

Figure S1: Peaks overlap of NMV and RIT using CZE and 50 mM phosphate buffer pH 7.

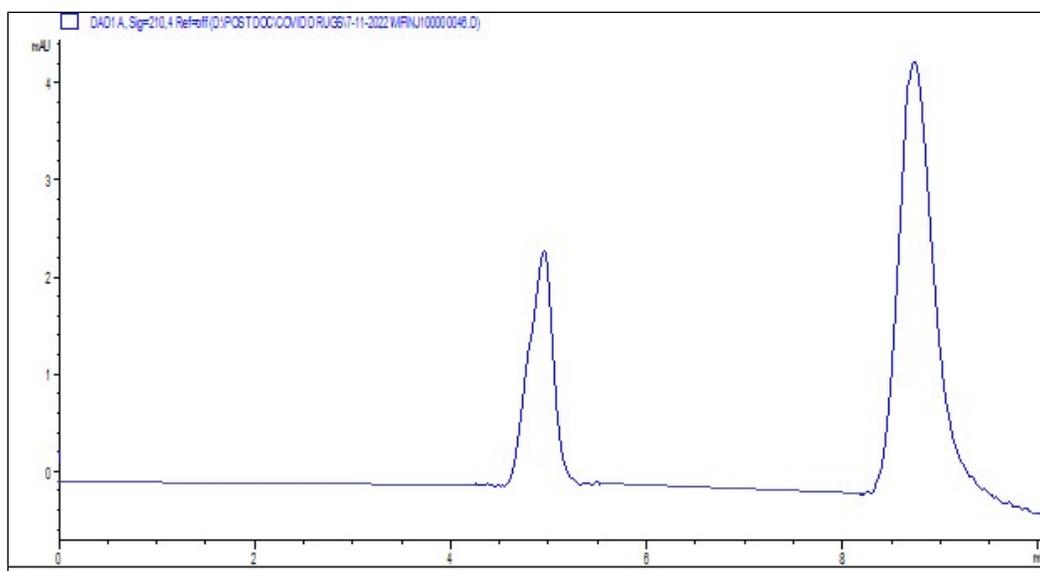


Figure S2: Electropherogram representing the effect of diluting solvent using 10% methanol.

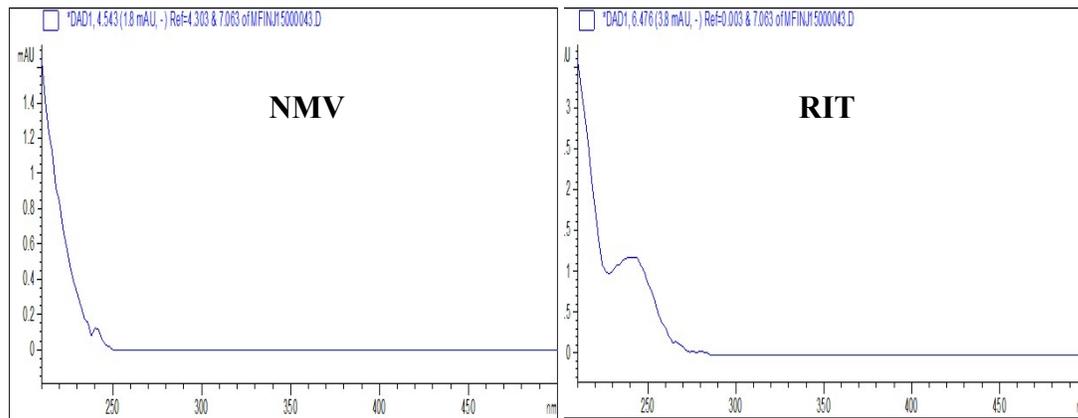


Figure (S3): UV spectra of NMV and RIT using the

proposed MEKC method.

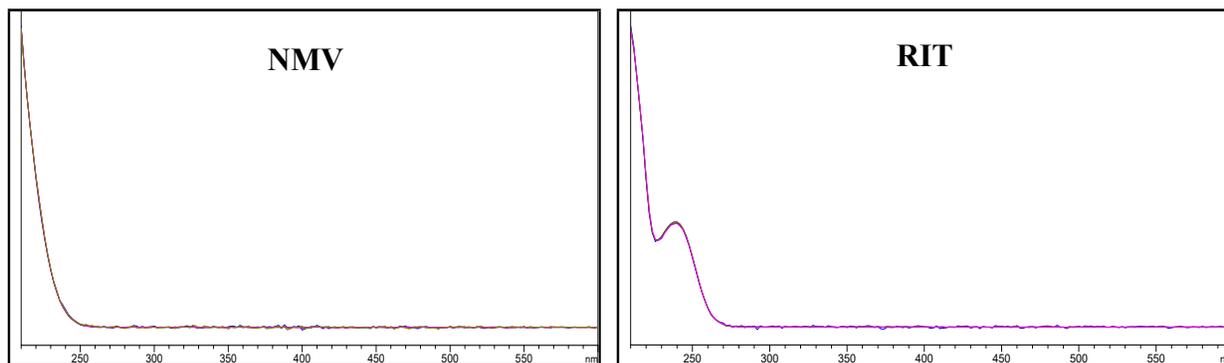


Figure (S4): UV spectra of NMV and RIT using the proposed HPLC method.

NMV: MEKC

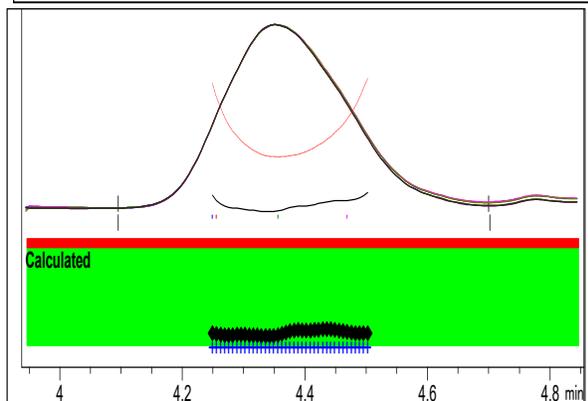
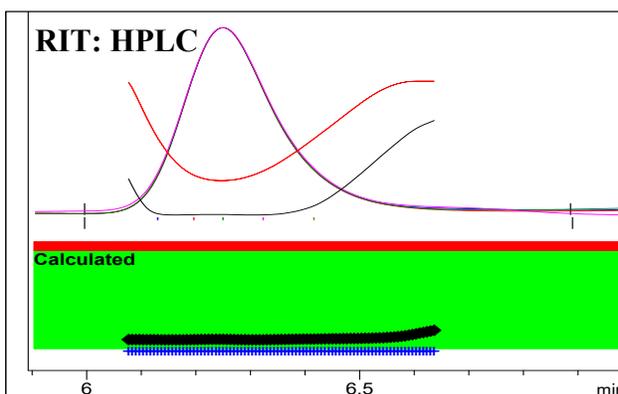
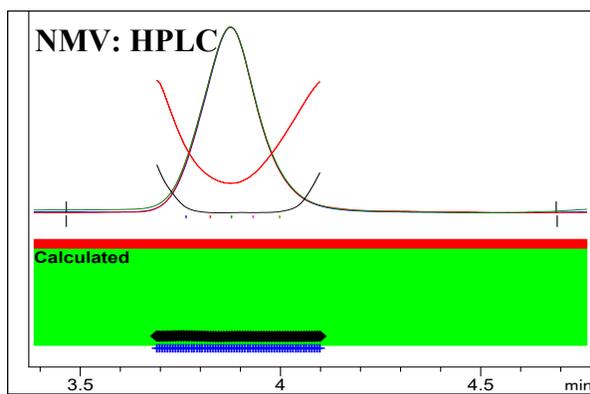
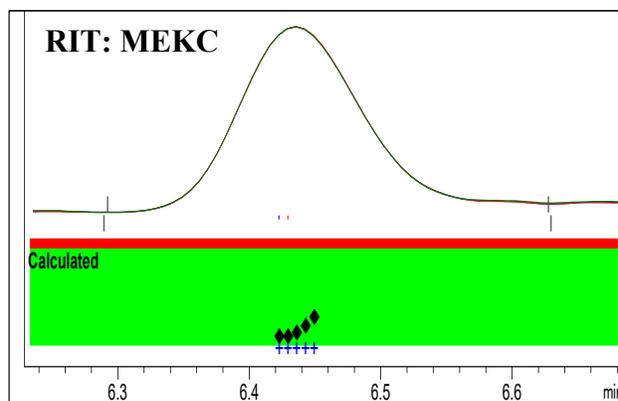


Figure (S5): The purity plot for NMV and RIT peaks in MEKC and HPLC methods.

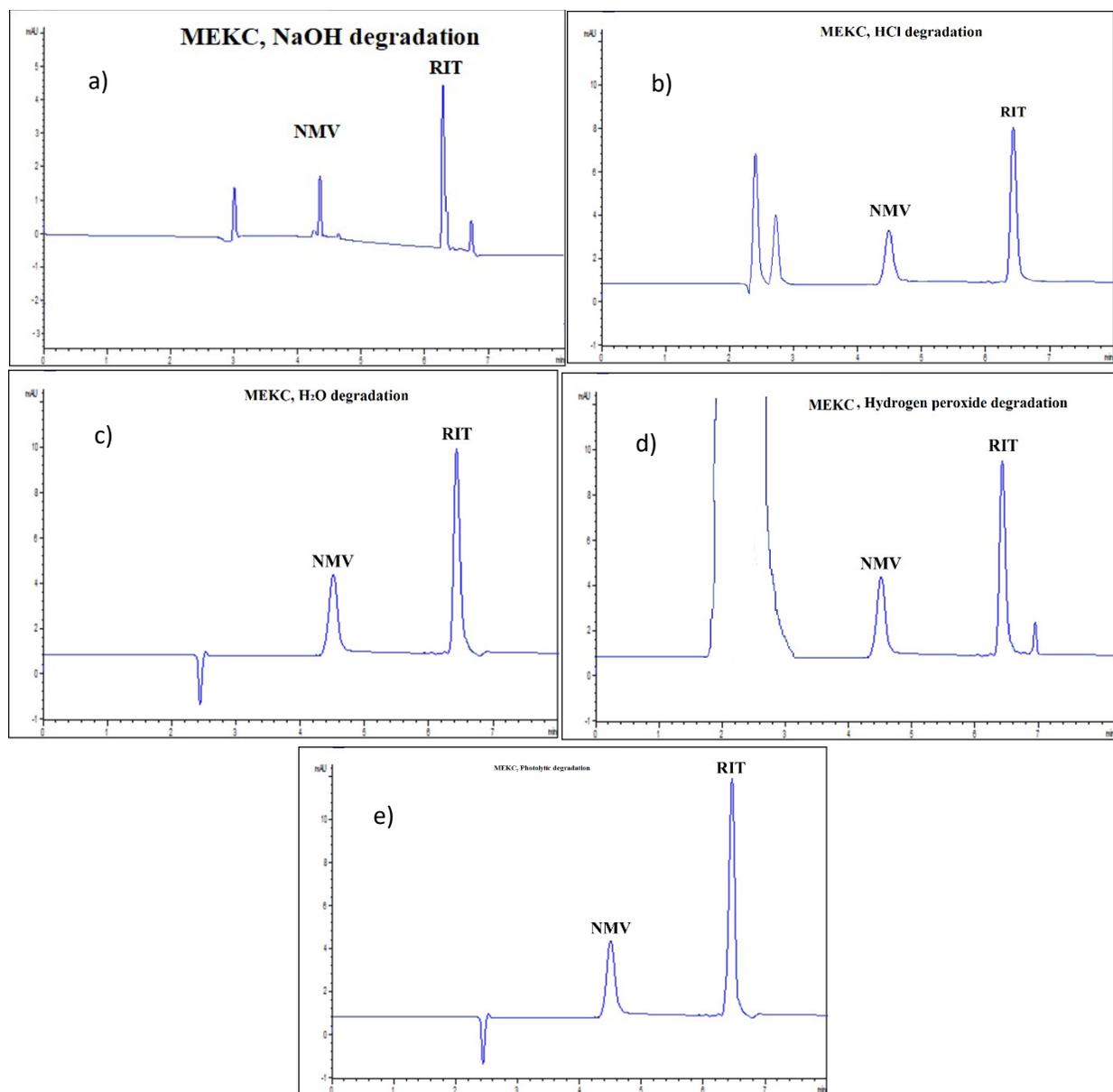


Figure (S6). MEKC electropherograms of 100 $\mu\text{g/mL}$ of NMV and RIT after different stress conditions: alkaline degradation (0.1 M NaOH, 70 $^{\circ}\text{C}$, $\frac{1}{2}$ h), a), acidic degradation (1 M HCl, 70 $^{\circ}\text{C}$, 1 h), b), neutral degradation (H₂O, 70 $^{\circ}\text{C}$, 1 h), c), oxidative degradation (30% H₂O₂, 70 $^{\circ}\text{C}$, $\frac{1}{2}$ h), d), photo-degradation (day light, 4 h), e).

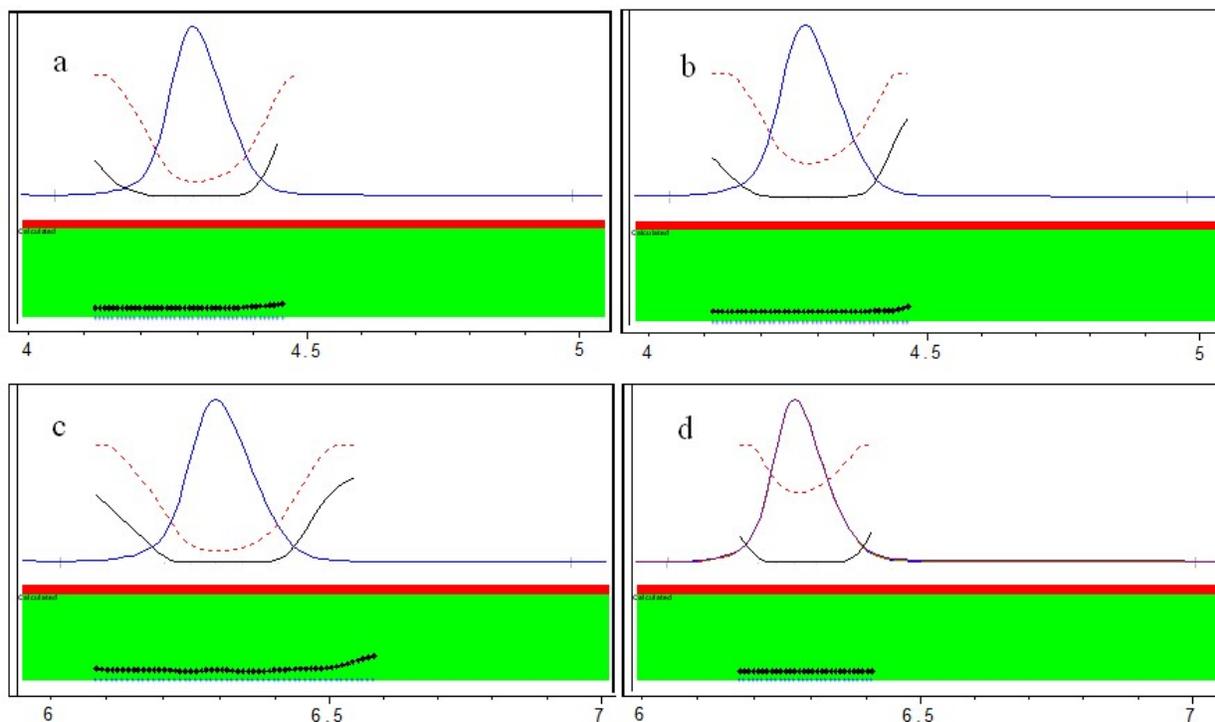


Figure (S7): The purity plot for NMV peaks using alkaline, a) and acidic degradation conditions, b), and RIT peaks using alkaline, c) and acidic degradation conditions, d), in MEKC method.

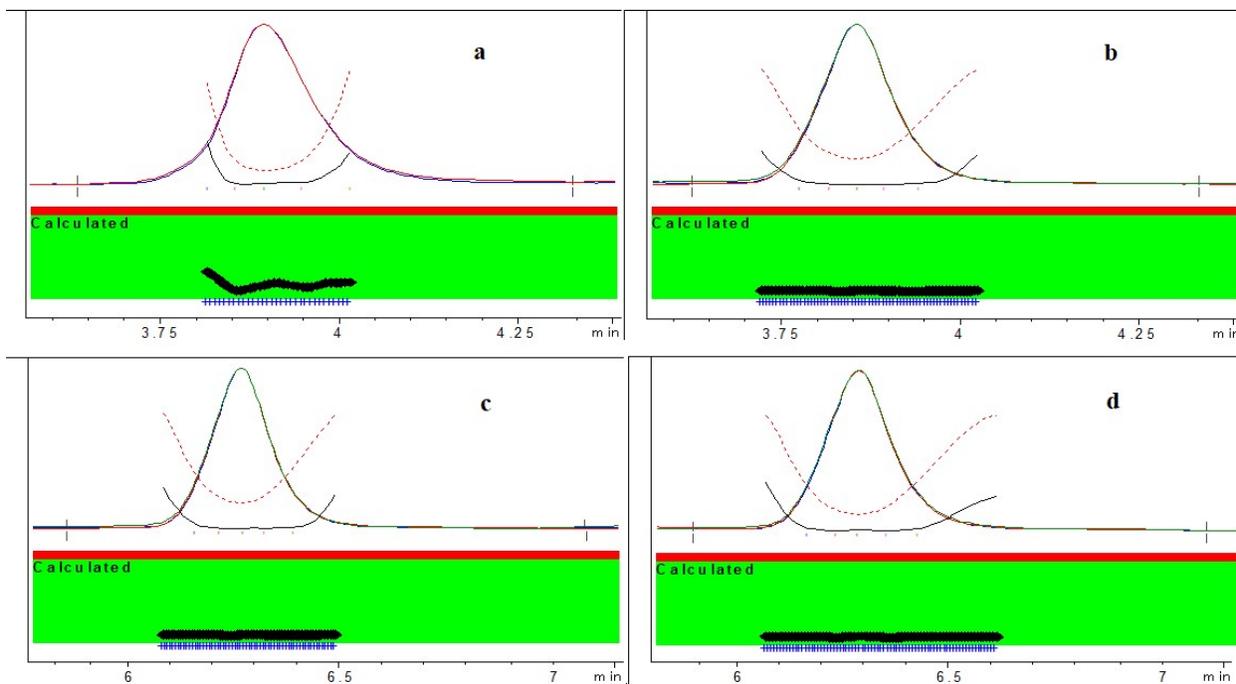


Figure (S8): The purity plot for NMV peaks using alkaline, a) and acidic degradation conditions, b), and RIT peaks using alkaline, c) and acidic degradation conditions, d), in HPLC method.

Table (1S): Precision and accuracy for determination of NMV and RIT mixture using the proposed MEKC and HPLC methods.

Analyte	MEKC				HPLC			
	Nominal value (µg/mL)	Found ± SD ^a (µg/mL)	RSD(%) ^b	E _r (%) ^c	Nominal value (µg/mL)	Found ± SD ^a (µg/mL)	RSD(%) ^b	E _r (%) ^c
NMV	Within-day							
	10	9.93±0.14	1.41	-0.70	10	9.90±0.17	1.72	-0.97
	50	50.26± 0.37	0.74	0.52	50	49.99±0.33	0.66	-0.01
	100	100.10 ±0.24	0.24	0.10	100	99.98±0.40	0.4	-0.02
	Between-days							
	10	10.18 ± 0.14	1.38	1.77	10	9.96±0.19	1.86	-0.43
50	50.30 ± 0.25	0.50	0.60	50	49.72±0.88	1.77	-0.55	
100	100.18 ± 0.31	0.31	0.18	100	99.71±0.91	0.91	-0.29	
RIT	Within-day							
	10	10.19 ± 0.06	0.59	1.90	10	10.00±0.12	1.15	0.00
	50	50.06 ± 0.85	1.70	0.12	50	49.61±0.72	1.44	-0.77
	100	100.32 ± 0.13	0.13	0.32	100	99.48±0.80	0.80	-0.52
	Between-days							
	10	10.16 ± 0.06	0.59	1.60	10	9.93±0.18	1.85	-0.67
50	49.69 ± 0.56	1.13	-0.62	50	50.10±0.50	1.00	0.21	
100	100.02 ± 0.29	0.29	0.02	100	99.47±0.79	0.79	-0.53	

Table (2S): Robustness evaluation for the analysis of NMV and RIT mixture using the proposed MEKC and HPLC methods.

Parameter	MEKC							
	NMV				RIT			
	Peak area ± SD	RSD%	Migration time ± SD	RSD%	Peak area ± SD	RSD%	Migration time ± SD	RSD%
Buffer concentration 50 ± 2 mM	40.55 ± 0.13	0.32	4.51 ± 0.08	1.77	89.93 ± 0.38	0.42	6.30 ± 0.10	1.58
Buffer pH 9.2 ± 0.2 pH unit	40.91 ± 0.33	0.8	4.54 ± 0.05	1.10	90.07 ± 0.90	1.00	6.34 ± 0.12	1.89
SDS concentration 25 ± 2 mM	40.66 ± 0.10	0.25	4.47 ± 0.06	1.34	89.8 ± 0.26	0.29	6.27 ± 0.01	0.16
Wavelength 210 ± 2 nm	40.63± 0.08	0.20			90.2 ±0.10	0.11		
Parameter	HPLC							
	NMV				RIT			
	Peak area ± SD	RSD%	Retention time ± SD	RSD%	Peak area ± SD	RSD%	Retention time ± SD	RSD%
Buffer concentration 50 ± 2 mM	2312±0.41	0.02	3.89 ± 0.06	0.15	4827 ±0.56	0.01	6.29 ±0.23	0.35
Buffer pH 5 ± 0.2 pH unit	2330±0.59	0.03	3.90 ± 0.10	0.03	4878 ±0.94	0.02	6.25 ±0.04	0.06
Flow rate 1 ± 0.05 mL	2299±0.18	0.01	3.89 ± 0.08	0.20	4799 ±1.12	0.02	6.31 ±0.41	0.61
Wavelength 210 ± 2 nm	2305±0.33	0.01			4853 ±1.07	0.02		

* Robustness parameters were determined for a mixture containing 100 µg/mL of NMV and RIT for MEKC and HPLC.

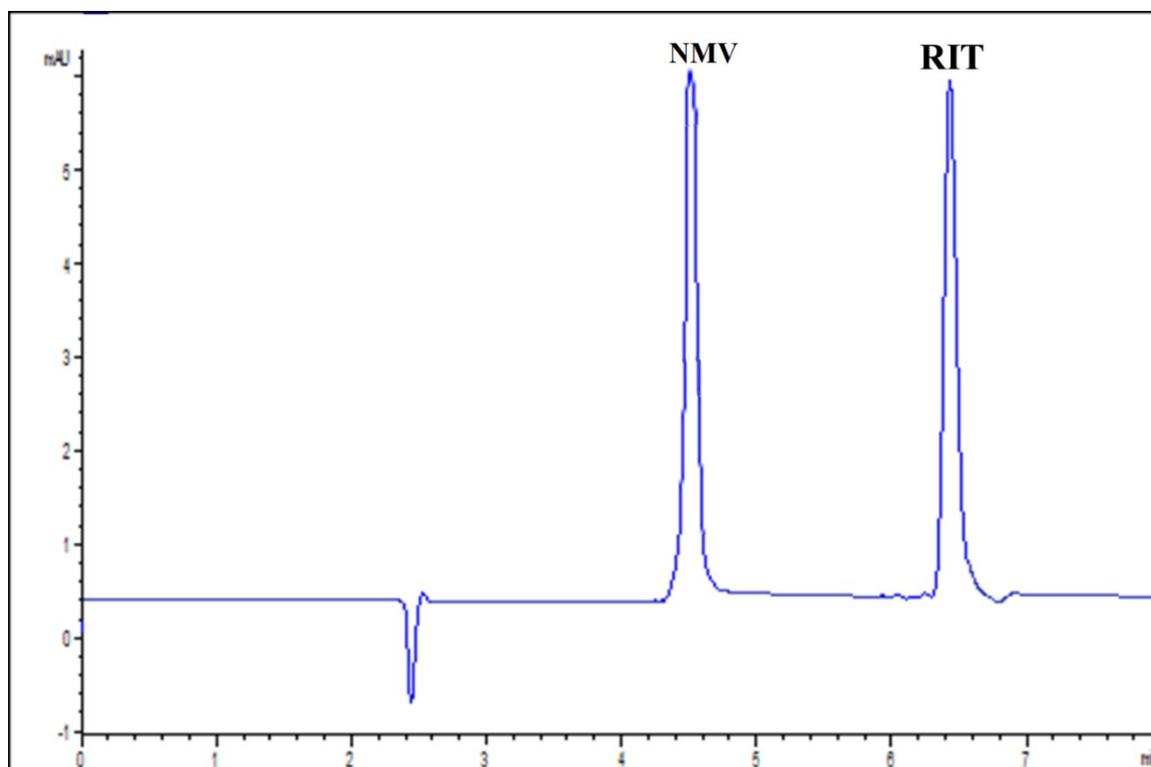


Figure S9: MEKC electropherogram of NMV and RIT extracted from the tablets at concentration 150 and 50 $\mu\text{g/mL}$, respectively.

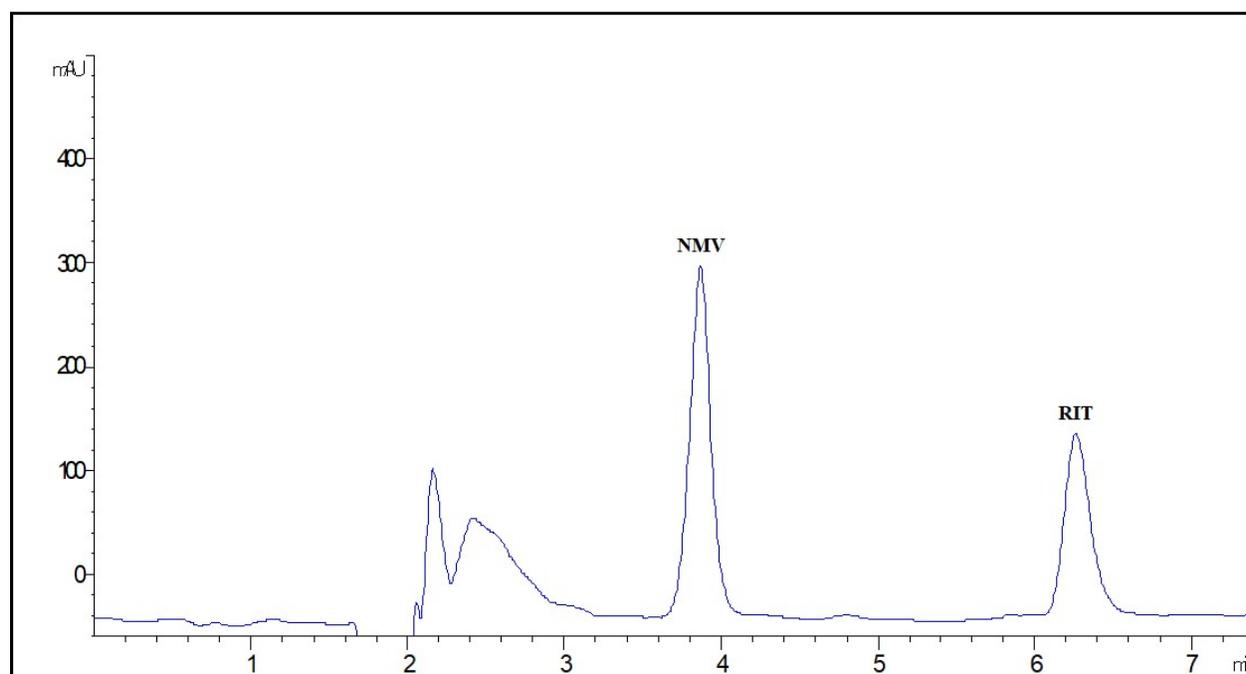


Figure S10: HPLC chromatogram of NMV and RIT extracted from the tablets at concentration 150 and 50 $\mu\text{g/mL}$, respectively.