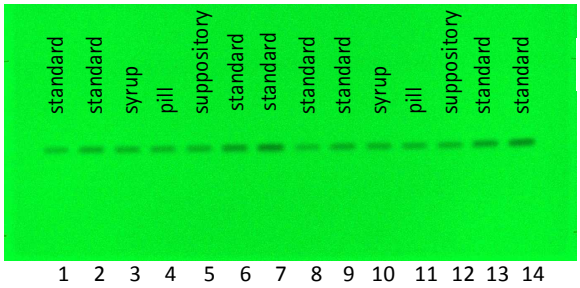
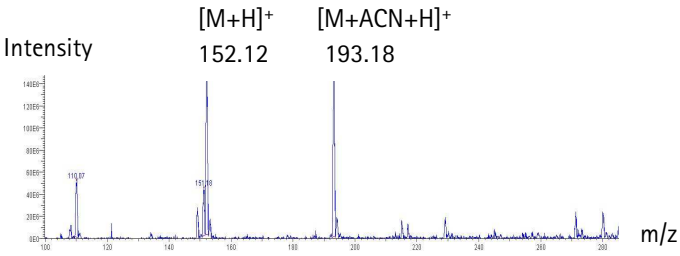
Determination of Paracetamol in different formulations on HPTLC Silica gel 60 F_{254} MS-grade

Chromatographic Conditions

Plate:	HPTLC Silica gel 60 F_{254} MS-grade 20x10 cm
Article number:	1.00934.0001
Mobile Phase (v/v):	Acetone (1.00020) / Toluene (1.08327) 1:1 + 0.1 % Acetic acid (1.00063)
Migration distance:	Migration distance 5 cm (migration time 9 min)
Chamber:	Normal chamber without chamber saturation
Detection:	UV 254 nm
Mass spectrometry:	Identification by coupling the TLC – MS Interface (CAMAG) with the Advion expression CMS ESI-(+). Eluent: Acetonitrile / Water 95:5 + 0.1 % TFA
Sample preparation:	Suppository: One suppository containing 125 mg Paracetamol was diluted in 125 ml ethanol at 36°C and applied directly. Pain syrup: 0.2 ml Paracetamol pain syrup containing 4 % Paracetamol was diluted in 7.8 ml methanol and applied directly. Pill: One pill containing 500 mg Paracetamol was diluted in 500 ml methanol, filtered through a 0.45 µm Millex®-LCR syringe filter and applied directly.





Chromatographic Data

Track No.	Compounds	Concentration (mg/ml)	Solvent	Application volume µl	hRf
1, 8	Paracetamol Standard 1	1.0	Methanol	0.3	49 / 51
2, 9	Paracetamol standard 2	1.0	Methanol	0.5	49 / 51
3, 10	Paracetamol Standard 3	1.0	Methanol	0.7	49 / 51
4, 11	Paracetamol Standard 4	1.0	Methanol	1.0	50 / 51
5, 12	Pain syrup	1.0	Methanol	0.5	50 / 52
6, 13	Pill	1.0	Methanol	0.5	50 / 52
7, 14	Suppository	1.0	Ethanol	0.5	50 / 53