



Certificate – mtDNA

Family Tree DNA certifies that a mitochondria DNA sample taken from

Frank Carrucan

differs from the Cambridge Reference Sequence (CRS)* at the numbered positions indicated,
by the presence of the bases designated A, C, G or T:

Haplogroup T1

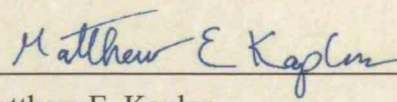
Sample # 71421

The letters designate the base – adenine, cytosine, guanine or thymine – that occurs at each of those positions in place of the CRS 540-base portion for Hyper Variable Region 1 starting at position 16,001 and ending with 16,569, as well as the 574 base portion for Hyper Variable Region 2 starting at position 1 and ending with 574. These are distinctive of this sample and may be compared to other people to confirm or rule out common descent, providing genetic evidence of genealogical relationships.

1st Segment	16126C, 16163G, 16186T, 16189C, 16294T, 16519C
2nd Segment	73G, 152C, 263G, 309.1C, 309.2C, 315.1C

*The Cambridge Reference Sequence is the accepted mtDNA standard.

October 25, 2006


Matthew E. Kaplan