

PreDictor plates for High-Throughput Process Development

PreDictor™ 96-well filter plates

- disposable 96-well filter plates made of polypropylene and polyethylene
- pre-filled with defined amounts of GE Healthcare BioProcess™ chromatography media
- available with Capto™ and MabSelect™ media
- other GE Healthcare media available on request
- support High-Throughput Process Development (HTPD) by allowing parallel screening of chromatographic conditions, either in manual or in automated workflows

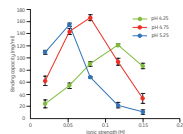
Benefits of using PreDictor

- **Reduced experimental time:** allows fast and efficient evaluation of parameters for binding/wash/elution conditions, and media benchmarking
- **Low sample consumption:** new format significantly reduces sample consumption
- **Increased process understanding:** more process information in less time and with less effort
 - Reduces time-to-clinic
 - Allows for more drug candidates to be screened in a shorter time frame

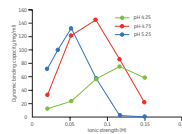
Why Plates:

1. Plate-based data are predictive of what happens in a column

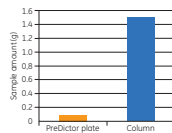
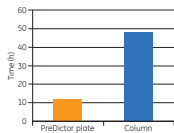
A) PreDictor plates (media volume 2 uL/well)



B) Tricorn™ columns (CV 2 ml)



2. Working with plates saves time and sample. Estimated time and sample for the above experiments



Operation

The standardized 96-well plate format gives great flexibility regarding mode of operation. Thus PreDictor plates can be used in automated workflows using robotic systems, or operated manually using multi-channel pipettes. Liquid removal can be made either by centrifugation or vacuum.

Related product literature

Data File: PreDictor 96-well filter plates 28-9258-39

Application Note: Screening of loading conditions on Capto S using a new high-throughput format, PreDictor plates 28-9258-40

Application Note: High-throughput screening of elution conditions on Capto MMC using PreDictor plates 28-9277-90

Application Note: High-throughput screening of elution pH for monoclonal antibodies on MabSelect SuRe using PreDictor plates 28-9277-92

Technical specifications

Filter plate size	127.8 × 85.5 × 30.6 mm (according to ANSI/SBS 1-2004, 3-2004 & 4-2004 standards)
Filter plate material	Polypropylene and polyethylene
Number of wells	96
Well volume	800 µl
Working volume per well	100–300 µl
Volume sedimented medium/well	Capto Q, Capto S, Capto DEAE: 2 µl, 20 µl, 50 µl Capto MMC, Capto adhere, MabSelect™, MabSelect SuRe™: 6 µl, 20 µl, 50 µl
Medium suspensions in total volumes	2 µl sedimented medium/well: 200 µl 6, 20, and 50 µl sedimented medium/well: 500 µl
Storage solution	20% ethanol (Capto S in 20 % ethanol + 0.2 M sodium acetate).
Recommended storage temperature	As for corresponding chromatography media
Working temperature	+4 to +30 °C
Centrifugation speed	Sample dependent
Recommended:	100 to 500 × g
Maximum:	700 × g
Vacuum	Sample dependent
Recommended:	–0.15 bar to –0.30 bar
Maximum:	–0.5 bar
Microplate shaker mixing speed	1100 rpm

Ordering information

PreDictor Product	Quantity	Code No
PreDictor Capto Q, 2 µl	4 × 96 well filter plates	28-9257-73
PreDictor Capto Q, 20 µl	4 × 96 well filter plates	28-9258-06
PreDictor Capto Q, 50 µl	4 × 96 well filter plates	28-9258-07
PreDictor Capto S, 2 µl	4 × 96 well filter plates	28-9258-08
PreDictor Capto S, 20 µl	4 × 96 well filter plates	28-9258-09
PreDictor Capto S, 50 µl	4 × 96 well filter plates	28-9258-10
PreDictor Capto DEAE, 2 µl	4 × 96 well filter plates	28-9258-11
PreDictor Capto DEAE, 20 µl	4 × 96 well filter plates	28-9258-12
PreDictor Capto DEAE, 50 µl	4 × 96 well filter plates	28-9258-13
PreDictor Capto MMC, 6 µl	4 × 96 well filter plates	28-9258-14
PreDictor Capto MMC, 20 µl	4 × 96 well filter plates	28-9258-15
PreDictor Capto MMC, 50 µl	4 × 96 well filter plates	28-9258-16
PreDictor Capto adhere, 6 µl	4 × 96 well filter plates	28-9258-17
PreDictor Capto adhere, 20 µl	4 × 96 well filter plates	28-9258-18
PreDictor Capto adhere, 50 µl	4 × 96 well filter plates	28-9258-19
PreDictor MabSelect, 6 µl	4 × 96 well filter plates	28-9258-20
PreDictor MabSelect, 20 µl	4 × 96 well filter plates	28-9258-21
PreDictor MabSelect, 50 µl	4 × 96 well filter plates	28-9258-22
PreDictor MabSelect SuRe, 6 µl	4 × 96 well filter plates	28-9258-23
PreDictor MabSelect SuRe, 20 µl	4 × 96 well filter plates	28-9258-24
PreDictor MabSelect SuRe, 50 µl	4 × 96 well filter plates	28-9258-25

Plate Selection Guide

Media volume in well (µl)	Application binding conditions						Application wash/elute conditions					
	Capto Q	Capto S	Capto DEAE	Capto MMC	Capto adhere	MabSelect family	Capto Q	Capto S	Capto DEAE	Capto MMC	Capto adhere	MabSelect family
2	+	+	+	NA	NA	NA	-	-	-	NA	NA	NA
6	NA	NA	NA	+	+	+	NA	NA	NA	-	-	-
20	-	-	-	-	-	-	+ ¹	+ ¹	+ ¹	+ ¹	+ ¹	+ ¹
50	-	-	-	-	-	-	+ ²	+ ²	+ ²	+ ²	+ ²	+ ²

NA = no product available

¹ The 20 µl plate is the preferred plate for the first set of experiments

² The 50 µl plate may be used for certain experiments, for example when protein concentrations are in the higher range or when there is a need for high amounts of sample for analysis.



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