

**Table S3: Summary of results of forensic case samples.** Comparison between reference and *GeneSlice* analyses. T<sub>m</sub>: Melting temperature.

Case sample	Reference analysis		<i>GeneSlice</i> analysis	
	Methods *	Results	Results	Interpretation
<b>Bone sample (spine)</b>	(1)	<b>Sheep</b> DNA	<i>12s rRNA/cytb</i> signal with Caprinae-specific primers; universal <i>12S rRNA</i> signal	Member of the sub-family Caprinae; <b>sheep</b> due to T <sub>m</sub>
<b>"Biltong" sample (meat)</b>	(1)	<b>Kangaroo</b> DNA	no family-specific signal; universal <i>12S rRNA</i> signal	sample of an animal not covered by the assay
<b>Piece of a tent (fabric) [1]</b>	(1), (2); species-specific PCR, cloning	Mixture of <b>fox</b> and <b>human</b> DNA	<i>12s rRNA/cytb</i> signal with Canidae- and human-specific primers; universal <i>12S rRNA</i> signal (double peak indicating mixture)	mixed sample: 1. <b>Human</b> ; 2. Member of the family Canidae; <b>fox</b> DNA according to T <sub>m</sub> of <i>cytb</i> differentiable to dog
<b>Swab from a jacket (skin/blood mixture)</b>	(1), (2) and subsequent sequencing	No result for universal <i>12S rRNA/cytb</i> sequencing; Human, cow, pig, chicken after sequencing of human-, Bovini-, pig- and Phasianidae-specific PCR products	<i>12s rRNA/ low cytb</i> signal with human-specific primers; low <i>12S rRNA</i> signal with Bovinae-specific primers; universal <i>12S rRNA</i> signal	<b>Human</b> DNA with a low level of <b>cow</b> DNA

\* Methods were chosen according to the task and extended if required by the obtained results

(1) universal *12S rRNA* (404-409bp) and *cytb* (483-488-bp) sequencing [2]; cf. Table S1

(2) animal-group-specific PCR with subsequent melt curve analysis using tubes

1. Naue J, Lutz-Bonengel S, Pietsch K, Sanger T, Schlauderer N, Schmidt U. Bite through the tent. *Int J Legal Med.* 2012 May 1;126(3):483–8.
2. Naue J, Lutz-Bonengel S, Sanger T, Schlauderer N, Schmidt U. Modular real-time PCR screening assay for common European animal families. *Int J Legal Med.* 2014 Jan;128(1):11–8.