Supplementary Information

**Ultrafast Enzymatic Digestion of Deoxyribonucleic Acid in Aqueous**

**Microdroplets for Sequence Discrimination and Identification**

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**Supplementary Table S1:** Digestion extent of different DNA sequences by DNase I

with ESSI-MS. A positive voltage of 3 kV was applied for the digestion and detection.





**Supplementary Figure S1:** Mass spectrum of fragments identified from digests of

DNA sequence containing pure T by ESSI-MS applied with a positive voltage (+3 kV).



**Supplementary Figure S2:** Mass spectrum of fragments identified from digests of DNA sequence containing pure A incubated in bulk phase overnight at room temperature. ESSI-MS was applied with a positive voltage (+3 kV) for detection.

**Supplementary Figure S3:** Mass spectrum of fragments identified from digests of DNA sequence containing pure C incubated in bulk phase overnight at room temperature. ESSI-MS was applied with a positive volta