**S1 Table. Sample of fossil hominin teeth included in this study.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Specimen** | **Curating institution** | **Site name and its** | **Dating** | **Taxon** | **Tooth type** |
|  |  | **location** |  |  |  |
| KNM-KP  | National Museums of  | Kanapoi, Kenya | 4.17 ± 0.03 – 4.07± 0.03 Ma [1] | *Australopithecus*  | LRC, LRM1 |
| 34725 | Kenya |  |  | *anamensis* |  |
| MLD2 | University of the  | Makapansgat, South  | ~3 Ma [2,3] | *Australopithecus*  | LLM1, LLM2,  |
|  | Witwatersrand | Africa | 2.4–2.8 Ma [4] | *africanus* | LLC |
| MLD11-30 | University of the  | Makapansgat, South  | ~3 Ma [2,3] | *Australopithecus*  | URI2, URC |
|  | Witwatersrand | Africa | 2.4–2.8 Ma [4] | *africanus* |  |
| KB5223 | DITSONG Museums  | Member 3, Kromdraai  | ~1.9 Ma [5] | *Paranthropus*  | LLI1, LLI2 |
|  | of South Africa | B, South Africa |  | *robustus* |  |
| StW151 | University of the  | Member 4,  | 2.8 – 2.6 Ma [6] | *Au. africanus?*  | ULC, ULM1,  |
|  | Witwatersrand | Sterkfontein, South  |  | *Early Homo?* | LLC |
|  |  | Africa |  |  |  |
| SK62 | DITSONG Museums  | Member 1,  | 1.8 – 1.6 Ma [7,8] | *Paranthropus*  | LLI1 |
|  | of South Africa | Swartkrans, South |  | *robustus* |  |
|  |  | Africa |  |  |  |
| STS2 | DITSONG Museums  | Member 4,  | 1.5 – 2.5 Ma [9] | *Australopithecus*  | ULC |
|  | of South Africa | Sterkfontein, South |  | *africanus* |  |
|  |  | Africa |  |  |  |
| STS24 | DITSONG Museums  | Member 4,  | 1.5 – 2.5 Ma [9] | *Australopithecus*  | LRI1, URI1,  |
|  | of South Africa | Sterkfontein, South |  | *africanus* | ULI2 |
|  |  | Africa |  |  |  |

For the tooth type: the first letter ‘L’ or ‘U’ stands for ‘lower’ (mandibular) and ‘upper’ (maxillary), respectively. The second letter ‘L’ or ‘R’ indicates the side (‘left’ or ‘right’ respectively). The last part of the labeling is as: I1= central incisor; I2=lateral incisor; C= canine; M1= first molar; M2 = second molar.

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