

**Table S1 Results of model comparison**

| Clock model                            | Tree prior                  | AICM      | S.E.      |
|--|-----------------------------|-----------|-----------|
| Strict clock                           | Bayesian skyline coalescent | 12762.557 | +/- 0.274 |
| Uncorrelated lognormal relaxed clock   | Bayesian skyline coalescent | 17782.659 | +/- 0.318 |
| Uncorrelated exponential relaxed clock | Bayesian skyline coalescent | 17683.957 | +/- 0.156 |
| Strict clock                           | Constant size               | 12879.323 | +/- 0.299 |
| Uncorrelated lognormal relaxed clock   | Constant size               | 17858.05  | +/- 0.7   |
| Uncorrelated exponential relaxed clock | Constant size               | 17829.817 | +/- 0.407 |
| Strict clock                           | Exponential growth model    | 12790.245 | +/- 0.177 |
| Uncorrelated lognormal relaxed clock   | Exponential growth model    | 17806.364 | +/- 0.345 |
| Uncorrelated exponential relaxed clock | Exponential growth model    | 17703.76  | +/- 0.159 |

Lower AICM values indicate better model fit.

**Table S2 Complete sequences of MeV genotype B3 H gene analyzed in this study**

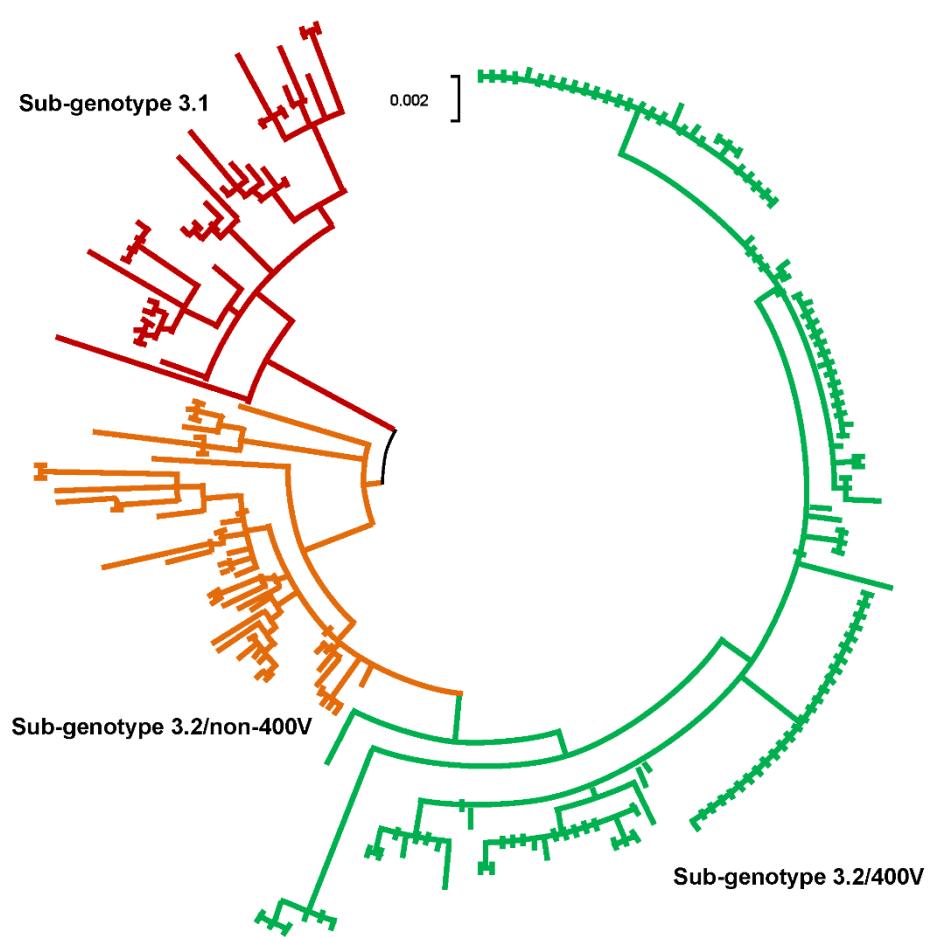
| Accession number | Country | Collection year |
|------------------|---------|-----------------|
| AF484955         | GMB     | 1993            |
| AF484954         | GMB     | 1993            |
| EU332936         | GMB     | 1993            |
| EU332939         | GMB     | 1993            |
| L46752           | USA     | 1994            |
| AF484953         | FRA     | 1994            |
| AY059391         | GMB     | 1996            |
| AJ239173         | NIE     | 1997            |
| AF453430         | SUD     | 1997            |
| AF453431         | SUD     | 1997            |
| AJ239134         | NIE     | 1997            |
| AJ239133         | NIE     | 1997            |
| HM439386         | SUD     | 1997            |
| MG912590         | SUD     | 1997            |
| AJ239157         | NIE     | 1998            |
| AJ239146         | NIE     | 1998            |
| AJ239149         | NIE     | 1998            |
| AJ239154         | NIE     | 1998            |
| AJ239141         | NIE     | 1998            |
| AJ239151         | NIE     | 1998            |
| AJ239135         | NIE     | 1998            |
| AJ239175         | GHA     | 1998            |
| AJ239176         | GHA     | 1998            |
| AJ239177         | GHA     | 1998            |
| AJ239145         | NIE     | 1998            |
| AJ239148         | NIE     | 1998            |
| AJ239163         | NIE     | 1998            |
| AJ239147         | NIE     | 1998            |
| AJ239170         | NIE     | 1998            |
| AJ239153         | NIE     | 1998            |
| AJ239171         | NIE     | 1998            |
| AJ239156         | NIE     | 1998            |
| AJ239140         | NIE     | 1998            |
| AJ239158         | NIE     | 1998            |
| AJ239139         | NIE     | 1998            |
| AJ239169         | NIE     | 1998            |
| AJ239168         | NIE     | 1998            |
| AJ239142         | NIE     | 1998            |
| AJ239162         | NIE     | 1998            |
| AJ239159         | NIE     | 1998            |

|          |     |      |
|----------|-----|------|
| AJ239161 | NIE | 1998 |
| AJ239166 | NIE | 1998 |
| AJ239164 | NIE | 1998 |
| AJ239152 | NIE | 1998 |
| AJ239172 | NIE | 1998 |
| AJ239165 | NIE | 1998 |
| AJ239143 | NIE | 1998 |
| AJ239167 | NIE | 1998 |
| AJ239150 | NIE | 1998 |
| AJ239137 | NIE | 1998 |
| AJ239136 | NIE | 1998 |
| AJ239155 | NIE | 1998 |
| AJ239160 | NIE | 1998 |
| AJ239144 | NIE | 1998 |
| AJ239138 | NIE | 1998 |
| AJ239174 | GHA | 1998 |
| AF480469 | DEU | 2000 |
| AF453432 | SUD | 2000 |
| AF453433 | SUD | 2000 |
| AY159459 | BFA | 2001 |
| AY159460 | BFA | 2001 |
| AY159461 | BFA | 2001 |
| AY159462 | BFA | 2001 |
| AY159463 | BFA | 2001 |
| AY159464 | BFA | 2001 |
| AF484952 | CAE | 2001 |
| AF484951 | CAE | 2001 |
| AF484950 | CAE | 2001 |
| AF484949 | CAE | 2001 |
| FN594773 | TUN | 2002 |
| FJ865562 | SPA | 2003 |
| FJ865561 | SPA | 2003 |
| DQ267505 | FRA | 2004 |
| DQ267504 | FRA | 2004 |
| JN635408 | USA | 2005 |
| KP191044 | SPA | 2006 |
| FN594772 | LBY | 2007 |
| FN594725 | TUN | 2009 |
| FN594724 | LBY | 2009 |
| JQ417683 | DEU | 2010 |
| KC305669 | ZAF | 2010 |
| KC305668 | ZAF | 2010 |
| KC305667 | ZAF | 2010 |

|          |     |      |
|----------|-----|------|
| KC305666 | ZAF | 2010 |
| KC305665 | ZAF | 2010 |
| KC305664 | ZAF | 2010 |
| KC305670 | ZAF | 2010 |
| KC305663 | ZAF | 2010 |
| MH922967 | IRN | 2012 |
| KT732214 | GBR | 2012 |
| KF672752 | CAN | 2013 |
| KF704001 | CAN | 2013 |
| MH920633 | IRN | 2013 |
| MH918856 | IRN | 2013 |
| KT732217 | GBR | 2013 |
| KT732216 | GBR | 2013 |
| KT732215 | GBR | 2013 |
| MN630023 | KOR | 2013 |
| KT851538 | ZAF | 2014 |
| KP881504 | TWN | 2014 |
| KP881503 | TWN | 2014 |
| KP881502 | TWN | 2014 |
| KP881501 | TWN | 2014 |
| KP881500 | TWN | 2014 |
| KP881499 | TWN | 2014 |
| LC155950 | JPN | 2014 |
| LC155949 | JPN | 2014 |
| LC154867 | JPN | 2014 |
| LC154866 | JPN | 2014 |
| LC154865 | JPN | 2014 |
| LC154864 | JPN | 2014 |
| LC154863 | JPN | 2014 |
| LC154862 | JPN | 2014 |
| LC154861 | JPN | 2014 |
| KY969481 | USA | 2014 |
| KY969478 | USA | 2014 |
| KY969477 | USA | 2014 |
| KT732224 | GBR | 2014 |
| KT732223 | GBR | 2014 |
| KT732222 | GBR | 2014 |
| KT732221 | GBR | 2014 |
| KT732220 | GBR | 2014 |
| KT732219 | GBR | 2014 |
| KT732218 | GBR | 2014 |
| MK628318 | ITA | 2015 |
| MK628314 | ITA | 2015 |

|          |     |      |
|----------|-----|------|
| MK628313 | ITA | 2015 |
| MK628312 | ITA | 2015 |
| MK628311 | ITA | 2015 |
| MK628309 | ITA | 2015 |
| MK628308 | ITA | 2015 |
| MK628305 | ITA | 2015 |
| KX838946 | FRA | 2016 |
| MK628307 | ITA | 2016 |
| MK628317 | ITA | 2016 |
| MK628316 | ITA | 2016 |
| MK628315 | ITA | 2016 |
| MK628310 | ITA | 2016 |
| MK628306 | ITA | 2016 |
| MK628304 | ITA | 2016 |
| MK628303 | ITA | 2016 |
| MK628302 | ITA | 2016 |
| MK628301 | ITA | 2016 |
| MK628300 | ITA | 2016 |
| MK513622 | ITA | 2017 |
| MK513621 | ITA | 2017 |
| MK513620 | ITA | 2017 |
| MK513619 | ITA | 2017 |
| MK513618 | ITA | 2017 |
| MK513617 | ITA | 2017 |
| MK513616 | ITA | 2017 |
| MK513615 | ITA | 2017 |
| MK513614 | ITA | 2017 |
| MK513613 | ITA | 2017 |
| MK513612 | ITA | 2017 |
| MK513611 | ITA | 2017 |
| MK513610 | ITA | 2017 |
| MK513609 | ITA | 2017 |
| MK513608 | ITA | 2017 |
| MK513607 | ITA | 2017 |
| MK513606 | ITA | 2017 |
| MK513605 | ITA | 2017 |
| MK513604 | ITA | 2017 |
| MK513603 | ITA | 2017 |
| MK513602 | ITA | 2017 |
| MK513601 | ITA | 2017 |
| MK513600 | ITA | 2017 |
| MK513599 | ITA | 2017 |
| MK513598 | ITA | 2017 |

|          |     |      |
|----------|-----|------|
| MN893225 | FRA | 2018 |
| MN052912 | FRA | 2018 |
| MN052911 | FRA | 2018 |
| MT789820 | USA | 2019 |
| MT789819 | USA | 2019 |
| MT789818 | USA | 2019 |
| MT789817 | USA | 2019 |
| MT789816 | USA | 2019 |
| MT789815 | USA | 2019 |
| MT789814 | USA | 2019 |
| MT789813 | USA | 2019 |
| MT789812 | USA | 2019 |
| MT789811 | USA | 2019 |
| MT789810 | USA | 2019 |
| MT789809 | USA | 2019 |
| MT789808 | USA | 2019 |
| MT789807 | USA | 2019 |
| MT789806 | USA | 2019 |
| MT789805 | USA | 2019 |
| MT789804 | USA | 2019 |
| MT789803 | USA | 2019 |
| MT789802 | USA | 2019 |
| MT789801 | USA | 2019 |
| MT789800 | USA | 2019 |
| MT789799 | USA | 2019 |
| MT789798 | USA | 2019 |
| MT789797 | USA | 2019 |
| MT789796 | USA | 2019 |
| MT789795 | USA | 2019 |
| MT789794 | USA | 2019 |
| MT789793 | USA | 2019 |
| MT789792 | USA | 2019 |
| MT789791 | USA | 2019 |
| MT789790 | USA | 2019 |
| MT789789 | USA | 2019 |
| MT789788 | USA | 2019 |



**Figure S1.** Phylogenetic tree of MeV genotype B3 H gene based on maximum likelihood method.