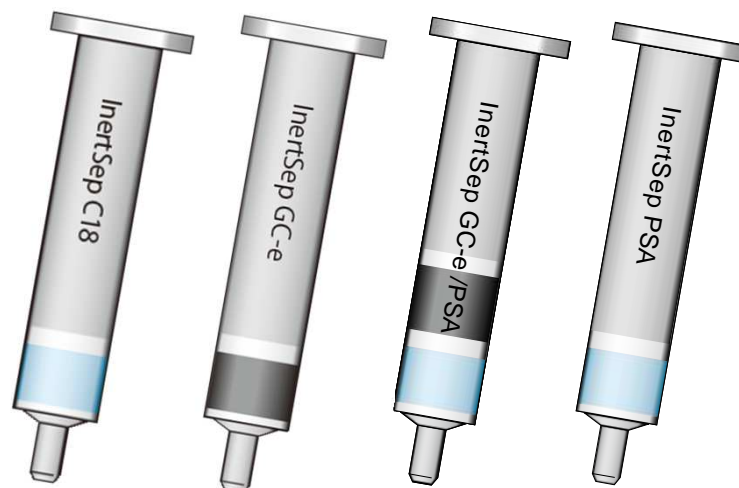


All about InertSep HLB



Content



1. Features

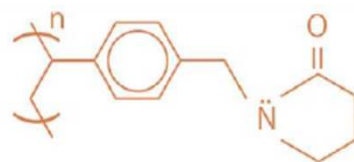
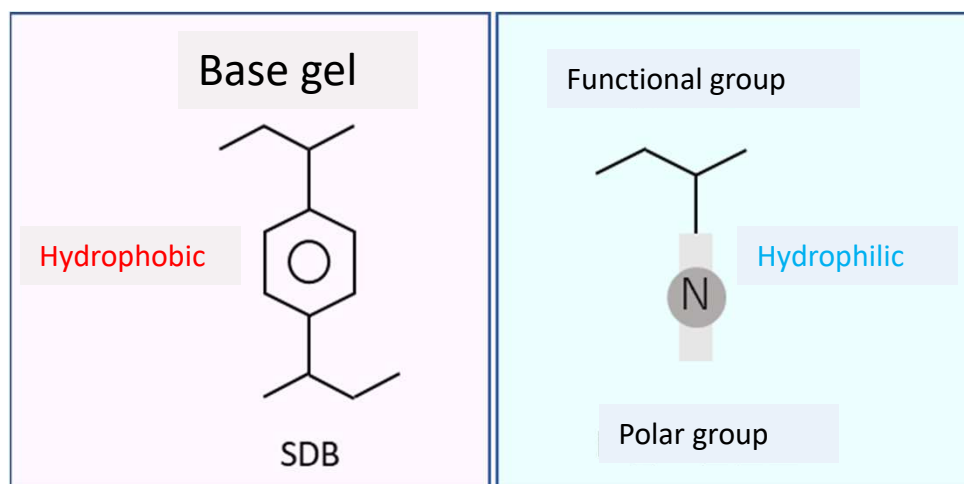
Having close performance to Waters Oasis HLB

2. Markets

Pharma and food company

InertSep HLB Features

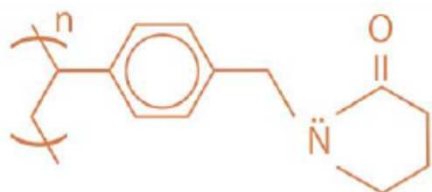
InertSep HLB(Hydrophilic Lipophilic Balanced)



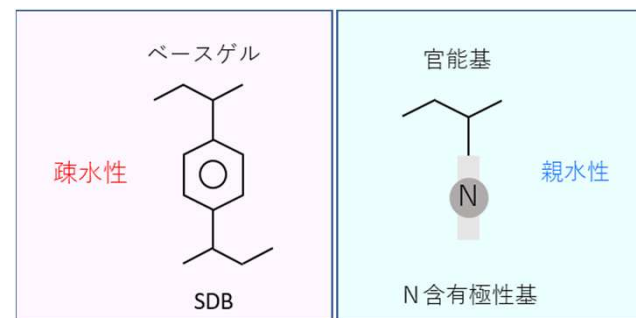
Physical properties

	Surface area	Pore size(nm)	Pore volume cm ³ /g
OASIS	761	7.0	1.384
InertSep HLB	750	6.67	1.296

OASIS HLB



InertSep HLB

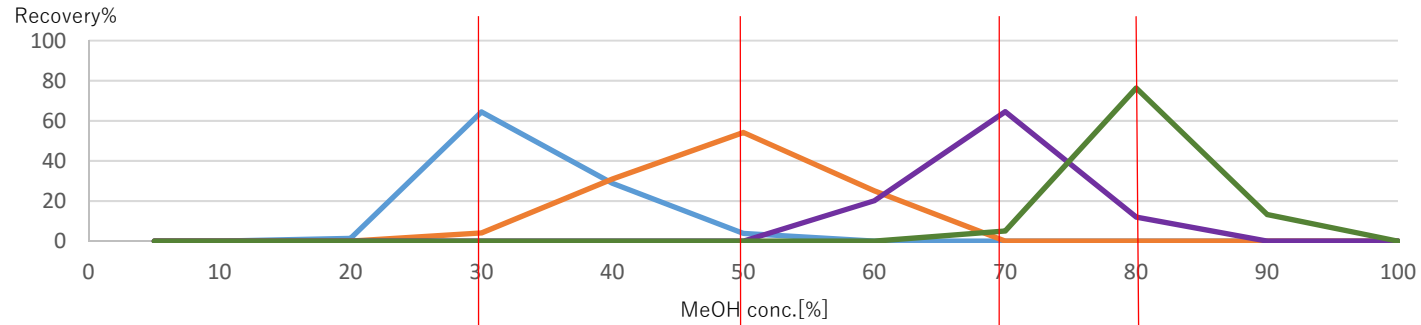


Please be noted tt

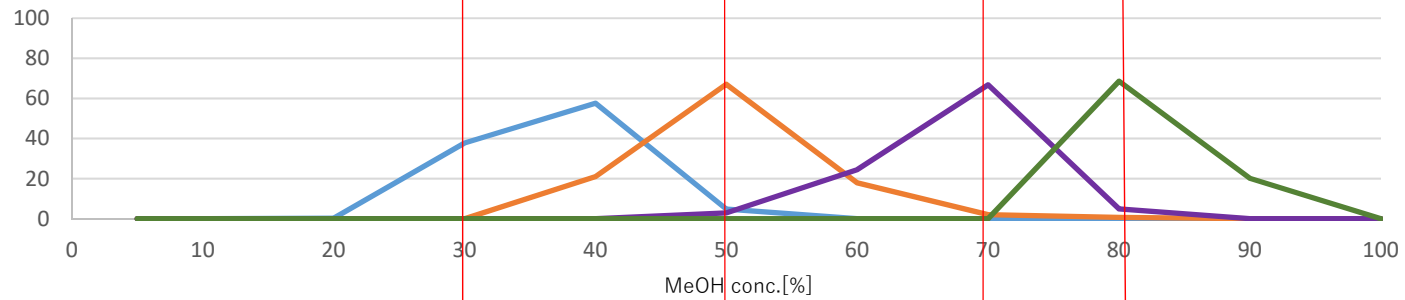
Having close retention pattern to OASIS HLB



OASIS



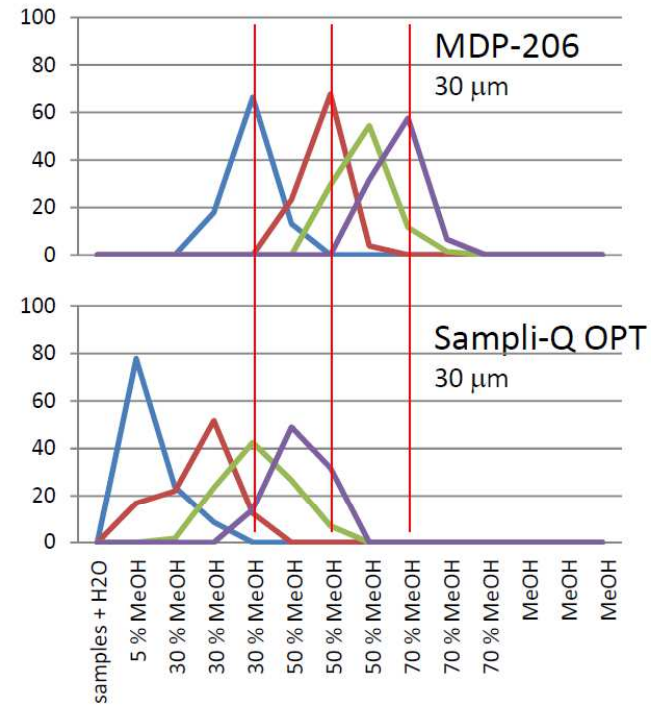
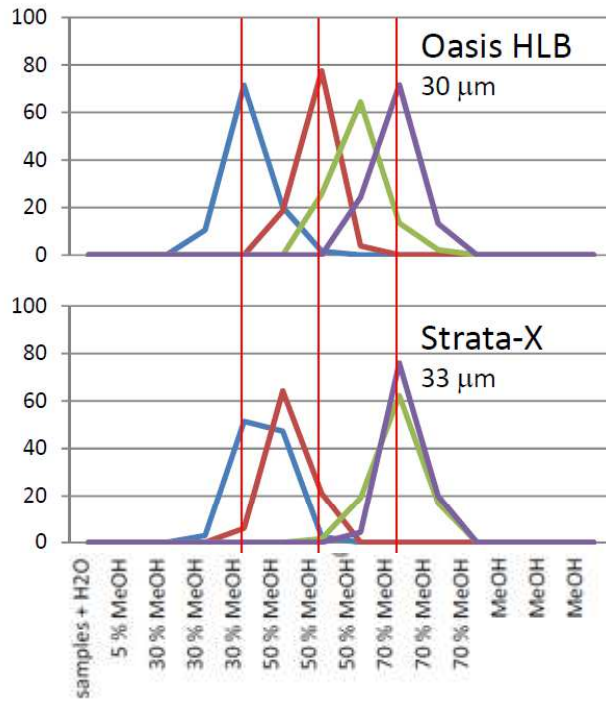
InertSep HLB



MeOH conc. [%]
— Acetaminophen, — Caffeine, — Florfenicol, — Carbamazepine

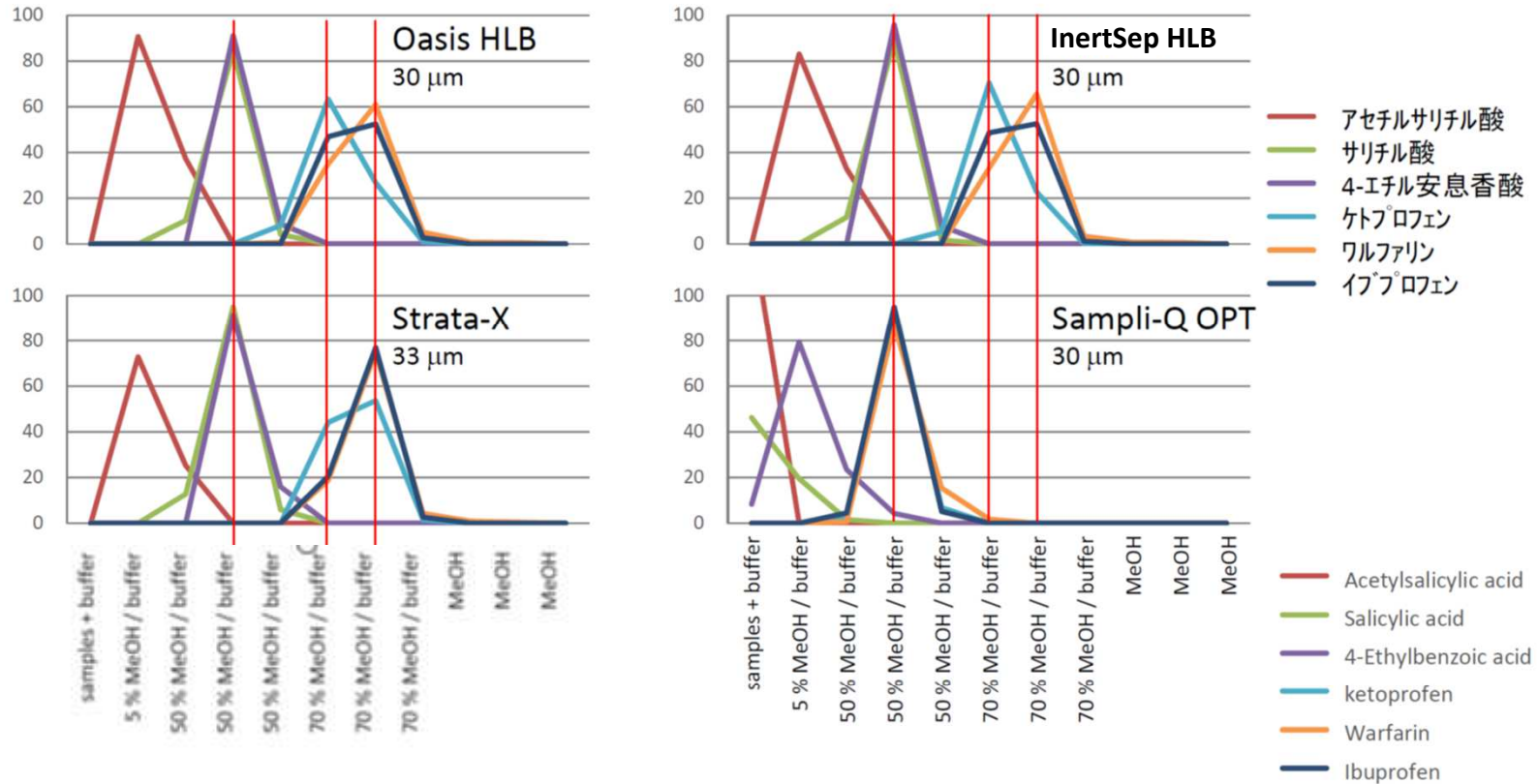
InertSep HLB has closer retention pattern to OASIS HLB.

Retention patterns for polar analytes

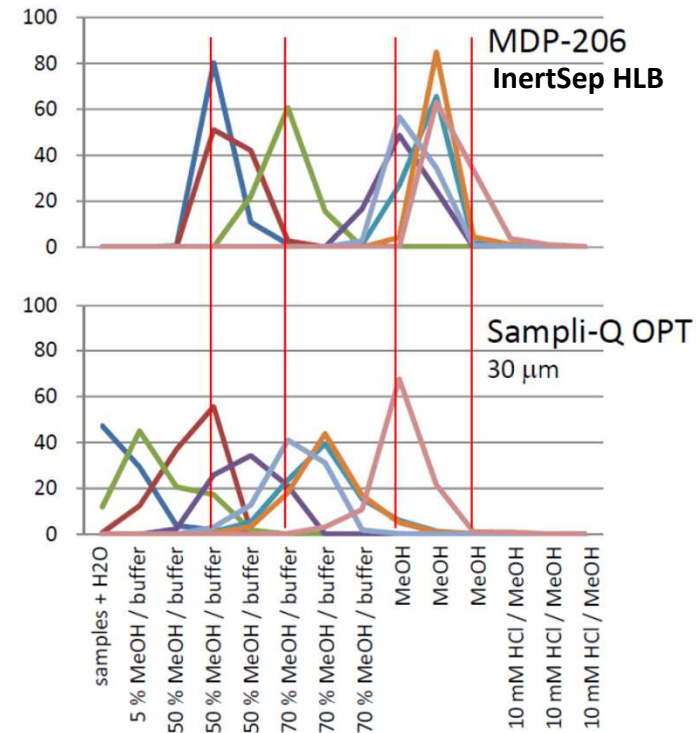
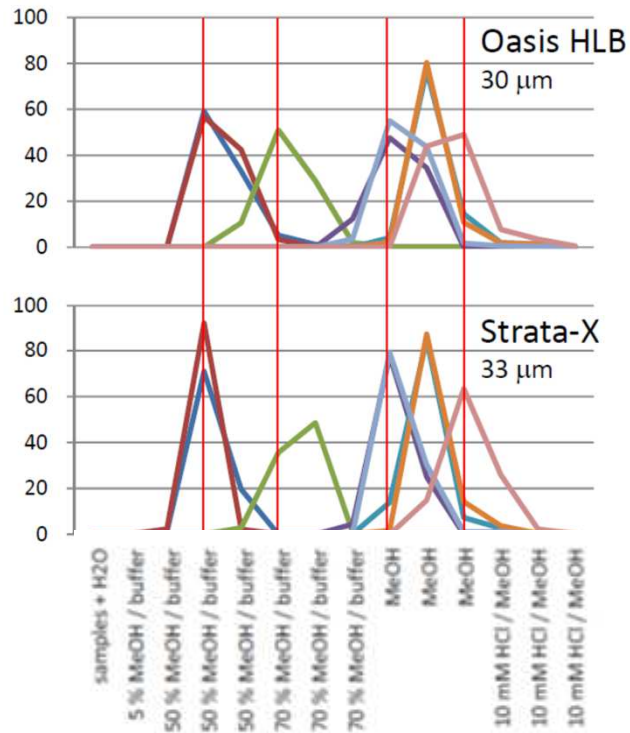


- Theombin
- Acetaminophen
- Caffeine
- P-Toluamide

Retention patterns for acidic analytes

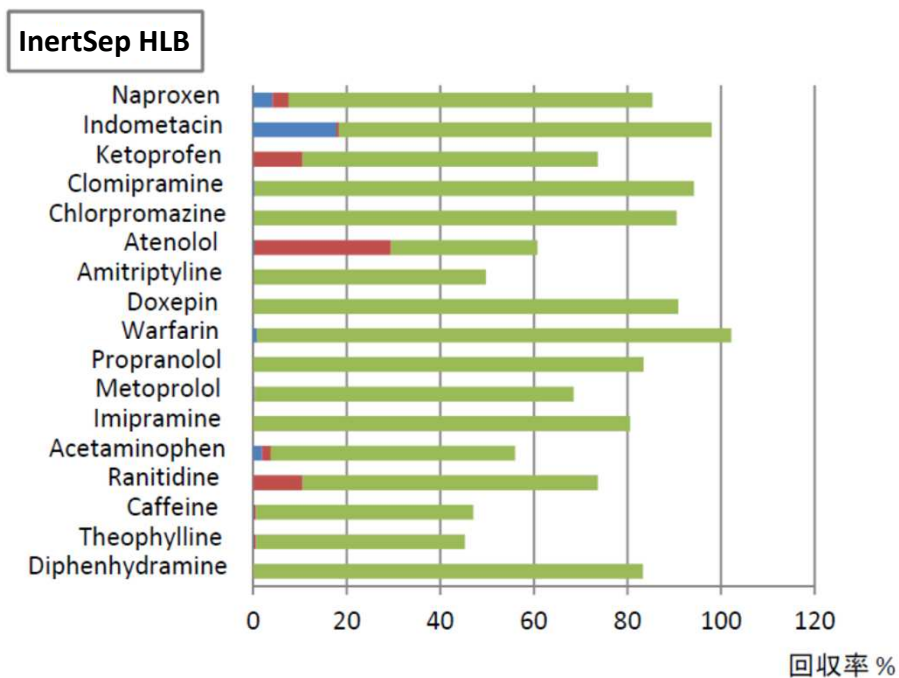
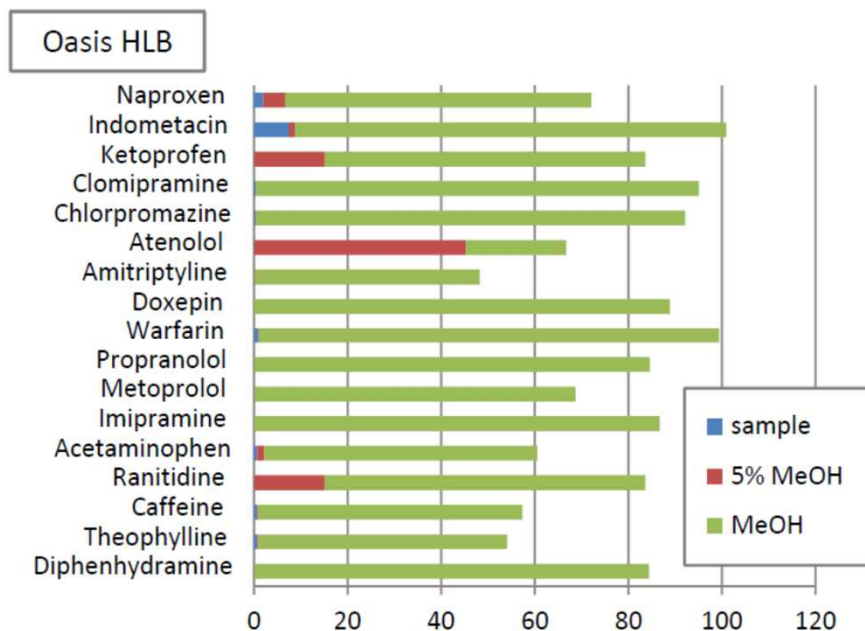


Retention patterns of basic analytes



- プロカインアミド
- アセトアミノフェン
- ラニチジン
- プロカイン
- プロプラノロール
- ジフェンヒドラミン
- アミトリプチリン

Spike and Recovery Test in plasma



LC-MS/MS condition

System: Aquity UPLC (Waters), API3000 (ABSciex)

Column: InertSustain C18 HP (3 μ m, 2.1 \times 100)

Eluent: A) 0.1% HCOOH - H₂O B) methanol

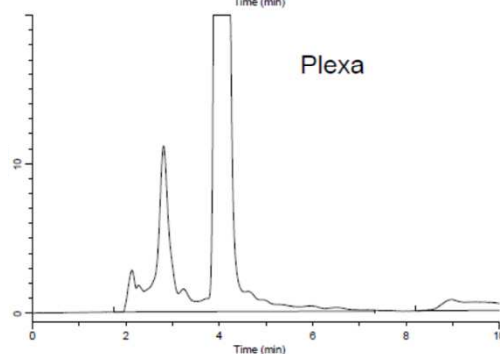
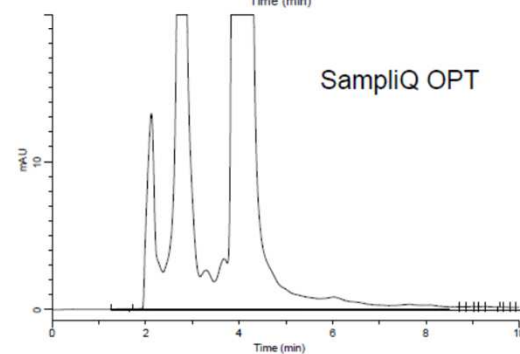
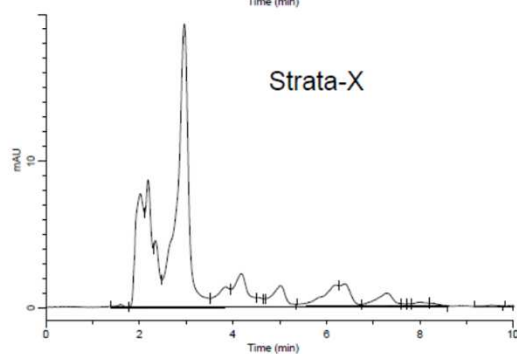
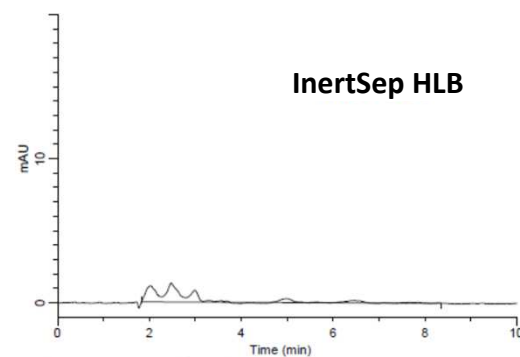
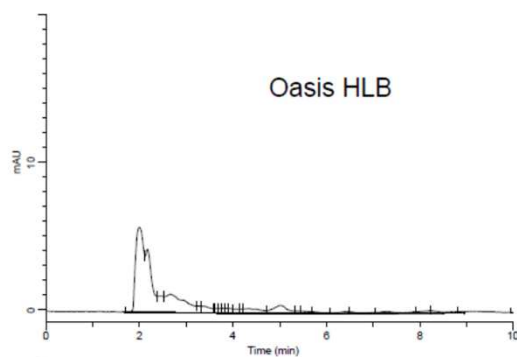
A/B = 80/20 - 10min - 0/100 - 1min - 0/100 - 0.1min - 80/20 - 5min

Col. Temp: 40°C

Flow rate: 0.2 mL/min

Detection: ESI Pos. SRM

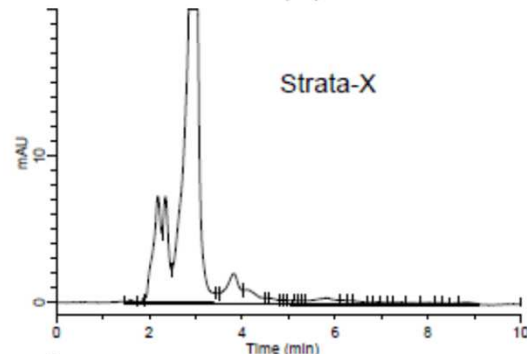
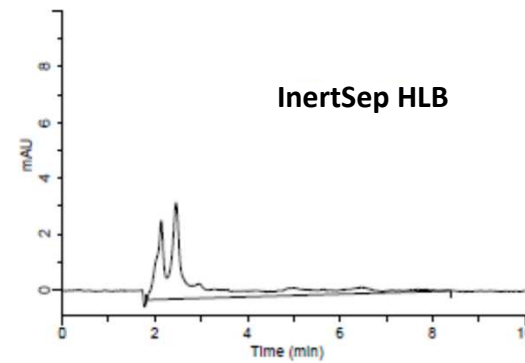
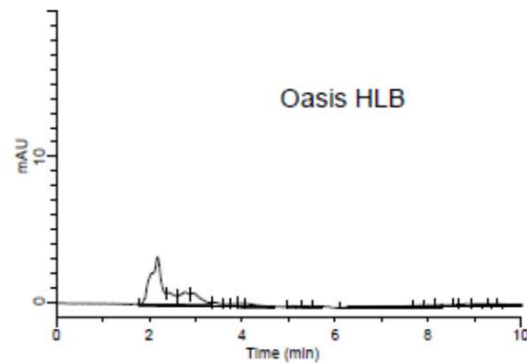
Blank (1) (UV 210nm)



Eluate(Blank)-LC/UV evaluation

UV blank @ 210 nm

Blank (2) (UV 230nm)

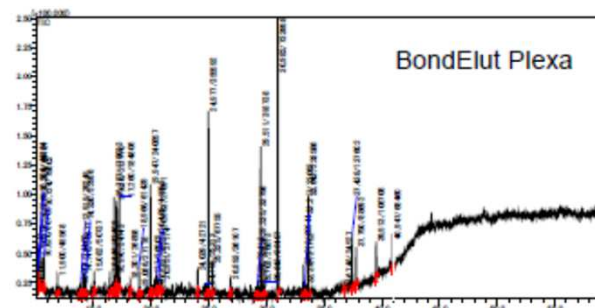
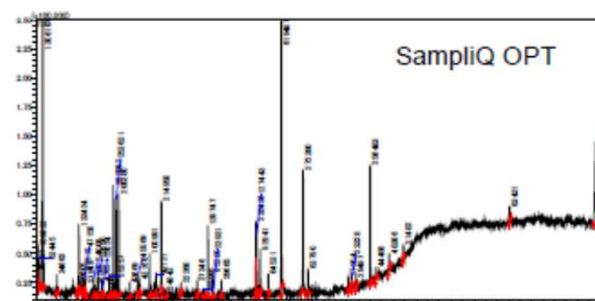
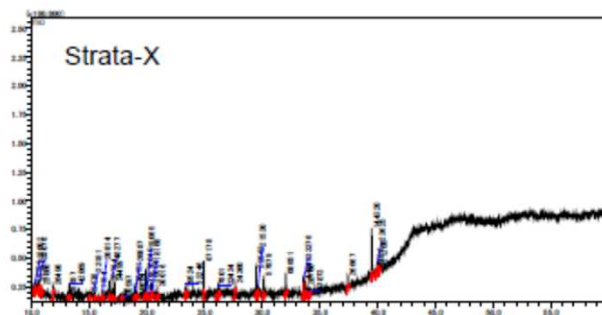
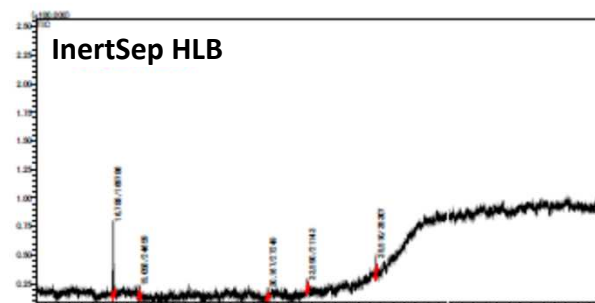
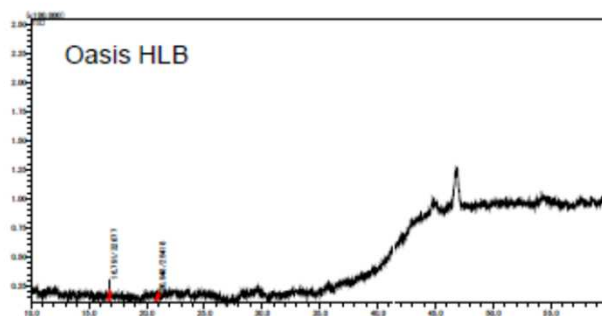


0.1g Packing material is extracted with
2mL Acetonitrile, overload liquid is flown
to HPLC

HPLC条件

Column Inertsil 300 C4, 5 μ m, 3.0 mm x 150 mm
Eluent 0.1 % H₃PO₄ / MeCN (60:40, v/v)
Flow rate 0.32 mL/min
Detection PDA UV 210 ~ 300 nm
Temp. 40 °C

Blank (3) (GC-MS)

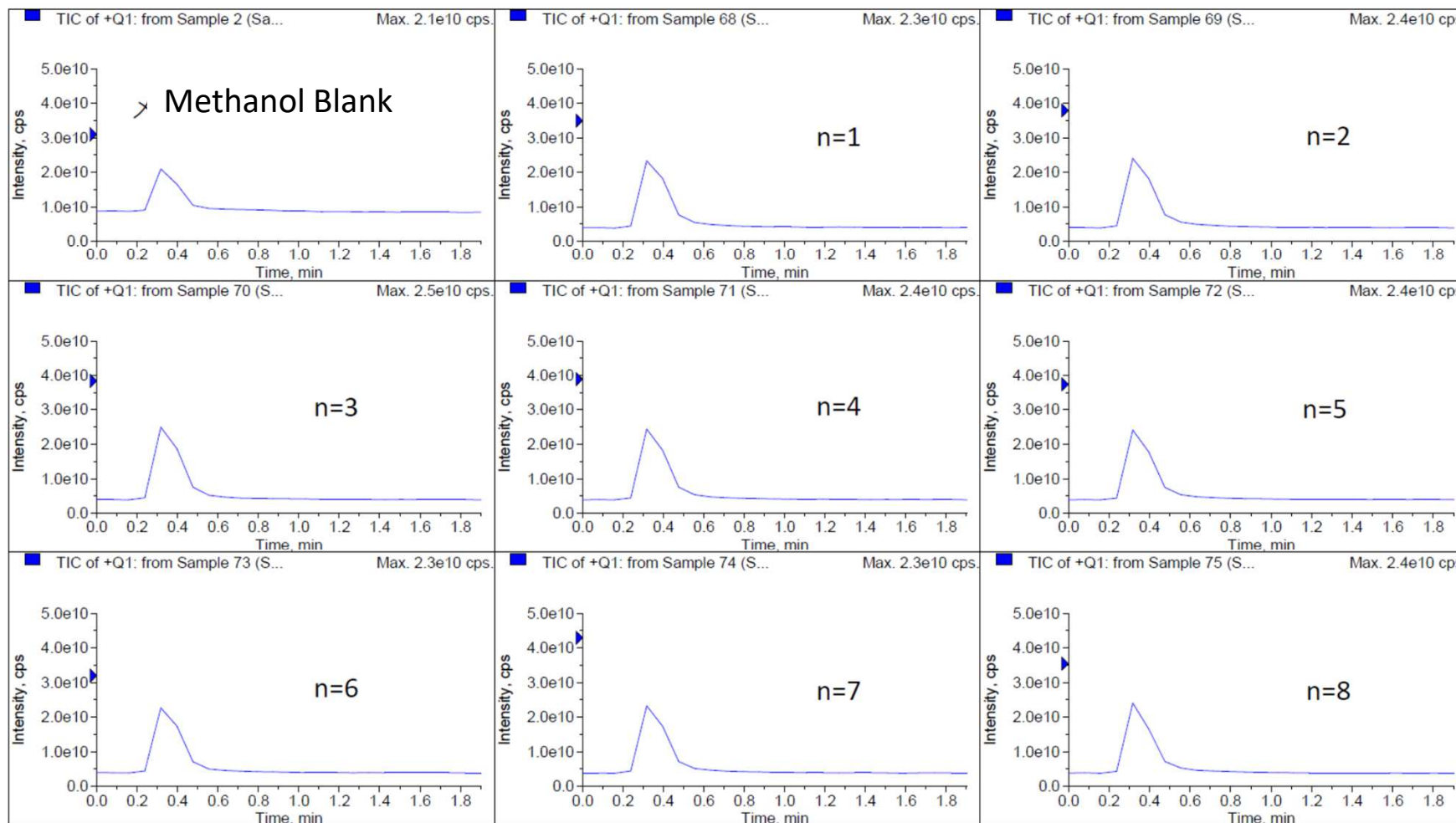


Evaluation of Eluate from SPEs (GC-MS)

Blank (4) (LC-MS) OASIS HLB 96WP



Oasis HLB 96 well plate 10mg With conditioning (Methanol)

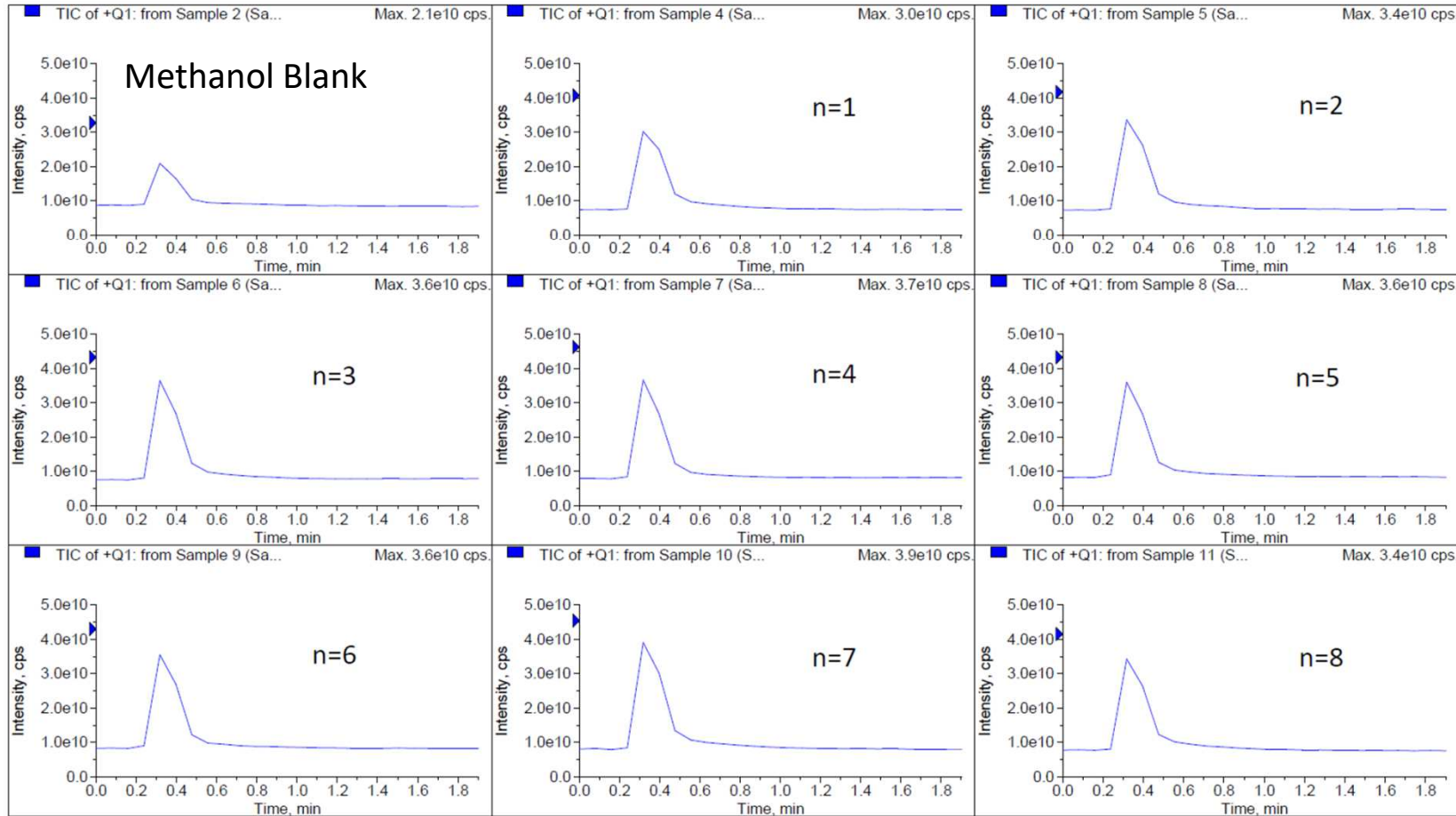


Blank 2.5×10^{10}

Blank (5) (LC-MS) InertSep HLB 96WP



InertSep HLB 96well plate 10mg Plate No.2 With conditioning (Methanol)



Blank test in 8well

Blank $3-4 \times 10^{10}$ which is a little higher than OASIS, but no problem in practice

Products line-up



InertSep HLB 30um

InertSep HLB	
Cat.No.	Description
5010-27520	10mg/1mL
5010-27521	30mg/1mL
5010-27522	60mg/3mL
5010-27523	200mg/6mL
5010-27524	500mg/6mL
5010-66440	96WP 10mg
5010-66441	96WP 30mg

InertSep HLB FF 60um

InertSep HLB FF		
Cat.No.	Description	Qty
5010-27532	60mg/3mL	50qty
5010-27533	200mg/6mL	30qty
5010-27535	200mg/20mL	20qty
5010-27534	500mg/6mL	30qty
5010-27536	500mg/20mL	20qty

Features



- Physical properties are closer to Waters OASIS HLB, and also performance for acidic, basic and polar compounds.
- Recommend to condition the cartridges prior to use.