

**Supplementary Table 1.** Language, subsistence and lactase persistence classifications of sampled populations and LP-associated allele frequencies.

Region/Language Family/ Population	Subsistence	Phenotyped	Lactase Persistent	Lactase Intermediate Persistent	Lactase Non- Persistent	Genotyped	C%	G%	T%	G%	A%	-14010	-13907	-13910	-13915	-22018
<b>Kenya</b>																
<i>Afro-Asiatic</i>																
Burji	Agro-pastoralist	8	3	2	3	8	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Borana	Pastoralist	8	5	1	2	8	12.5	12.5	0.0	18.8	0.0	0.0	0.0	0.0		
El Molo	Fishing/Pastoralist	9	4	3	2	9	11.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Gabra	Pastoralist	9	8	1	0	9	0.0	11.1	0.0	27.8	0.0	0.0	0.0	0.0		
Konso	Agro-pastoralist	6	2	2	2	6	8.3	0.0	0.0	8.3	0.0	0.0	0.0	0.0		
Rendille	Pastoralist	8	5	1	2	8	12.5	6.3	0.0	12.5	0.0	0.0	0.0	0.0		
Somali	Pastoralist	1	1	0	0	1	0.0	0.0	0.0	50.0	0.0	0.0	0.0	0.0		
Wata	Hunter-gatherer	1	0	0	1	1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Yaaku	gatherers/Pastoralist	14	8	5	1	14	53.6	4.2	0.0	0.0	0.0	0.0	0.0	0.0		
<b>Total</b>		<b>64</b>	<b>36</b>	<b>15</b>	<b>13</b>	<b>64</b>	<b>18.3</b>	<b>4.8</b>	<b>0.0</b>	<b>9.4</b>	<b>0.0</b>					
<i>Nilo-Saharan</i>																
Maasai	Pastoralist	32	23	6	3	32	57.8	3.1	0.0	0.0	0.0	0.0	0.0	0.0		
Marakwet	Agro-pastoralist	6	3	1	2	7	35.7	0.0	0.0	7.1	0.0	0.0	0.0	0.0		
Nandi	Agro-pastoralist	4	0	2	2	4	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Ogiek	Agro-pastoralist/Hunter-gatherers	11	6	0	5	11	36.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Pokot	Pastoralist	14	6	4	4	14	28.6	0.0	0.0	3.6	0.0	0.0	0.0	0.0		
Sabaot	Agro-pastoralist	6	3	2	1	6	16.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Samburu	Pastoralist	9	8	0	1	9	27.8	6.3	0.0	5.6	0.0	0.0	0.0	0.0		
Sengwer	Agro-Pastoralist/Hunter-gatherers	16	2	4	10	16	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Tugen	Agro-pastoralist	16	8	5	3	16	18.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

Region/Language Family/ Population	Subsistence	Phenotyped	Lactase Persistent	Lactase Intermediate Persistent	Lactase Non- Persistent	Genotyped	C%	G%	T%	G%	A%	-14010	-13907	-13910	-13915	-22018
Turkana	Pastoralist	12	4	4	4	13	20.8	0.0	0.0	0.0	0.0					
<b>Total</b>		<b>126</b>	<b>63</b>	<b>28</b>	<b>35</b>	<b>128</b>	<b>31.5</b>	<b>1.2</b>	<b>0.0</b>	<b>1.2</b>	<b>0.0</b>					
<i>Niger-Kordofanian</i>																
Kikuyu	Agriculturalist	2	1	0	1	2	75.0	0.0	0.0	0.0	0.0					
<b>Kenya Total</b>		<b>192</b>	<b>100</b>	<b>43</b>	<b>49</b>	<b>194</b>	<b>27.6</b>	<b>2.4</b>	<b>0.0</b>	<b>3.9</b>	<b>0.0</b>					
<b>Sudan</b>																
<i>Afro-Asiatic</i>																
Beja Banuamir	Pastoralist	6	6	0	0	6	0.0	25.0	0.0	16.7	0.0					
Beja Hadandawa	Pastoralist	11	9	0	2	11	0.0	18.2	0.0	9.1	0.0					
<b>Total</b>		<b>17</b>	<b>15</b>	<b>0</b>	<b>2</b>	<b>17</b>	<b>0.0</b>	<b>20.6</b>	<b>0.0</b>	<b>11.8</b>	<b>0.0</b>					
<i>Nilo-Saharan</i>																
Dinka	Pastoralist	9	6	2	1	9	0.0	0.0	0.0	0.0	0.0					
Koalib	Agro-pastoralist	1	1	0	0	1	0.0	0.0	0.0	0.0	0.0					
Liguri/Logorik	Agro-pastoralist	1	0	0	1	1	0.0	0.0	0.0	0.0	0.0					
Masalit	Agro-pastoralist	1	1	0	0	1	0.0	0.0	0.0	0.0	0.0					
Nuer	Pastoralist	4	2	2	0	5	0.0	0.0	0.0	0.0	0.0					
Ama	Agro-pastoralist	2	1	0	1	2	0.0	0.0	0.0	0.0	0.0					
Shilook	Pastoralist	8	3	4	1	8	0.0	0.0	0.0	0.0	0.0					
<b>Total</b>		<b>26</b>	<b>14</b>	<b>8</b>	<b>4</b>	<b>27</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>					
<b>Sudan Total</b>		<b>43</b>	<b>29</b>	<b>8</b>	<b>6</b>	<b>44</b>	<b>0.0</b>	<b>8.0</b>	<b>0.0</b>	<b>4.5</b>	<b>0.0</b>					
<b>Tanzania</b>																
<i>Afro-Asiatic</i>																
Burunge	Agro-pastoralist	18	6	2	10	18	38.2	0.0	0.0	0.0	0.0					
Iraqw	Agro-pastoralist	21	18	2	1	39	57.7	0.0	0.0	0.0	0.0					
Mbugu	Agro-pastoralist	30	10	7	13	30	31.0	0.0	0.0	0.0	0.0					
Fiome	Agro-pastoralist	12	1	5	6	12	55.0	0.0	0.0	0.0	0.0					
<b>Total</b>		<b>81</b>	<b>35</b>	<b>16</b>	<b>30</b>	<b>99</b>	<b>45.8</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>					

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							-14010	-13907	-13910	-13915	-22018
<i>Nilo-Saharan</i>											
Akie	Hunter-gatherers/ Pastoralist	14	6	3	5	14	25.0	0.0	0.0	0.0	3.6
Datog	Pastoralist	4	0	3	1	4	62.5	0.0	0.0	0.0	0.0
Dorobo	Hunter-gatherers/ Pastoralist	10	4	4	2	10	40.0	0.0	0.0	0.0	0.0
Maasai	Pastoralist	17	10	2	5	19	44.7	0.0	0.0	0.0	0.0
<b>Total</b>		<b>45</b>	<b>20</b>	<b>12</b>	<b>13</b>	<b>47</b>	<b>39.4</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>1.1</b>
<i>Niger-Kordofanian</i>											
Mbugwe	Agro-pastoralist	13	4	5	4	13	26.9	0.0	0.0	3.8	0.0
Pare	Agro-pastoralist	10	6	2	2	10	10.0	0.0	0.0	0.0	0.0
Rangi	Agro-pastoralist	35	17	9	9	35	27.1	0.0	0.0	0.0	0.0
Samba'a	Agro-pastoralist	3	0	1	2	3	0.0	0.0	0.0	0.0	0.0
<b>Total</b>		<b>61</b>	<b>27</b>	<b>17</b>	<b>17</b>	<b>61</b>	<b>23.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.8</b>	<b>0.0</b>
<i>Khoisan</i>											
Hadza	Hunter-gatherer	18	9	3	6	18	0.0	0.0	0.0	0.0	0.0
Sandawe	Hunter-gatherer*	30	8	7	15	31	13.3	0.0	0.0	0.0	0.0
<b>Total</b>		<b>48</b>	<b>17</b>	<b>10</b>	<b>21</b>	<b>49</b>	<b>8.3</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
<b>Tanzania Total</b>		<b>235</b>	<b>99</b>	<b>55</b>	<b>81</b>	<b>256</b>	<b>31.9</b>	<b>0.0</b>	<b>0.0</b>	<b>0.2</b>	<b>0.2</b>
<b>East Africa Total</b>		<b>470</b>	<b>228</b>	<b>106</b>	<b>136</b>	<b>494</b>	<b>27.4</b>	<b>1.6</b>	<b>0.0</b>	<b>2.0</b>	<b>0.1</b>
<i>Bersaglieri et al.</i>											
European	-	-	-	-	-	92	-	-	81.5	-	81.7
African American	-	-	-	-	-	50	-	-	14.0	-	13.3
Asian	-	-	-	-	-	35	-	-	0.0	-	0.0

\* Adopted agriculture and pastoralism within the past few hundred years