

S1 Table. Comparative Early Pleistocene *Homo* samples^a.

Sample	Specimen	Data source and references
<i>H. habilis s. l.</i> (2.3–1.6 Ma <i>Homo</i> from East Africa)		
Hadar	A.L. 666-1 L7-279*, 628-224, 894-1*; Omo 29-43*, 74-18*,	[1]
Omo (Member G/H)	75-14*, 75s-15*, 75s-16, 75i-1255, 195-1630*, SH1-1-17*	casts, [2,3]
East Turkana (upper Burgi and lower KBS)	KNM-ER 1462, 1470, 1480, 1483, 1501, 1502*, 1507*, 1508*, 1590*, 1801*, 1802*, 1805*, 1811, 1812, 1813*, 2597*, 2599, 2601*, 3734, 3891, 3953, 60000, 62000, 62003	casts/originals, [3,4]
Olduvai (Bed I/lower Bed II)	OH 4, 6*, 7*, 13*, 15, 16*, 21*, 24*, 27, 37*, 39*, 41*, 42, 44*, 45*, 55*, 57, 58, 60, 62, 65, 69, 73	casts/originals, [3,5,6]
<i>H. ergaster</i> (1.7–0.8 Ma <i>Homo</i> from East Africa)		
East Turkana (upper KBS and Okote)	KNM-ER 730, 803, 806*, 807, 808*, 819, 820*, 992*, 1506*, 1515, 1808*, 1814*, 3733*	casts/originals, [3]
West Turkana (1.47 Ma)	KNM-WT 15000	[7]
Omo (Member K)	Omo K7-1*	cast, [2]
Konso	KGA 10-1*, 11-350*	casts, [8]
Olduvai (Bed III/IV)	OH 22*, 51*	casts/originals
Dmanisi <i>Homo</i> (1.75 Ma)		
Dmanisi	D2600, 2282/211, 2700/2735	[9,10]
early Javanese <i>H. erectus</i> (>1.2–0.8 Ma)		
Sangiran Lower (Grenzbank or below)	S1b*, 4*, 5*, 6a*, 6b*, 7* (N=27), 8, 9*, 15a, 22*, 27*; Bk7905*; Bpg 2001.04	casts/originals, [11,12]
Sangiran Upper (above Grenzbank)	S7* (N=18), 17*, 21, Skull IX*; Sb 8103*, Ng 8503*, Bu 9706; Njg 2005.05	cast/original, [13-16]
Sangiran (stratigraphy unknown)	Ng 9603*	cast/original
East Asian Middle Pleistocene archaic <i>Homo</i>		
Zhoukoudian Locality 1	Sin 1–117, 130’–147’; Zdansky premolar & molar; PA 67–70, 110 PA 102 (Lantian); PA 832–839, HXUP3	casts/originals, [17,18]
Lantian, Hexian, Changyang, Chaoxian, Xujiajiao, Penghu ^b	(Hexian); V. 1681, 1682 (Changyang); Chaoxian; PA 1480, 1481, 1496, 1500 (Xujiajiao); Penghu 1	originals, [18-23]

*Samples included in the EFAs.

^aThe original fossil specimens listed above are housed at the National Museum of Ethiopia, Addis Ababa (Hadar, Omo, Konso), National Museum of Kenya, Nairobi (Turkana), National Museum and House of Culture, Dar es Salaam, and National Natural History Museum, Arusha (Olduvai), Georgian National Museum, Tbilisi (Dmanisi), Senckenberg Research Institute, Frankfurt-am-Main, Geological Museum, Bandung, Bandung Institute of Technology, Bandung, and Gadjah Mada University, Yogyakarta (Sangiran), Institute of Vertebrate Paleontology and Paleoanthropology, Beijing (Zhoukoudian, Lantian, Hexian, Changyang, Chaoxian, Xujiajiao), and National Museum of Natural Science, Taichung (Penghu).

^bSpecimen possibly belonging to the Late Pleistocene [23].

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