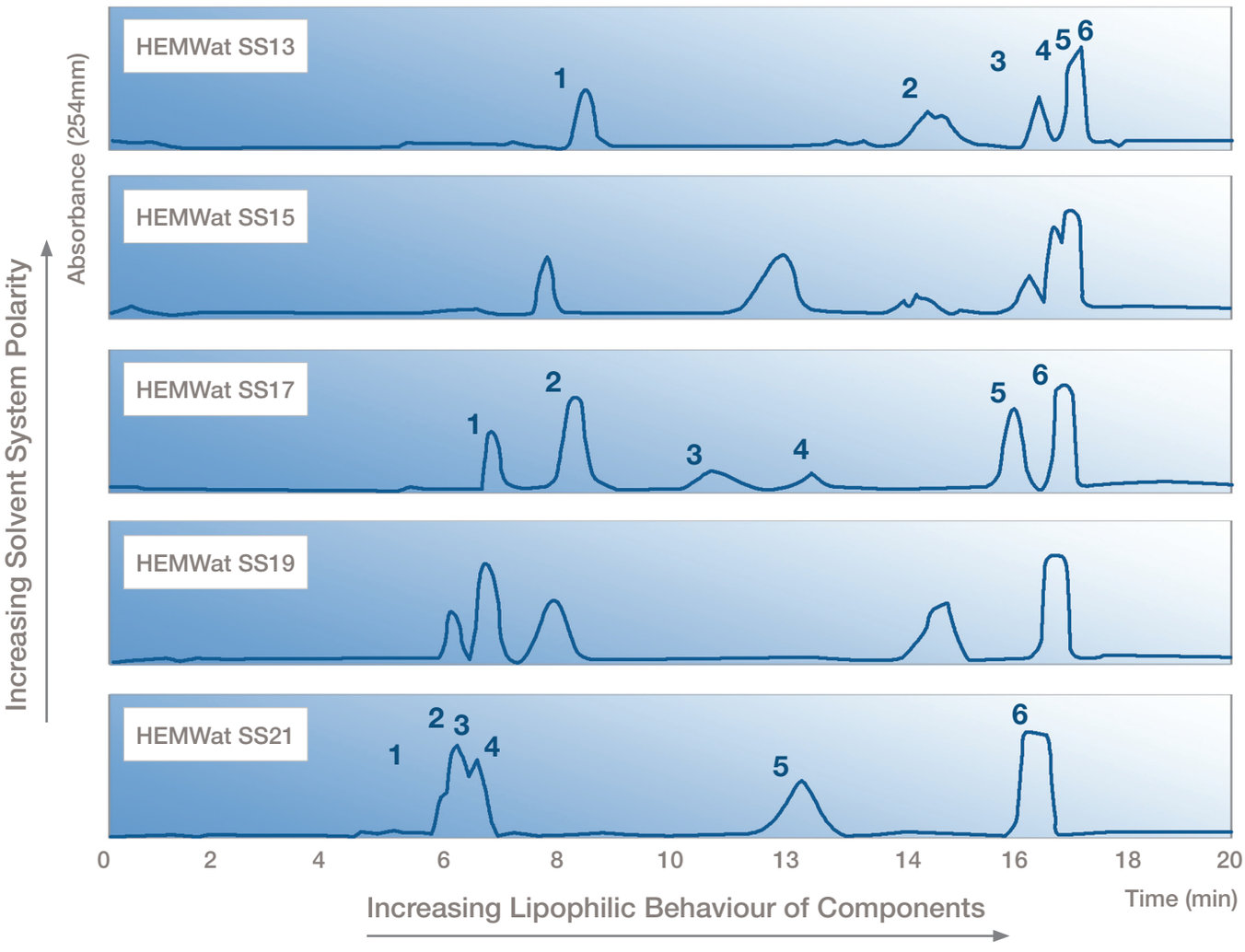
Tuneable Separation using HPCCC



Test Mix Component	Elution Order
Dipyridamole	1
4-Bromobenzamide	2
Methyl 4-amino-3-methylbenzoate	3
Warfarin	4
Methyl 2-acetamido-5-bromobenzoate	5
Biphenyl	6

HEMWat Solvent System	Hexane	Ethyl acetate	Methanol	Water
SS13	2	5	2	5
SS15	2	3	2	3
SS17	1	1	1	1
SS19	3	2	3	2
SS21	5	2	5	2

Experimental Conditions

Column:	Dynamic Extractions Mini HPCCC (19ml)
Solvent Systems:	HEMWat solvent systems 13, 15, 17, 19 & 21
pH modifier:	0 .1% TFA added to all systems
Load:	2mg/25µl DMSO
Flow Rate:	2ml/min elution, 4ml/min extrusion
Run Mode:	Isocratic, RP, elution-extrusion:12min elution, 8min extrusion

Discussion:

- The HEMWat solvent system series provides excellent and tuneable selectivity for the purification of a wide range of compounds by HPCCC
- Predictable, near linear variation in retention of individual compounds across the solvent system series
- Relative polarity of HEMWat solvent systems display near linear polarity change across series, from more polar (SS06) to more lipophilic (SS27)
- Rapid screening using an automated HPCCC system facilitates rapid method development – in this example 5 runs were performed in <110min
- Screening run identified that SS17+0.1% TFA provides good separation of all components in the test mix

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