a- Royal Mitochondrial Lineage Mummies

Mummy (tomb)	HVRI Diagnostic Mutation*, (Frequency, Experiments†)	Predicted Haplogroups#	Sequences per Alignment	Min/ Max Coverage	Coverage
Thuya (KV46)	16224 (89% - 4 exps) 16311 (92% - 3 exps)	K	87	4/57	Full
KV35EL (Tiye) (KV35)	16224 (90% - 5 exps) 16311 (100% - 2 exps)	K	74	3/43	Full
KV35YL (KV35)	16224 (88% - 4 exps) 16311 (100% - 3 exps)	K	72	6/55	Full
KV55 (Akhenaten) (KV55)	16224 (78% - 4 exps) 16311 (100% - 3 exps)	K	137	27/69	Full
Tutankhamun (KV62)	16224 (96% - 5 exps) 16311 (98% - 3 exps)	K	79	2/65	Full

b- Control Mummies

Mummy (tomb)	HVRI Diagnostic Mutation*, (Frequency, No. of Trials†)	Predicted Haplogroups#	Sequences per Alignment	Min/ Max Coverage	Coverage
Yuya (KV46)	16224 (80% - 2 exps) 16311 (89% - 3 exps)	K	64	2/58	Full
Amenhotep III (KV35)	16311 (100% - 1 exp)	H2b	80	17/47	Partial 16118-16409
Sitra-In (KV60)	None	K excluded	18	-	Partial 16118-16232
Hatshepsut (KV60)	None	K excluded	20	-	Partial 16118-16232

c- Staff Controls

Staff Member	HVRI Diagnostic Mutation	Predicted Haplogroups&
Staff 1	16189; 16192; 16223; 16292; 16355; 16519	L2a1
Staff 2	16069; 16126; 16193; 16300; 16309	J1d
Staff 3	16519	H (CRS)
Staff 4	16304; 16519	H5
Staff 5	16217; 16309	HV2
Staff 6	16218; 16519	H20
Staff 7	16069; 16126; 16145; 16187; 16217; 16261; 16300; 16311	J1b1
Staff 8	16051; 16132; 16172; 16189; 16219; 16278	U6
Staff 9	16069; 16126; 16214; 16231; 16305	J
Staff 10	16093; 16224; 16304; 16311	K1a
Staff 11	16129; 16309; 16318; 16362; 16397	U7

*Alterations observed in the mitochondrial DNA with a frequency higher than 75% were designated as diagnostic mutations.

#The phylogenetic tree (http://www.phylotree.org) and the Genebase mtDNA Haplogroup Reference Guide (www.genebase.com) were used to determine mtDNA haplotypes (Van Oven & Kayser 2009, E386-E394).

†"Experiments" indicate the number of primer combinations used to generate differently sized PCR amplicons which harbour the diagnostic mutation.

&Haplogroup determination for staff members was mainly based on the findings of Saunier *et al.* (2009, e97-e103) and Elmadawy *et al.* (2013, 338-341), in addition to general information from the van Oven & Kayser (2009, e386-e394) phylogenetic tree.

Table 4. Characterization of mitochondrial DNA of 18th Dynasty mummies