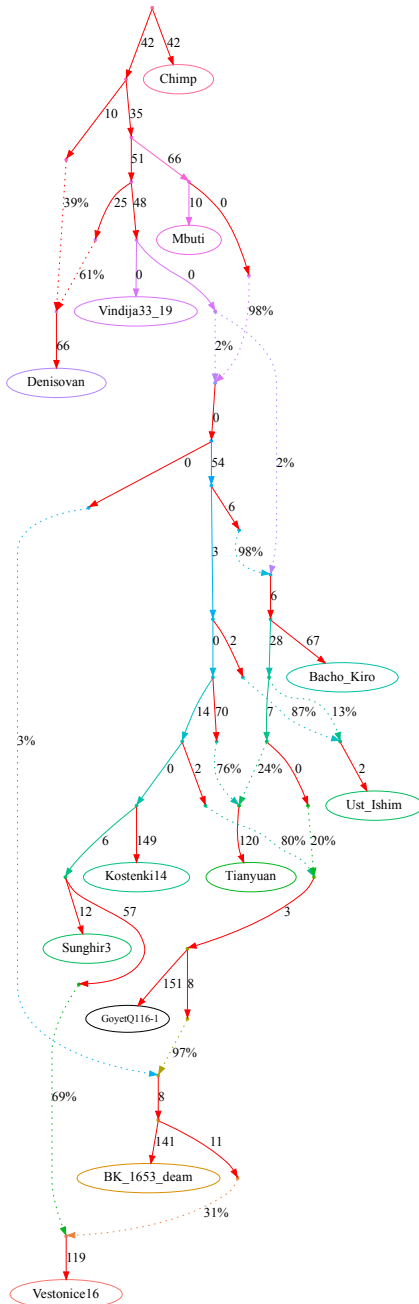


Figure S9

**Figure S9.** Published admixture graph from Hajdinjak *et al.* (2021) and alternative graphs found with *findGraphs* (12 populations, 8 admixture events). Model parameters (graph edges) that were inferred to be unidentifiable are plotted in red.

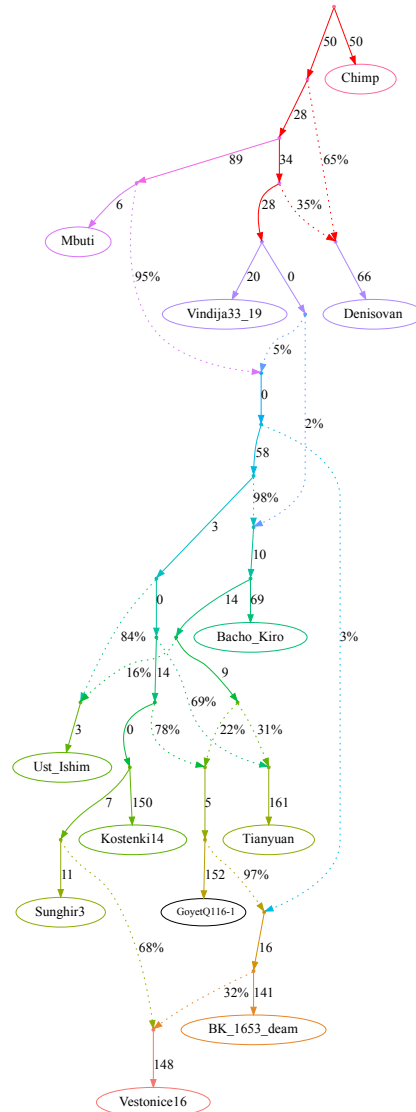
**a, published model**

LL=71.6, WR=4.80, admix=8



**b, published model, simplified**

LL=71.6, WR=4.80, admix=8



Claims by Hajdinjak *et al.* 2021 relying on the admixture graph:

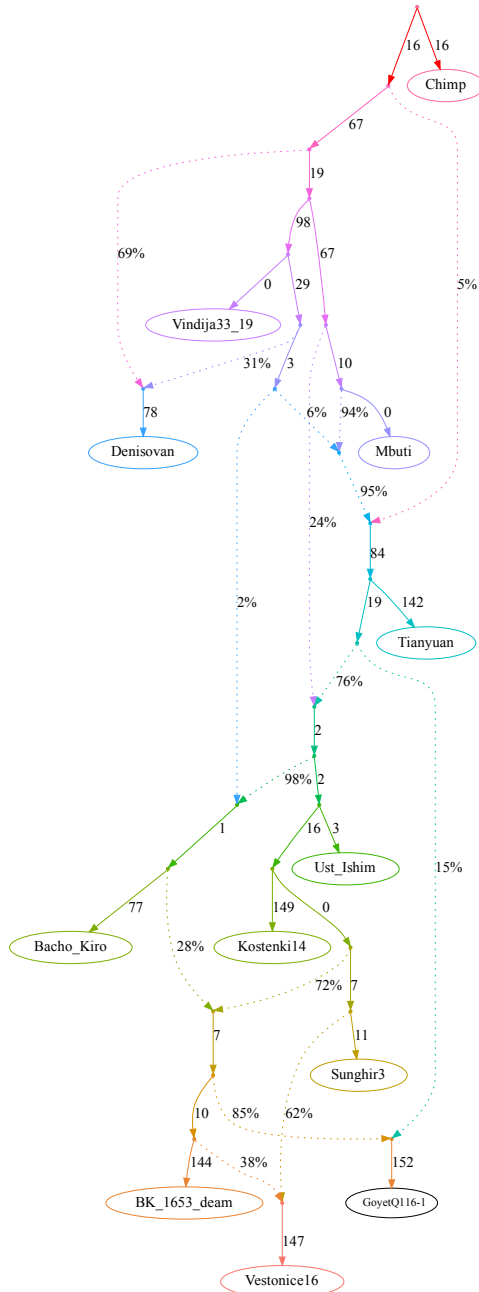
- 1) Gene flow from the Bacho Kiro lineage to Ust'-Ishim, Tianyuan, and GoyetQ116-1;
- 2) the BK1653 individual belonged to a population that was related, but not identical, to that of the GoyetQ116-1 individual;
- 3) Vestonice is a mixture of a Sunghir-related and a BK1653-related lineage.

Figure S9

c, selected alternative models fitting significantly better than the published one

claim 1 partially supported, claims 2&3 supported

**LL=34.9, WR=2.7, admix=8**



claim 1 not supported, claims 2&3 supported

**LL=35.4, WR=2.58, admix=8**

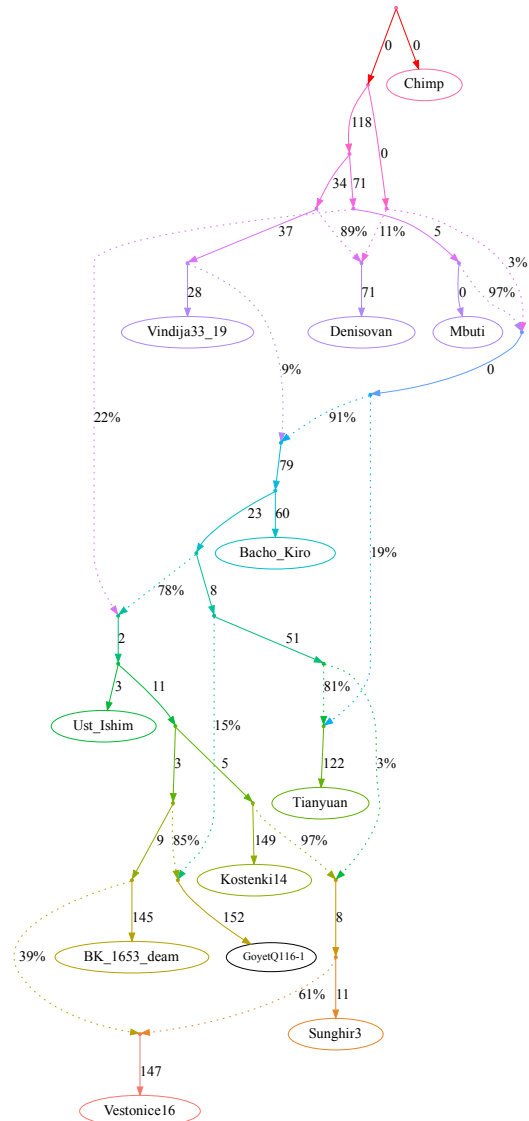
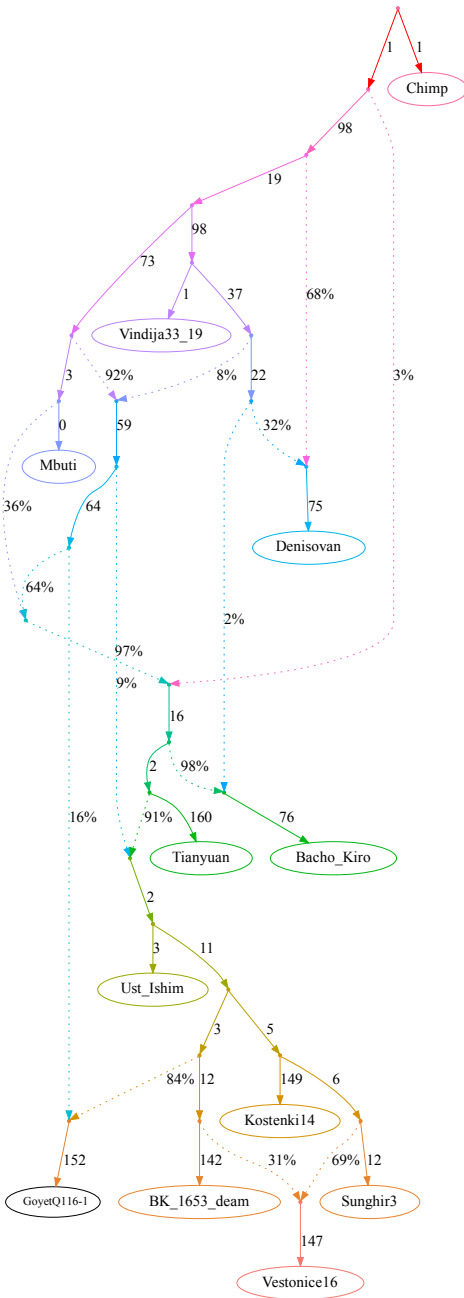


Figure S9

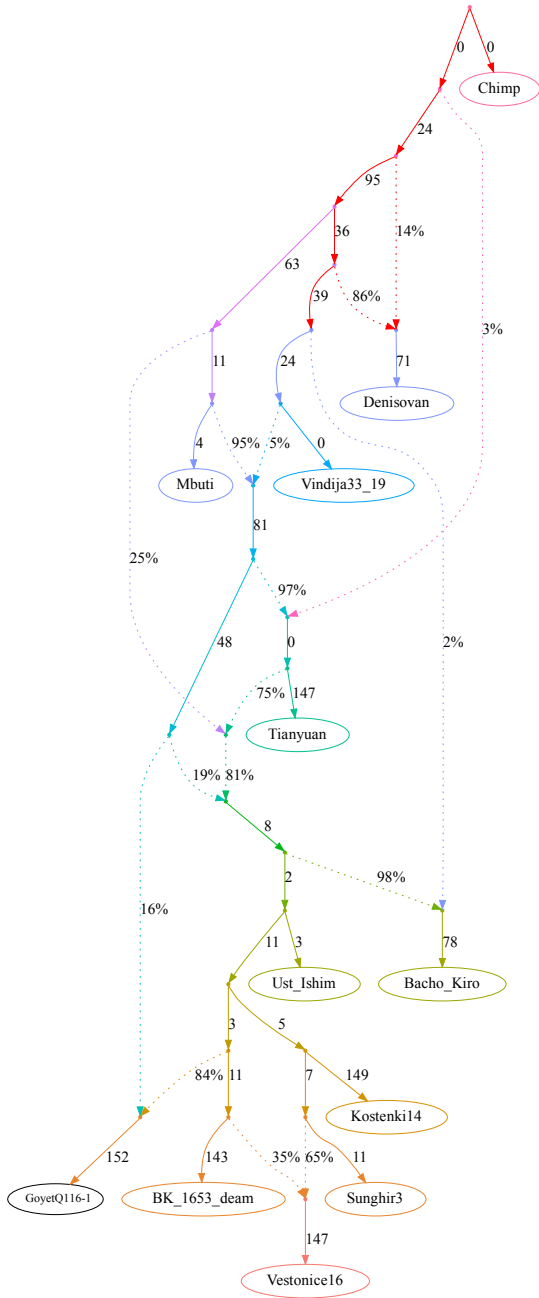
claim 1 not supported, claims 2&3 supported

LL=35.4, WR=2.7, admix=8

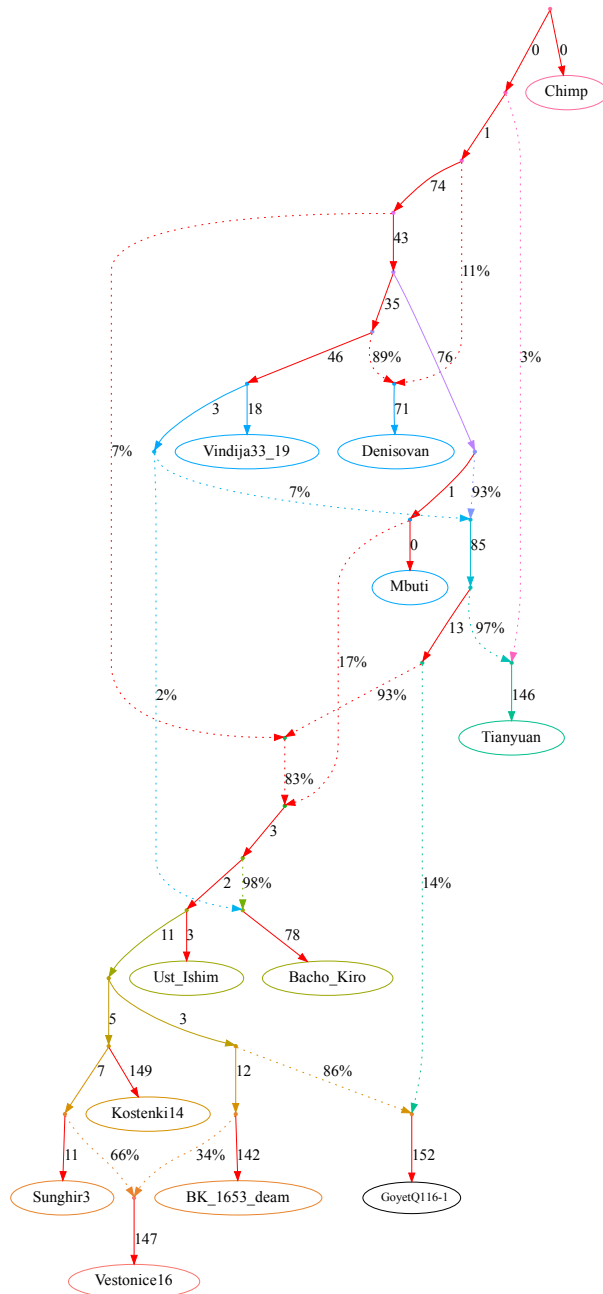


claim 1 not supported, claims 2&3 supported

LL=35.6, WR=2.7, admix=8



LL=35.8, WR=2.7, admix=8



claim 1 not supported, claims 2&3 supported

LL=35.9, WR=2.75, admix=8

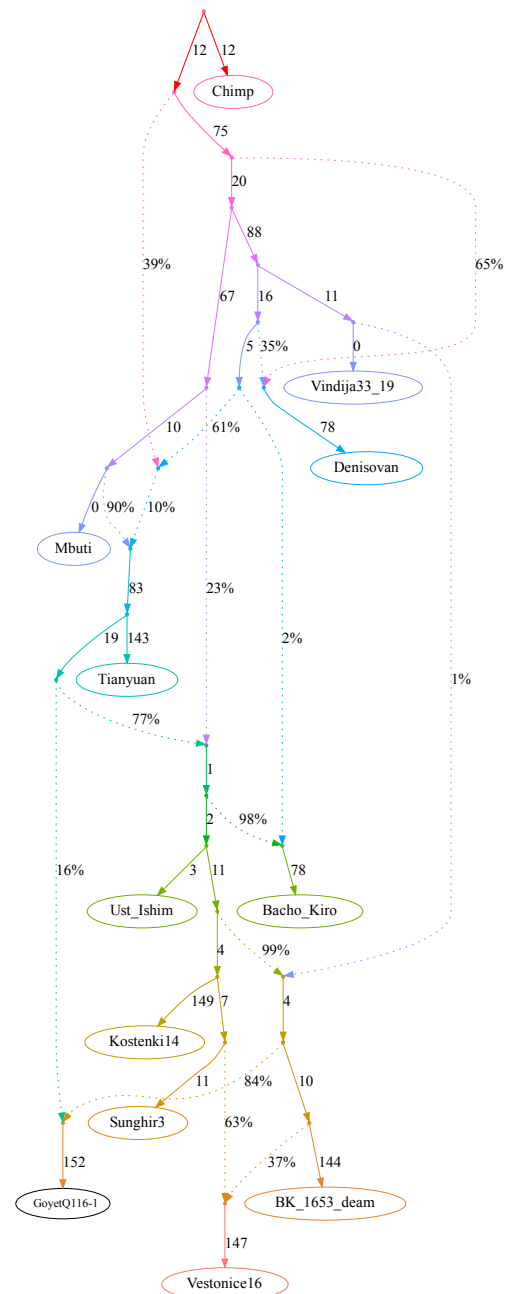
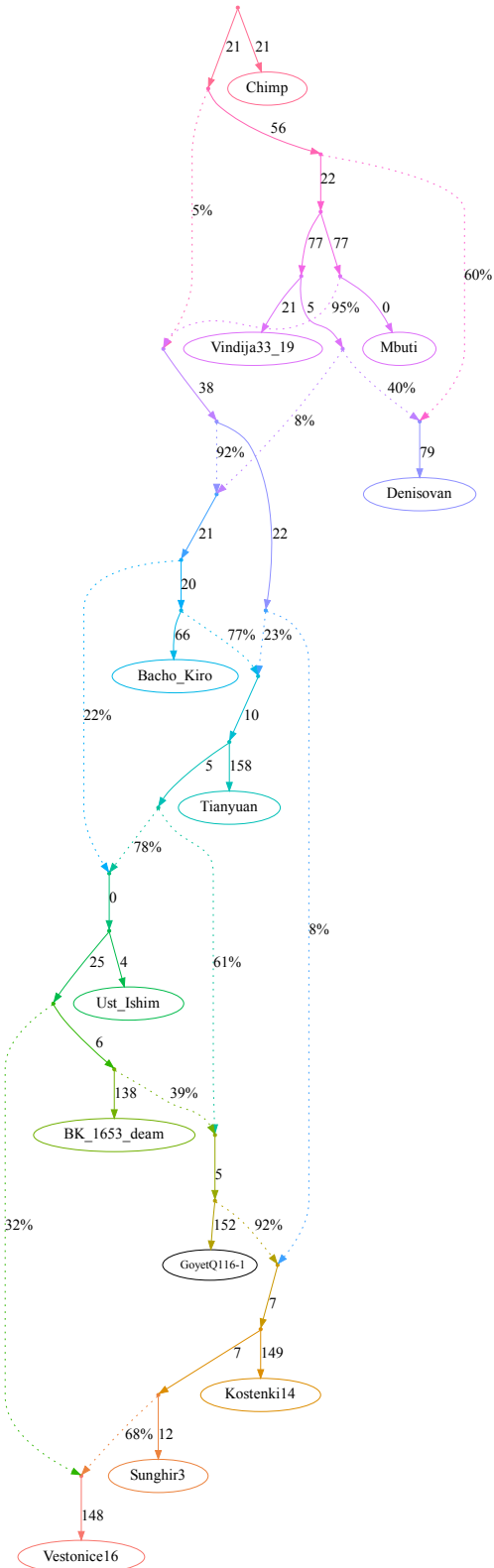


Figure S9

claims 1&2 not supported, claim 3 supported

**LL=34.6, WR=3.40, admix=8**



claims 1&2 not supported, claim 3 supported

**LL=34.6, WR=3.52, admix=8**

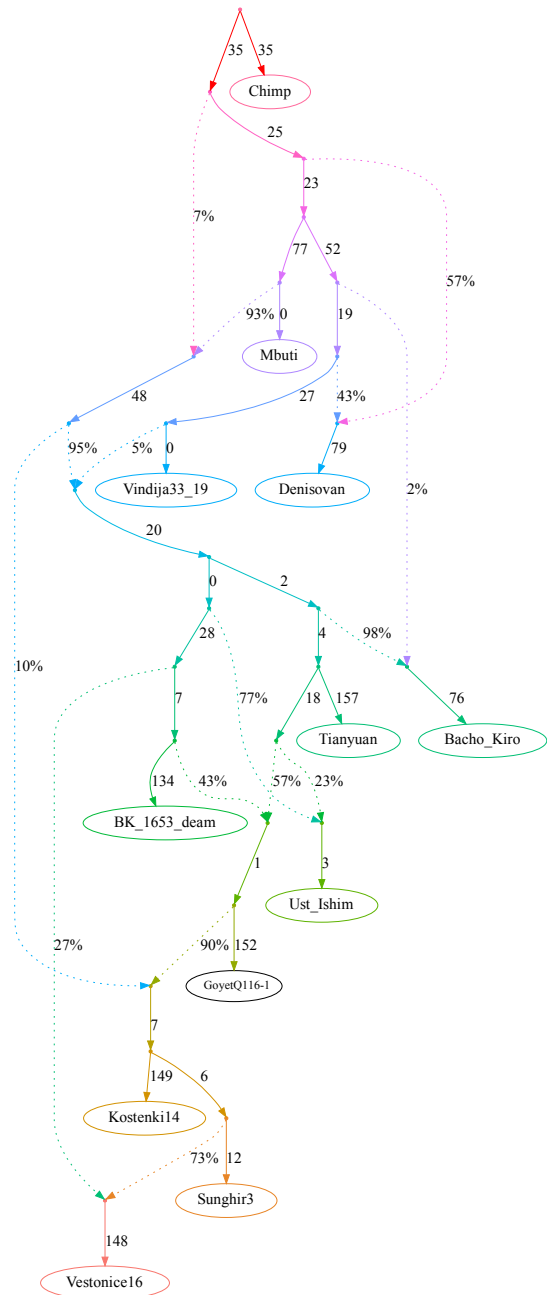
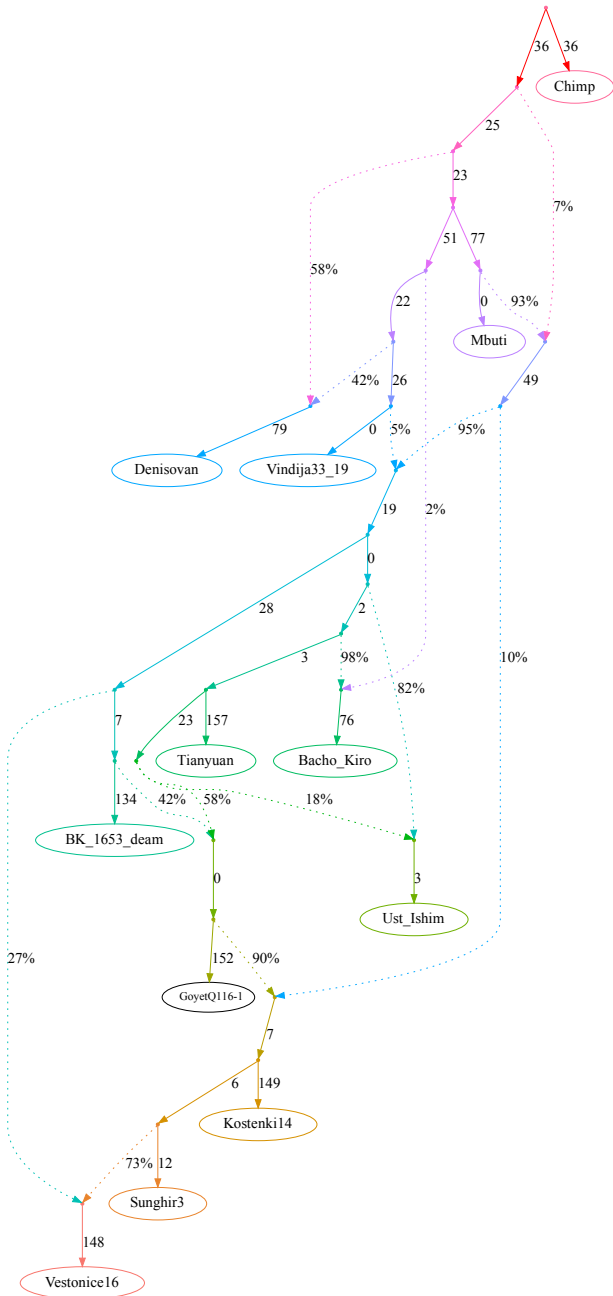


Figure S9

e, selected alternative models fitting significantly better than the published one

claims 1&2 not supported, claim 3 supported

LL=34.7, WR=3.52, admix=8



claims 1&2 not supported, claim 3 supported

LL=35.7, WR=3.52, admix=8

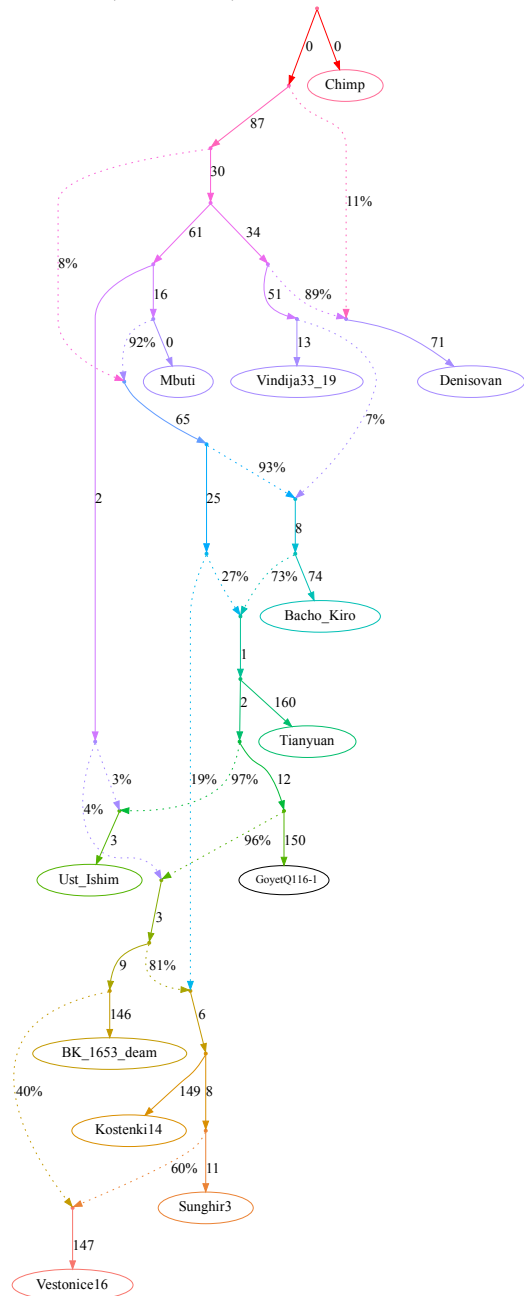


Figure S9

claims 1&2 not supported, claim 3 supported

**LL=36.2, WR=3.52, admix=8**

