1985	Sheep	Australia	New South Wales		Univ. Sydney	1	I	Y	Virulent	Disease state - severe footrot; Elastase positive
VCS1006	1974	Sheep	Australia	New South Wales	Carcoar	Univ. Sydney	1	B	Y	Virulent	Disease state - severe footrot; Elastase positive
RBG-17	2000	Sheep	Bhutan	Bumthang		Univ. Sydney	1	B	R	Intermediate	Disease state - footrot; Elastase negative
09-5148-1a	2009	Sheep	Denmark	Jutland	Ebeltoft	NVI	1	A	Y	Virulent	Disease state - severe footrot;
09-5625-1a	2009	Sheep	Denmark	Jutland	Kolind	NVI	1	E	Y	Virulent	Disease state - severe footrot; Stable protease; Elastase positive
09-6137-1a	2009	Sheep	Denmark	Jutland	Kolind	NVI	1	A	Y	Virulent	Disease state - severe footrot; Stable protease
09-6137-2a	2009	Sheep	Denmark	Jutland	Kolind	NVI	1	A	Y	Virulent	Disease state - severe footrot; Stable protease; Elastase positive
09-6137-7a	2009	Sheep	Denmark	Jutland	Kolind	NVI	1	E	Y	Virulent	Disease state - severe footrot; Stable protease; Elastase positive

09-6137-10a	2009	Sheep	Denmark	Jutland	Kolind	NVI	1	E	Y	Virulent	Disease state - severe footrot; Stable protease
11-8906-1a	2011	Sheep	Denmark	Zealand	Helsinge	NVI	1	E	Y	Virulent	Disease state - severe footrot; Stable protease
09-5148-3a	2009	Sheep	Denmark	Jutland	Ebeltoft	NVI	1	A	Y	Virulent	Disease state - severe footrot; Stable protease; Elastase positive
Ind-1	-	Sheep	India	Kashmir		Monash Univ.	1	B	Y	Virulent	Disease state - footrot
Nep-6-6	1993	Sheep	Nepal	Kaski		Univ. Sydney	1	E	Y	Virulent	Disease state - severe footrot; Elastase positive
08-2321-5a	2008	Sheep	Norway	Buskerud	Nesbyen	NVI	2	I	R	Benign	Unstable protease; Elastase negative
08-2408-4a	2008	Sheep	Norway	Rogaland	Bryne	NVI	1	A	Y	Virulent	Stable protease; Elastase positive
09-1338-11b	2009	Cattle	Norway	Akershus	Ås	NVI	2	E	R	Benign	Unstable protease; Elastase negative
09-1399-1b	2009	Sheep	Norway	Rogaland	Bryne	NVI	1	A	Y	Virulent	Stable protease; Elastase positive
09-1715-2h	2009	Cattle	Norway	Nordland	Indre Kvarøy	NVI	2	C	R	Benign	Unstable protease; Elastase negative
09-2912-7c	2009	Cattle	Norway	Troms	Tromsdalen	NVI	2	M	R	Benign	Unstable protease; Elastase negative
09-3473-11a	2009	Sheep	Norway	Rogaland	Bryne	NVI	1	A	Y	Virulent	Stable protease; Elastase positive
09-4068-1a	2009	Sheep	Norway	Hedmark	Brumunddal	NVI	2	G	R	Benign	Unstable protease; Elastase negative
09-5097-1a	2009	Sheep	Norway	Rogaland	Bryne	NVI	1	A	Y	Virulent	Stable protease; Elastase positive
09-5341-13b	2009	Sheep	Norway	Rogaland	Undheim	NVI	1	A	Y	Virulent	Stable protease; Elastase positive
09-5688-7d	2009	Sheep	Norway	Rogaland	Fogn	NVI	1	A	Y	Virulent	Stable protease; Elastase positive
10-0483-9a	2010	Sheep	Norway	Rogaland	Hjelmeland	NVI	1	A	Y	Virulent	Stable protease; Elastase positive
10-0781-4a	2010	Sheep	Norway	Rogaland	Rogaland	NVI	1	A	Y	Virulent	Stable protease; Elastase positive
10-1096-8a	2010	Cattle	Norway	Rogaland	Bryne	NVI	2	B	R	Benign	Unstable protease; Elastase negative
10-3073-1a	2010	Sheep	Norway	Rogaland	Fister	NVI	1	A	Y	Virulent	Stable protease; Elastase positive
10-3073-4b	2010	Sheep	Norway	Rogaland	Fister	NVI	1	H	Y	Virulent	Stable protease; Elastase positive
10-4697-2b	2010	Sheep	Norway	Rogaland	Rennesøy	NVI	2	C	R	Benign	Unstable protease; Elastase negative
10-5149-1a	2010	Goat	Norway	Rogaland	Karmsund	NVI	2	B	R	Benign	Unstable protease; Elastase negative
09-1622-6h	2009	Sheep	Norway	Rogaland	Bjerkreim	NVI	2	C	R	Benign	Unstable protease; Elastase negative
09-3055-14a	2009	Sheep	Norway	Hedmark	Brumunddal	NVI	2	A	R	Benign	Unstable protease; Elastase negative
09-3796-10c	2009	Sheep	Norway	Rogaland	Bryne	NVI	1	A	Y	Virulent	Stable protease; Elastase positive
09-5005-8a	2009	Sheep	Norway	Rogaland	Ålgård	NVI	1	A	Y	Virulent	Stable protease; Elastase positive
09-5146-2b	2009	Sheep	Norway	Oppland	Snertingdal	NVI	2	B	R	Benign	Unstable protease; Elastase negative
09-5146-4a	2009	Sheep	Norway	Oppland	Snertingdal	NVI	2	I	R	Benign	Unstable protease; Elastase negative
09-5150-4a	2009	Sheep	Norway	Akershus	Rykkinn	NVI	2	A	R	Benign	Unstable protease; Elastase negative

09-5436-2a	2009	Sheep	Norway	Akershus	Skui	NVI	2	A	R	Benign	Unstable protease; Elastase negative
10-0857-2c	2010	Sheep	Norway	Rogaland	Undheim	NVI	1	H	Y	Virulent	Stable protease; Elastase positive
10-2193-2c	2010	Sheep	Norway	Oppland	Lillehammer	NVI	2	G	R	Benign	Unstable protease; Elastase negative
10-4333-18b	2010	Cattle	Norway	Rogaland	Rennesøy	NVI	1	A	Y	Virulent	Stable protease; Elastase positive
08-2408-5a	2008	Sheep	Norway	Rogaland	Bryne	NVI	1	I	Y	Virulent	Stable protease; Elastase positive
10-2777-3g	2010	Sheep	Norway	Rogaland	Fister	NVI	1	B	Y	Virulent	Stable protease; Elastase positive
10-5036-5c	2010	Sheep	Norway	Rogaland	Rennesøy	NVI	1	A	Y	Virulent	Stable protease
10-5036-5a	2010	Sheep	Norway	Rogaland	Rennesøy	NVI	1	C	Y	Virulent	Stable protease
10-5036-12c	2010	Sheep	Norway	Rogaland	Rennesøy	NVI	2	C	R	Benign	Unstable protease
10-1778-2a	2010	Sheep	Norway	Telemark	Vråliosen	NVI	2	A	R	Benign	Unstable protease; Elastase negative
10-1837-12a	2010	Sheep	Norway	Rogaland	Rennesøy	NVI	1	A	Y	Virulent	Stable protease; Elastase positive
AN363-05	2005	Sheep	Sweden	Västra Götalands län		SVA	1	B	Y	Virulent	Stable protease
AN484-05	2005	Sheep	Sweden	Skåne län		SVA	2	E	R	Benign	Unstable protease
07BKT018497	2007	Sheep	Sweden	Blekinge län		SVA	1	B	Y	Virulent	Stable protease
12BKT031675	2012	Cattle	Sweden	Gotlands län		SVA	2	H	R	Benign	Unstable protease
11BKT048543	2011	Sheep	Sweden	Östergötlands län		SVA	2	C	R	Benign	Disease state - benign footrot, Unstable protease
11BKT051780	2011	Sheep	Sweden	Södermanlands län		SVA	2	B	R	Benign	Disease state - benign footrot, Unstable protease
12BKT052990	2012	Sheep	Sweden	Kronobergs län		SVA	2	A	R	Benign	Disease state - benign footrot
11BKT055907	2011	Sheep	Sweden	Östergötlands län		SVA	2	G	R	Benign	Disease state - virulent footrot
11BKT058516	2011	Sheep	Sweden	Jönköpings län		SVA	2	E	R	Benign	Disease state - virulent footrot
11BKT058890	2011	Sheep	Sweden	Örebro län		SVA	2	G	R	Benign	Disease state - benign footrot, Unstable protease
11BKT062646	2011	Sheep	Sweden	Dalarnas län		SVA	1	G	Y	Virulent	Disease state - severe footrot, Stable protease
08BKT063297	2008	Sheep	Sweden	Skåne län		SVA	1	G	Y	Virulent	Stable protease
12BKT066722	2012	Sheep	Sweden	Dalarnas län		SVA	1	G	Y	Virulent	Disease state - virulent footrot
12BKT066771	2012	Goat	Sweden	Örebro län		SVA	2	B	R	Benign	Disease state - benign footrot, Unstable protease
11BKT068051	2011	Sheep	Sweden	Gotlands län		SVA	2	B	R	Benign	Disease state - benign footrot, Unstable protease
11BKT072696	2011	Sheep	Sweden	Östergötlands län		SVA	2	G	R	Benign	Disease state - benign footrot, Unstable protease

12BKT073391	2012	Cattle	Sweden	Södermanlands län		SVA	2	B	R	Benign	Unstable protease
153-LB2	-	Sheep	UK			Monash Univ.	1	I	Y	Virulent	Disease state - severe footrot

<sup>a</sup> Monash University, Australia (Monash Univ.); The National Veterinary Institute, Sweden (SVA); The Norwegian Veterinary Institute (NVI); The University of Sydney, Australia (Univ. Sydney).