

Electronic Supplementary Information

Determination of microRNA-122 in hepatocytes by two-step amplification of duplex-specific nuclease with laser-induced fluorescence detection

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Table S1 Oligonucleotide sequences

Nucleic acids	Sequence (5' to 3')
Probe 1	FAM-CAAACACCATTGTCACACTCCATATTCTTCAGGTGTTTG-BHQ1
Probe 2	FAM-CCTGGTCAAACACCTGAAGAATAACCAGG-BHQ1
MiR-122	UGGAGUGUGACAAUGGUGUUUG
MiR-122 (mismatch 1)	UGGAGUGUGAU <u>AA</u> UGGUGUUUG
MiR-122 (mismatch 3)	UGGAGU <u>CUGA</u> <u>UAAU</u> <u>AG</u> UGUUUG
MiR-21	UAGCUUAUCAGACUGAUGUUGA

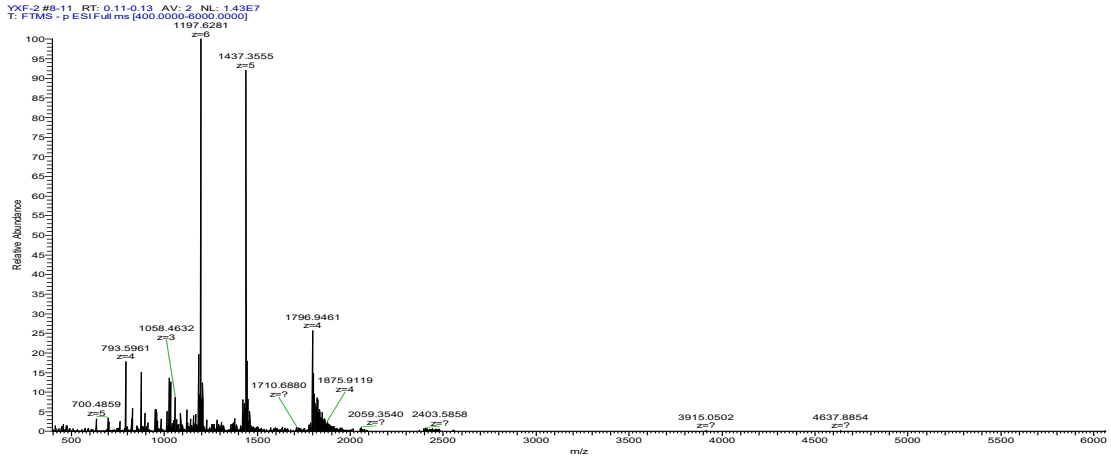
Underlined parts were the mismatched bases

Table S2 Repeatability

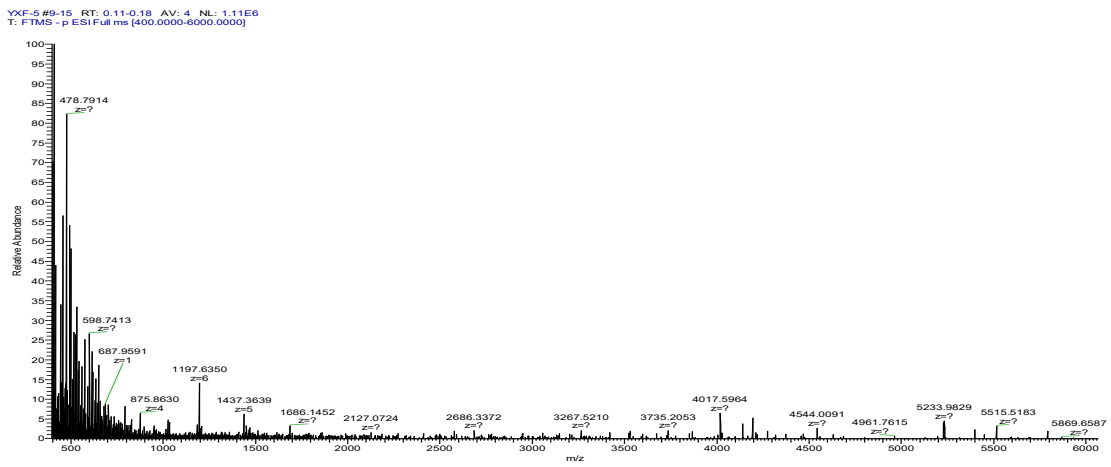
Repeatability	Fluorescence increment (mV)										RSD
											(n = 9)
Intraday	255.67	282.36	272.52	268.68	267.14	267.91	276.01	268.69	267.18	269.18	2.69%
Interday	269.36	264.11	289.95	252.95	267.14	279.43	280.19	260.11	276.01	276.01	4.23%

Table S3 Recoveries

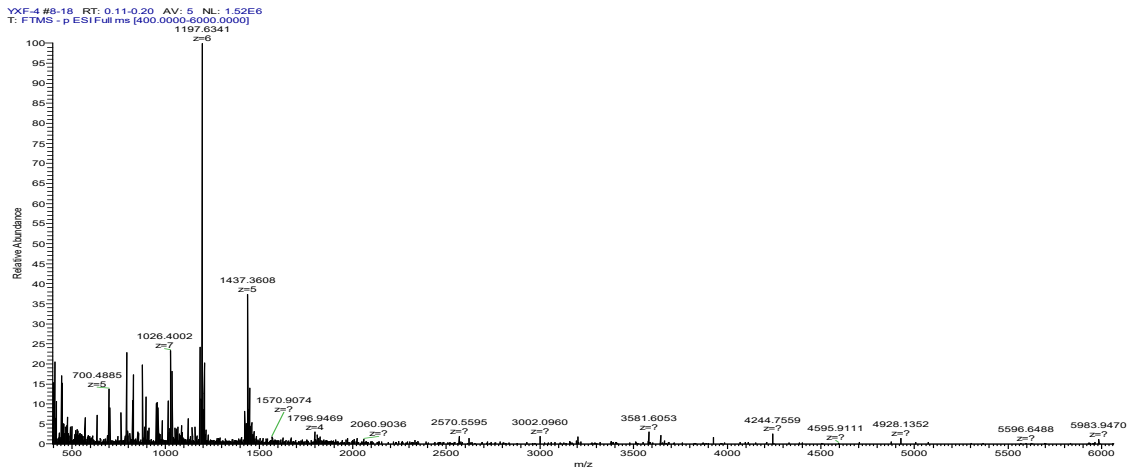
Cells	Analytes	Added amount (M)	Found amount (M)	Recoveries (%)	RSD (n = 3)
Chicken liver	miR-122	4.50×10^{-10}	5.06×10^{-10}	112.4%	6.08%
Duck liver	miR-122	9.50×10^{-10}	9.19×10^{-10}	95.68%	5.95%



A



B



C

Fig. S1 MS spectrograms of miR-122 and samples
A, MS spectrogram for miR-122 (50ppm); B, MS spectrogram of the sample of chicken liver; C, MS spectrogram of the sample of duck liver