Archaic reads

Retrotransposons consensus sequences

Modern reference

3' portion of the insertions

Distinguish shared and putative species-specific insertions

Putative archaic-specific insertions 3' portions

Putative archaic-specific insertions 5' portions

Putative modern-specific insertions 3' portions

Putative empty sites from modern reference

Putative empty sites for archaic-specific insertions

Putative modern-specific filled sites, 3' flankings and 5' flankings from reference

Archaic reads matching both flankings

Modern-specific insertions filled sites

Archaeic empty sites for modern-specific insertions

Step 1

Step 2.1

de novo assembly of the 3' portions site-by-site

de novo assembly of the 5' portions site-by-site

Last filtering and selection

Modern empty sites for archaic-specific insertions

Archaeic-specific insertions 3' portions

Archaeic-specific insertions 5' portions

3' flanking and 5' flanking from reference

Step 2.2

Putative empty sites from modern reference

Putative archaic-specific insertions 5' portions

Putative archaic-specific insertions 3' portions

Putative modern-specific insertions 3' portions

Putative modern-specific filled sites.

Putative modern-specific filled sites.

Modern empty sites for modern-specific insertions

Modern-specific insertions filled sites

Archaeic empty sites for modern-specific insertions

Last filtering and selection

HD- and HN-specific insertions

AMH-specific and Chimp-specific insertions

• = AluY insertion 5' and 3' portions

• = Poly-A tail

• = Target Site Duplication