Selection guide

Prepacked chromatography columns for ÄKTA™ systems

cytiva

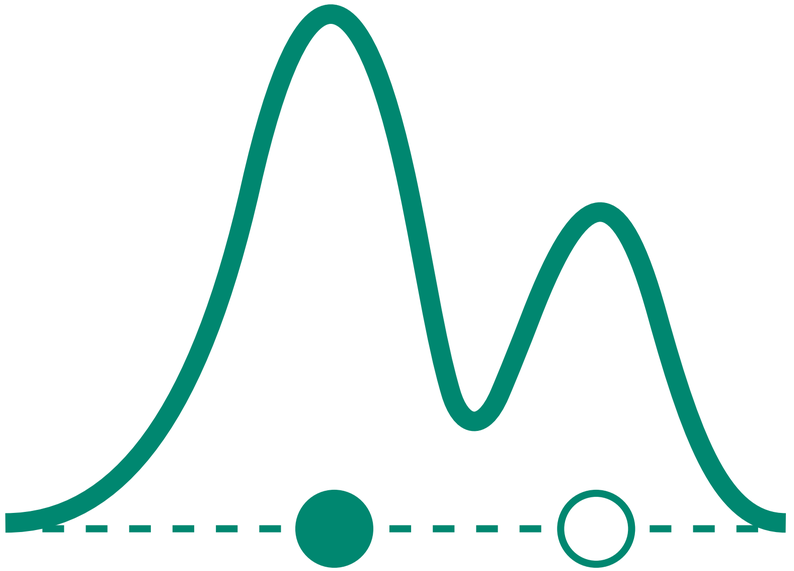
Select the chromatography technique of your choice

This guide gives you an overview of prepacked columns from Cytiva that can be used with ÄKTA™ chromatography systems. The columns are grouped by chromatography techniques.

In each section, you can access product information and tips for product selection.

Size exclusion chromatography, desalting/buffer exchange (SEC)	05
Ion exchange chromatography (IEX)	07
Affinity chromatography (AC) – tagged protein purification	09
Affinity chromatography (AC) – antibody purification	11
Affinity chromatography (AC) – purification of specific groups of biomolecules	12
Hydrophobic interaction chromatography (HIC)	13
Multimodal chromatography (MMC)	14
Reversed phase chromatography (RPC)	14

Once you have selected your column, check its compatibility with your ÄKTA system on page 4. ▶



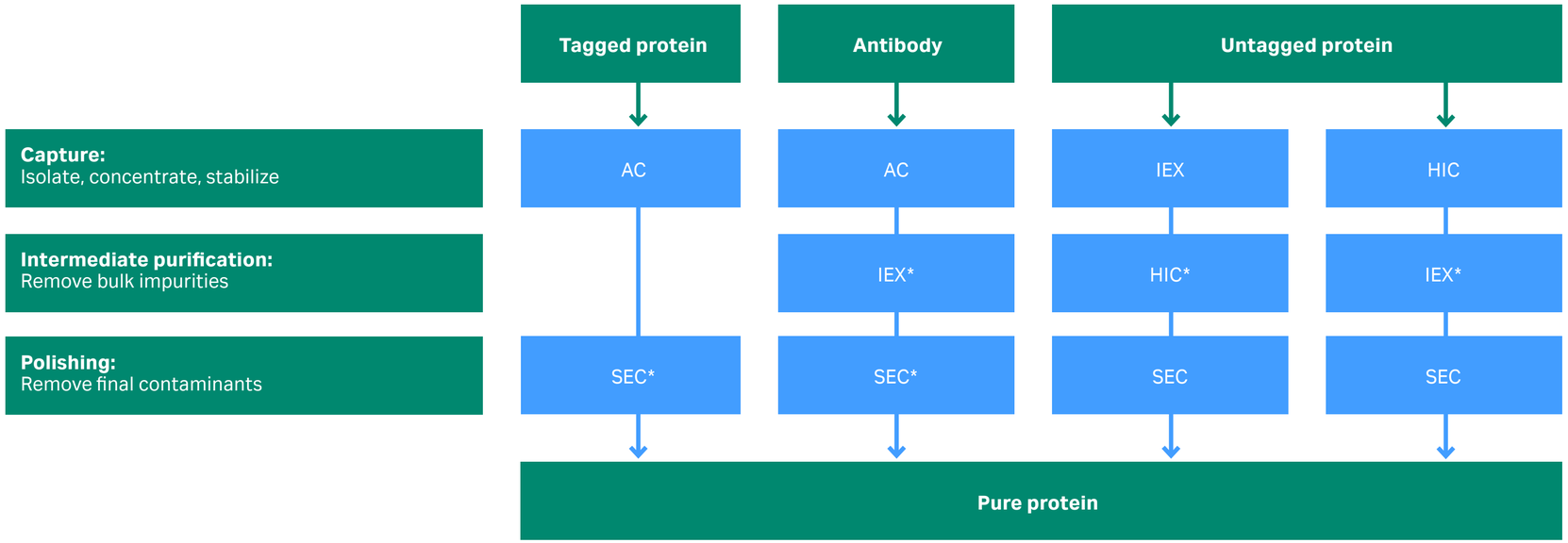
Sign up for the ÄKTA club newsletter to stay updated in protein research.

cytiva.com/aktaclub

Optimize your results by combining chromatography techniques

You can achieve significant improvements by using a combination of different chromatography techniques. Check the table below for examples of combinations you can use for different types of proteins based on proven capture, intermediate purification, and polishing (CiPP) purification strategy.

Learn more from the *Strategies for Protein Purification* handbook, which you can download **here.**



* These steps are not always used and will depend on the level of purity needed.

Examples of chromatography technique combinations based on CiPP strategy.

Check the compatibility of our column formats with your ÄKTA system






Column type	HiTrap™		HiScreen™	HiTrap Fibro HiScreen Fibro		HiPrep™		HiLoad™		RESOURCE™		Tricorn™			Precision
Main use	Easy to use with a syringe, peristaltic pump, or chromatography system		Optimized for method and process development	Fiber chromatography units for ultrafast purification		Convenient scale-up; preparative size exclusion chromatography		Preparative purification with high resolution		Fast with good resolution		High quality and high resolution			Micro-purification and analysis
Bed volume (mL) or column inner diameter (mm)	1 mL	5 mL	4.7 mL	0.4 mL	3.75 mL	16 mm	26 mm	16 mm	26 mm	1 mL 3 mL	6 mL	5 mm	4.6 mm	10 mm	1.6 mm 3.2 mm
ÄKTA start*	●	●	●			●	●	●	●	○	○				
ÄKTA go*	●	●	●	○	○	●	●	●	●	●	●	●†	●†	●	○†
ÄKTAprime plus	●	●	●			●	●	●	●	○	○				
ÄKTA pure 25	●	●	●	●	○	●	●	●	●	●	●	●†	●†	●	○†
ÄKTApurifier 10 plus	●	●	●			●	●	●	●	●	●	●	●	●	○
ÄKTA pure 150	○	●	●	●	●	●	●	●	●	○	●	○	○	○	
ÄKTApurifier 100 plus	○	●	●			●	●	●	●	○	●	○	○	○	
ÄKTA avant 25	●	●	●	●	○	●	●	●	●	●	●	●†	●†	●	
ÄKTAexplorer 10	●	●	●			●	●	●	●	●	●	●	●	●	
ÄKTA avant 150	○	●	●	●	●	●	●	●	●	○	●	○	○	○	
ÄKTAexplorer 100	○	●	●			●	●	●	●	○	●	○	○	○	
ÄKTAxpress	●	●	●			●	●	●	●	●	●	●	●	●	
ÄKTAmicro	○									●	●	●	●	●	●
AKTA pure micro	○									●	●	●	●	●	●

● Recommended for system.
○ Can be used with the system, but this combination might not give optimal results.
* System not specifically designed for HIC. HIC columns may be used with ÄKTA start in conditions where buffers are within specified system viscosity range and if gradient elution is not required. ÄKTA go may be used with HIC columns, however all buffer conditions are not verified. Please make sure to test buffers used for gradient performance.
† Depending on resins type, system configuration and tubing may need to be optimized. .

Columns for size exclusion chromatography, desalting/buffer exchange

SEC allows separation of entities that differ in molecular size in mild conditions. You can use the technique for preparative protein purification and protein analysis, or for desalting and buffer exchange of samples. Cytiva's SEC columns cover a molecular weight range from M_r 100 to 8 000 000, from peptides to very large proteins, protein complexes, and viruses.

Tip for choosing SEC columns

- Select the resin according to the fractionation range that covers the molecular weight values of interest in your sample. When you're interested in a specific component, select the resin where the target protein falls in the middle of the selectivity curve.

Product name	Columns per pack × bed volume	Product code	Sample volume	Flow rate (rec. | max.), mL/min	Column format*	Resin	Fractionation range ($M_r \times 10^3$)	pH (regular use)	Particle size, d_{50v} †
Sample volume > 0.5 mL: SEC columns for preparative purification									
HiLoad 16/600 Superose 6 pg	1 × 120 mL	29323952	≤ 5 mL	1 | 1.6	HiLoad 16 mm	Superose 6 prep grade	5000–5 000 000	3–12	30 ± 10 µm
HiLoad 16/600 Superdex 30 pg	1 × 120 mL	28989331	≤ 5 mL	1 | 1.7	HiLoad 16 mm	Superdex 30 prep grade	< 10	3–12	34 µm
HiLoad 26/600 Superdex 30 pg	1 × 320 mL	28989332	≤ 13 mL	2.5 | 4.2	HiLoad 26 mm				
HiLoad 16/600 Superdex 75 pg	1 × 120 mL	28989333	≤ 5 mL	1 | 1.7	HiLoad 16 mm	Superdex 75 prep grade	3–70	3–12	34 µm
HiLoad 26/600 Superdex 75 pg	1 × 320 mL	28989334	≤ 13 mL	2.5 | 4.2	HiLoad 26 mm				
HiLoad 16/600 Superdex 200 pg	1 × 120 mL	28989335	≤ 5 mL	1 | 1.7	HiLoad 16 mm	Superdex 200 prep grade	10–600	3–12	34 µm
HiLoad 26/600 Superdex 200 pg	1 × 320 mL	28989336	≤ 13 mL	2.5 | 4.2	HiLoad 26 mm				
HiPrep 16/60 Sephacryl S-100 HR	1 × 120 mL	17116501	≤ 5 mL	0.5 | 1	HiPrep 16 mm	Sephacryl S-100 HR	1–100	3–11	47 µm
HiPrep 26/60 Sephacryl S-100 HR	1 × 320 mL	17119401	≤ 13 mL	1.3 | 2.6	HiPrep 26 mm				
HiPrep 16/60 Sephacryl S-200 HR	1 × 120 mL	17116601	≤ 5 mL	0.5 | 1	HiPrep 16 mm	Sephacryl S-200 HR	5–250	3–11	47 µm
HiPrep 26/60 Sephacryl S-200 HR	1 × 320 mL	17119501	≤ 13 mL	1.3 | 2.6	HiPrep 26 mm				
HiPrep 16/60 Sephacryl S-300 HR	1 × 120 mL	17116701	≤ 5 mL	0.5 | 1	HiPrep 16 mm	Sephacryl S-300 HR	10–1500	3–11	47 µm
HiPrep 26/60 Sephacryl S-300 HR	1 × 320 mL	17119601	≤ 13 mL	1.3 | 2.6	HiPrep 26 mm				
HiPrep 16/60 Sephacryl S-400 HR	1 × 120 mL	28935604	≤ 5 mL	0.5 | 1	HiPrep 16 mm	Sephacryl S-400 HR	20–8 000	3–11	47 µm
HiPrep 26/60 Sephacryl S-400 HR	1 × 320 mL	28935605	≤ 13 mL	1.3 | 2.6	HiPrep 26 mm				
HiPrep 16/60 Sephacryl S-500 HR	1 × 120 mL	28935606	≤ 5 mL	0.5 | 1	HiPrep 16 mm	Sephacryl S-500 HR	40–20 000 (dextran)	3–11	47 µm
HiPrep 26/60 Sephacryl S-500 HR	1 × 320 mL	28935607	≤ 13 mL	1.3 | 2.6	HiPrep 26 mm				

* Check compatibility of the column format with your ÄKTA system on page 4.
† Median particle size of the cumulative volume distribution.

HiPrep Sephacryl™, HiLoad Superdex™, and Superdex 200 Increase columns.

◀ CHECK COMPATIBILITY WITH ÄKTA SYSTEMS, P.4

Product name	Columns per pack × bed volume	Product code	Sample volume	Flow rate (rec. | max.), mL/min	Column format*	Resin	Fractionation range (M_r × 10^3)	pH (regular use)	Particle size, d_{50v} †
Sample volume > 0.5 mL: SEC columns for preparative purification									
Superdex 75 Increase HiScale 16/40	1 × 80 mL	29321907	≤ 3.2 mL	Not available	HiScale 16 mm	Superdex 75 Increase	3–70	3 to 12	9 µm
Superdex 75 Increase HiScale 26/40	1 × 212 mL	29321908	≤ 8.5 mL	Not available	HiScale 26 mm				
Superdex 200 Increase HiScale 16/40	1 × 80 mL	29321905	≤ 3.2 mL	Not available	HiScale 16 mm	Superdex 200 Increase	10–600	3 to 12	8.6 µm
Superdex 200 Increase HiScale 26/40	1 × 212 mL	29321906	≤ 8.5 mL	Not available	HiScale 26 mm				
Superose 6 Increase HiScale 16/40	1 × 80 mL	29321903	≤ 3.2 mL	Not available	HiScale 16 mm	Superose 6 Increase	5–5 000	3 to 12	8.6 µm
Superose 6 Increase HiScale 26/40	1 × 212 mL	29321904	≤ 8.5 mL	Not available	HiScale 26 mm				
Sample volume < 0.5 mL: SEC columns for analysis or small-scale preparative purification									
Superdex 30 Increase 3.2/300	1 × 2.4 mL	29219758	4–50 µL	0.075 | 0.15	Precision 3.2 mm	Superdex 30 Increase	0.1–7	3 to 12	9 µm
Superdex 30 Increase 10/300 GL	1 x 24 mL	29219757	25–500 µL	0.8 | 1.2	Tricorn 10 mm				
Superdex 75 Increase 3.2/300	1 × 2.4 mL	29148723	4–50 µL	0.075 | 0.15	Precision 3.2 mm	Superdex 75 Increase	3–70	3 to 12	9 µm
Superdex 75 Increase 5/150 GL	1 × 3 mL	29148722	4–50 µL	0.45 | 0.75	Tricorn 5 mm				
Superdex 75 Increase 10/300 GL	1 × 24 mL	29148721	25–500 µL	0.8 | 1.6	Tricorn 10 mm				
Superdex 200 Increase 3.2/300	1 × 2.4 mL	28990946	4–50 µL	0.075 | 0.15	Precision 3.2 mm	Superdex 200 Increase	10–600	3 to 12	8.6 µm
Superdex 200 Increase 5/150 GL	1 × 3 mL	28990945	4–50 µL	0.45 | 0.75	Tricorn 5 mm				
Superdex 200 Increase 10/300 GL	1 × 24 mL	28990944	25–500 µL	0.75 | 1.8	Tricorn 10 mm				
Superose™ 6 Increase 3.2/300	1 × 2.4 mL	29091598	4–50 µL	0.04 | 0.15	Precision 3.2 mm	Superose 6 Increase	5–5 000	3 to 12	8.6 µm
Superose 6 Increase 5/150 GL	1 × 3 mL	29091597	4–50 µL	0.3 | 0.75	Tricorn 5 mm				
Superose 6 Increase 10/300 GL	1 × 24 mL	29091596	25–500 µL	0.5 | 1.5	Tricorn 10 mm				
Superose 12 3.2/300	1 × 2.4 mL	29036225	4–50 µL	0.05 | 0.10	Precision 3.2 mm	Superose 12	1–300	3 to 12	11 µm
Superose 12 10/300 GL	1 × 24 mL	17517301	25–500 µL	0.5 | 1.5	Tricorn 10 mm				
Desalting/Buffer exchange columns									
HiPrep 26/10 Desalting	1 × 53 mL	17508701	1–15 mL	10 | 40	HiPrep 26 mm	Sephadex™ G-25 Fine	> 5 (exclusion limit)	2 to 13	90 µm
	4 × 53 mL	17508702	1–15 mL	10 | 40					
HiTrap Desalting	1 × 5 mL	29048684	0.25–1.5 mL	5 | 15	HiTrap 5 mL	Sephadex G-25 Superfine	> 5 (exclusion limit)	2 to 13	40 µm
	5 × 5 mL	17140801	0.25–1.5 mL	5 | 15					
	100 × 5 mL	11000329‡	0.25–1.5 mL	5 | 15					

* Check compatibility of the column format with your ÄKTA system on page 4.
† Median particle size of the cumulative volume distribution.
‡ Special pack size delivered on specific customer order.

Superdex 200 Increase 10/300 GL column (10 × 300 mm) in use on an ÄKTA pure system.

◀ CHECK COMPATIBILITY WITH ÄKTA SYSTEMS, P.4

Columns for ion exchange chromatography

IEX separates proteins with differences in net surface charge. Scientists often use the technique to purify untagged or native proteins. IEX is also an excellent technique for purity and heterogeneity analysis.

Tip for choosing IEX chromatography columns

- Begin with a strong ion exchanger, which supports work over a broad pH range during the initial method development. If the strong ion exchanger doesn't have the right selectivity, consider using a weak exchanger.
- Use one of our HiTrap selection kits to screen for the most suitable ion exchanger.
- Keep in mind that smaller bead sizes deliver increased resolution but higher back pressure.

Product name	Columns per pack × bed volume	Product code	Typical loading range (mg/column)	Flow rate (rec. | max.), mL/min	Column format*	Resin	pH (regular use)	Particle size, d_{50v} †
Strong anion exchangers								
Capto Q HiRes 5/50	1 × 1 mL	29275878	5–50	< 2 | 2	Tricorn 5 mm	Capto Q HiRes	2 to 12	9 µm
Capto Q HiRes 10/100	1 × 8 mL	29275881	150–400	< 2 | 3	Tricorn 10 mm			
SOURCE™ 15Q 4.6/100 PE	1 × 1.7 mL	17518101	1–40	2 | 5	Tricorn 4.6 mm	SOURCE 15Q	2 to 12	15 µm
RESOURCE Q, 1 mL	1 × 1 mL	17117701	10–25	4 | 10	RESOURCE 1 mL			
RESOURCE Q, 6 mL	1 × 6 mL	17117901	60–150	6 | 60	RESOURCE 6 mL			
HiTrap Q HP	1 × 1 mL	29051325	1–50 (HSA)	1 | 4	HiTrap 1 mL	Q Sepharose™ High Performance	2 to 12	34 µm
	5 × 1 mL	17115301						
	5 × 5 mL	17115401	5–250 (HSA)	5 | 20	HiTrap 5 mL			
HiScreen Q HP	1 × 4.7 mL	28950511	5–250 (HSA)	0.6 | 1.2	HiScreen 4.7 mL			
HiPrep Q HP 16/10	1 × 20 mL	29018182	200–1400 (HSA)	3 | 5	HiPrep 16 mm			
HiTrap Capto™ Q ImpRes	5 × 1 mL	17547051	1–100 (BSA)	1 | 4	HiTrap 1 mL	Capto Q ImpRes	2 to 12	40 µm
	5 × 5 mL	17547055	5–500 (BSA)	5 | 20	HiTrap 5 mL			
HiScreen Capto Q ImpRes	1 × 4.7 mL	17547015	5–500 (BSA)	1.2 | 2.3	HiScreen 4.7 mL			
HiPrep Q FF 16/10	1 × 20 mL	28936543	200–2000 (HSA)	5 | 10	HiPrep 16 mm	Q Sepharose Fast Flow	2 to 12	90 µm
HiTrap Q FF	5 × 1 mL	17505301	1–120 (HSA)	1 | 4	HiTrap 1 mL			
	5 × 5 mL	17515601	5–600 (HSA)	5 | 20	HiTrap 5 mL			
HiScreen Q FF	1 × 4.7 mL	28950510	5–500 (HSA)	2.3 | 3.5	HiScreen 4.7 mL			
HiPrep Q XL 16/10	1 × 20 mL	28936538	200–2600 (BSA)	5 | 10	HiPrep 16 mm	Q Sepharose XL	2 to 12	90 µm
HiTrap Q XL	5 × 1 mL	17515801	10–130 (BSA)	1 | 4	HiTrap 1 mL			
	5 × 5 mL	17515901	50–650 (BSA)	5 | 20	HiTrap 5 mL			
HiTrap Capto Q	5 × 1 mL	11001302	10–100 (BSA)	1 | 4	HiTrap 1 mL	Capto Q	2 to 12	90 µm
	5 × 5 mL	11001303	50–500 (BSA)	5 | 20	HiTrap 5 mL			
HiScreen Capto Q	1 × 4.7 mL	28926978	50–500 (BSA)	2.7 | 5.4	HiScreen 4.7 mL			
Capto Q Validation column	1 × 15.7 mL	29363635	50–1600 (BSA)	Not available	Tricorn 10 mm	Capto Q	2 to 12	90 µm

* Check compatibility of the column format with your ÄKTA system on page 4.
† Median particle size of the cumulative volume distribution.
‡ This column format is compatible with ÄKTAexplorer, ÄKTApurifier, ÄKTA pure and ÄKTA avant.

HiTrap, RESOURCE, and Tricorn IEX columns.

◀ CHECK COMPATIBILITY WITH ÄKTA SYSTEMS, P.4

Product name	Columns per pack × bed volume	Product code	Typical loading range (mg/column)	Flow rate (rec. | max.), mL/min	Column format*	Resin	pH (regular use)	Particle size, d_{50v} †
Weak anion exchangers								
HiPrep DEAE FF 16/10	1 × 20 mL	28936541	10–2200 (HSA)	5 | 10	HiPrep 16 mm	DEAE Sepharose Fast Flow	2 to 12	90 µm
HiTrap DEAE FF	5 × 1 mL	17505501	1–110 (HSA)	1 | 4	HiTrap 1 mL			
	5 × 5 mL	17515401	5–550 (HSA)	5 | 20	HiTrap 5 mL			
HiScreen DEAE FF	1 × 4.7 mL	28978245	5–550 (HSA)	2.3 | 3.5	HiScreen 4.7 mL			
HiTrap ANX FF (high sub)	5 × 1 mL	17516201	3–40 (BSA)	1 | 4	HiTrap 1 mL	ANX Sepharose Fast Flow	3 to 13	90 µm
	5 × 5 mL	17516301	15–200 (BSA)	5 | 20	HiTrap 5 mL			
HiTrap Capto DEAE	5 × 1 mL	28916537	5–90 (ovalbumin)	1 | 4	HiTrap 1 mL	Capto DEAE	2 to 12	90 µm
	5 × 5 mL	28916540	25–450 (ovalbumin)	5 | 20	HiTrap 5 mL			
HiScreen Capto DEAE	1 × 4.7 mL	28926982	25–400 (ovalbumin)	2.7 | 5.4	HiScreen 4.7 mL			
Strong cation exchangers								
Capto S HiRes 5/50	1 × 1 mL	29275877	5 - 50	< 2 | 2	Tricorn 5 mm	Capto S HiRes	2 to 12	9 µm
Capto S HiRes 10/100	1 × 8 mL	29275879	150 - 400	< 2 | 3	Tricorn 10 mm			
SOURCE 15S 4.6/100 PE	1 × 1.7 mL	17518201	1–40	2 | 5	Tricorn 4.6 mm	SOURCE 15S	2 to 13	15 µm
RESOURCE S, 1 mL	1 × 1 mL	17117801	10–25	4 | 10	RESOURCE 1 mL			
RESOURCE S, 6 mL	1 × 6 mL	17118001	60–150	6 | 60	RESOURCE 6 mL			
HiPrep SP HP 16/10	1 × 20 mL	29018183	200–1100 (ribonuclease A)	3 | 5	HiPrep 16 mm	SP Sepharose High Performance	4 to 13	34 µm
HiTrap SP HP	1 × 1 mL	29051324	1–50 (ribonuclease A)	1 | 4	HiTrap 1 mL			
	5 × 1 mL	17115101						
	1 × 5 mL	17115201	5–250 (ribonuclease A)	5 | 20	HiTrap 5 mL			
HiScreen SP HP	1 × 4.7 mL	28950515	5–250 (ribonulease A)	0.6 | 1.2	HiScreen 4.7 mL			
HiTrap Capto SP ImpRes	5 × 1 mL	17546851	1–100 (lysozyme)	1 | 4	HiTrap 1 mL	Capto SP ImpRes	4 to 12	40 µm
	5 × 5 mL	17546855	5–500 (lysozyme)	5 | 20	HiTrap 5 mL			
HiScreen Capto SP ImpRes	1 × 4.7 mL	17546815	5–500 (lysozyme)	1.2 | 2.3	HiScreen 4.7 mL			
Capto SP ImpRes Validation column	1 × 15.7 mL	29315186	50-1600 (lysozyme)	Not available	Tricorn 10 mm	Capto SP ImpRes	4 to 12	40 µm
HiTrap Capto S ImpAct	5 × 1 mL	17371751	10–100 (antibodies)	1 | 4	HiTrap 1 mL	Capto S ImpAct	4 to 12	50 µm
	5 × 5 mL	17371755	10–500 (antibodies)	5 | 20	HiTrap 5 mL			
HiScreen Capto S ImpAct	1 × 4.7 mL	17371747	10–500 (antibodies)	1.2 | 2.3	HiScreen 4.7 mL			
Capto S ImpAct Validation column	1 × 15.7 mL	29321910	50-1600 (antibodies)	Not available	Tricorn 10 mm	Capto S ImpAct	4 to 12	50 µm
HiPrep SP FF 16/10	1 × 20 mL	28936544	200–2000 (ribonuclease A)	5 | 10	HiPrep 16 mm	SP Sepharose Fast Flow	4 to 13	90 µm
HiTrap SP FF	5 × 1 mL	17505401	1–70 (ribonuclease A)	1 | 4	HiTrap 1 mL			
	5 × 5 mL	17515701	5–350 (ribonuclease A)	5 | 20	HiTrap 5 mL			
HiScreen SP FF	1 × 4.7 mL	28950513	5–350 (ribonuclease A)	2.3 | 3.5	HiScreen 4.7 mL			
HiPrep SP XL 16/10	1 × 20 mL	28936540	200–3200 (lysozyme)	5 | 10	HiPrep 16 mm	SP Sepharose XL	4 to 13	90 µm
HiTrap SP XL	5 × 1 mL	17516001	10–150 (lysozyme)	1 | 4	HiTrap 1 mL			
	5 × 5 mL	17516101	50–800 (lysozyme)	5 | 20	HiTrap 5 mL			
HiTrap Capto S	5 × 1 mL	17544122	10–140 (lysozyme)	1 | 4	HiTrap 1 mL	Capto S	4 to 12	90 µm
	5 × 5 mL	17544123	50–700 (lysozyme)	5 | 20	HiTrap 5 mL			
HiScreen Capto S	1 × 4.7 mL	28926979	50–700 (lysozyme)	2.7 | 5.4	HiScreen 4.7 mL			
Weak cation exchangers								
HiPrep CM FF 16/10	1 × 20 mL	28936542	10–1000 (ribonuclease A)	5 | 10	HiPrep 16 mm	CM Sepharose Fast Flow	6 to 10	90 µm
HiTrap CM FF	5 × 1 mL	17505601	1–50 (ribonuclease A)	1 | 4	HiTrap 1 mL			
	5 × 5 mL	17505501	5–250 (ribonuclease A)	5 | 20	HiTrap 5 mL			
Ion exchange selection kits								
HiTrap IEX Selection Kit	7 × 1 mL	17600233	Depends on resin	1 | 4	HiTrap 1 mL	Various FF and XL resins§	Depends on resin	34 or 90 µm
HiTrap Capto IEX Selection Kit	5 × 1 mL	28934388	Depends on resin	1 | 4	HiTrap 1 mL	Various Capto resins¶	Depends on resin	75 or 90 µm

* Check compatibility of the column format with your ÄKTA system on page 4.
† Median particle size of the cumulative volume distribution.
‡ This column format is compatible with ÄKTAexplorer, ÄKTApurifier, ÄKTA pure and ÄKTA avant.
§ SP Sepharose Fast Flow , SP Sepharose XL , CM Sepharose Fast Flow, Q Sepharose Fast Flow, Q Sepharose XL, DEAE Sepharose Fast Flow, ANX Sepharose 4 Fast Flow.
¶ Capto Q, Capto S, Capto DEAE, Capto MMC, Capto adhere.

◀ CHECK COMPATIBILITY WITH ÄKTA SYSTEMS, P.4

Columns for tagged protein purification

Tagged protein typically requires using affinity chromatography (AC) in the first purification step.
AC separates proteins on the basis of a reversible interaction between the target protein (or group of proteins) and a specific ligand attached to a chromatography matrix.

Tips for choosing histidine-tagged (his-tagged) protein purification columns

- When high-binding capacity is the priority, choose Ni Sepharose products (HP as a first choice; FF for batch/gravity or scale-up).
- When nickel leakage is an issue, choose Ni Sepharose excel products.
- When high purity is the priority, choose TALON® Superflow™ products.

Product name	Columns per pack × bed volume	Product code	Typical loading range (mg/column)	Flow rate (rec. | max.), mL/min	Column format*	Resin	pH (regular use)	Particle size, d_{50v} †
His-tagged protein purification columns								
HisTrap HP	1 × 1 mL	29051021	1–40 (at least) $(his)_6$–tagged protein	1 | 4	HiTrap 1 mL	Ni Sepharose High Performance	3 to 12	34 µm
	5 × 1 mL	17524701						
	100 × 1 mL	17524705‡						
	1 × 5 mL	17524801	5–200 (at least) $(his)_6$–tagged protein	5 | 20	HiTrap 5 mL			
	5 × 5 mL	17524802						
	100 × 5 mL	17524805‡						
HisTrap FF	5 × 1 mL	17531901	1–40 (his) –tagged protein	1 | 4	HiTrap 1 mL	Ni Sepharose 6 Fast Flow	3 to 12	90 µm
	100 × 1 mL	17531902‡						
	5 × 5 mL	17525501	5–200 $(his)_6$–tagged protein	5 | 20	HiTrap 5 mL			
	100 × 5 mL	17525502‡						
HisTrap FF crude	1 × 1 mL	29048631	1–40 $(his)_6$–tagged protein	1 | 4	HiTrap 1 mL			
	5 × 1 mL	11000458						
	100 × 1 mL	11000459‡						
	5 × 5 mL	17528601	5–200 $(his)_6$–tagged protein	5 | 20	HiTrap 5 mL			
	100 × 5 mL	17528602‡						
HisPrep™ FF 16/10	1 × 20 mL	28936551	20–800 $(his)_6$–tagged protein	5 | 10	HiPrep 16 mm			
HiScreen Ni FF	1 × 4.7 mL	28978244	5–200 mg $(his)_6$–tagged protein	2.3 | 3.5	HiScreen 4.7 mL			
HisTrap excel	1 × 1 mL	29048586	1–10 $(his)_6$–tagged protein	1 | 4	HiTrap 1 mL	Ni Sepharose excel	2 to 14	90 µm
	5 × 1 mL	17371205						
	5 × 5 mL	17371206	5–50 $(his)_6$–tagged protein	5 | 20	HiTrap 5 mL			
HiTrap TALON crude	1 × 1 mL	29048565	1–20 $(his)_6$–tagged protein	1 | 4	HiTrap 1 mL	TALON Superflow	3 to 12	60–160 µm
	5 × 1 mL	28953766						
	5 × 5 mL	28953767	5–100 $(his)_6$–tagged protein	5 | 20	HiTrap 5 mL			

* Check compatibility of the column format with your ÄKTA system on page 4.
† Median particle size of the cumulative volume distribution.
‡ Special pack size delivered on specific customer order.

HiTrap TALON crude, HisTrap™ FF crude, and HisTrap excel columns.

◀ CHECK COMPATIBILITY WITH ÄKTA SYSTEMS, P.4

Product name	Columns per pack × bed volume	Product code	Typical loading range (mg/column)	Flow rate (rec. | max.), mL/min	Column format*	Resin	pH (regular use)	Particle size, d_{50v} †
GST-tagged protein purification columns								
GSTrap™ HP	5 × 1 mL	17528101	1–7 (recombinant GST)	0.3 | 4	HiTrap 1 mL	Glutathione Sepharose High Performance	3 to 12	34 µm
	1 × 5 mL	17528201	5–35 (recombinant GST)	1.5 | 15	HiTrap 5 mL			
	5 × 5 mL	17528202						
GSTrap FF	2 × 1 mL	17513002	1–10 (recombinant GST)	0.3 | 4	HiTrap 1 mL	Glutathione Sepharose 4 Fast Flow	3 to 12	90 µm
	5 × 1 mL	17513001						
	1 × 5 mL	17513101	5–50 (recombinant GST)	1.5 | 15	HiTrap 5 mL			
	5 × 5 mL	17513102						
GSTPrep™ FF 16/10	1 × 20 mL	28936550	20–200 (recombinant GST)	2 | 10	HiPrep 16 mm			
GSTrap 4B	1 × 1 mL	29048609	1–25 (recombinant GST)	0.3 | 4	HiTrap 1 mL	Glutathione Sepharose 4B	4 to 13	90 µm
	5 × 1 mL	28401745						
	1 × 5 mL	28401747	5–125 (recombinant GST)	1.5 | 15	HiTrap 5 mL			
	5 × 5 mL	28401748						
Strep-tag II -tagged protein purification columns								
StrepTrap™ XT	1 × 1 mL	29401317	10 (Strep-tag II protein)	1 | 4	HiTrap 1 mL	Strep-Tactin® XT Sepharose	6 to 10	34 µm
	5 × 1 mL	29401320						
	1 × 5 mL	29401322	50 (Strep-tag II protein)	5 | 20	HiTrap 5 mL			
	5 × 5 mL	29401323						
StrepTrap HP	1 × 1 mL	29048653	1–6 (Strep–tag II protein)	1 | 4	HiTrap 1 mL	Strep-Tactin™ Sepharose High Performance	> 7	34 µm
	5 × 1 mL	28907546						
	1 × 5 mL	28907547	5–30 (Strep–tag II protein)	5 | 20	HiTrap 5 mL			
	5 × 5 mL	28907548						
MBP-tagged protein purification columns								
MBPTrap™ HP	1 × 1 mL	29048641	1–10 (MBP–tagged protein)	1 | 4	HiTrap 1 mL	Dextrin Sepharose High Performance	> 7	34 µm
	5 × 1 mL	28918778						
	1 × 5 mL	28918779	5–50 (MBP–tagged protein)	5 | 20	HiTrap 5 mL			
	5 × 5 mL	28918780						
Immobilized metal ion affinity (IMAC) columns to be charged with the metal of your choice								
HiTrap IMAC HP	5 × 1 mL	17092003	1–40 $(his)_6$–tagged protein (Ni^{2+} charged)	1 | 4	HiTrap 1 mL	IMAC Sepharose High Performance	3 to 12	34 µm
	5 × 5 mL	17092005	5–200 $(his)_6$–tagged protein (Ni^{2+} charged)	5 | 20	HiTrap 5 mL			
HiTrap IMAC FF	5 × 1 mL	17092102	1–40 $(his)_6$–tagged protein (Ni^{2+} charged)	1 | 4	HiTrap 1 mL	IMAC Sepharose 6 Fast Flow	3 to 12	90 µm
	5 × 5 mL	17092104	5–200 $(his)_6$–tagged protein (Ni^{2+} charged)	5 | 20	HiTrap 5 mL			
HiPrep IMAC FF 16/10	1 × 20 mL	28936552	20–800 $(his)_6$–tagged protein (Ni^{2+} charged)	5 | 10	HiPrep 16 mm			
HiScreen IMAC FF	1 × 4.7 mL	28950517	5–200 $(his)_6$–tagged protein (Ni^{2+} charged)	2.3 | 4.6	HiScreen 4.7 mL			
HiTrap Chelating HP	5 × 1 mL	17040801	1–5 $(his)_6$–tagged protein (Ni^{2+} charged)	1 | 4	HiTrap 1 mL	Chelating Sepharose High Performance	3 to 13	34 µm
	1 × 5 mL	17040901		5 | 20	HiTrap 5 mL			
	5 × 5 mL	17040903						
	100 × 5 mL	17040905‡						

* Check compatibility of the column format with your ÄKTA system on page 4.
† Median particle size of the cumulative volume distribution.
‡ Special pack size delivered on specific customer order.

◀ CHECK COMPATIBILITY WITH ÄKTA SYSTEMS, P.4

Columns for purification of antibody variance and fragments

Polyclonal antibodies, monoclonal antibodies (mAb), and antibody fragments are usually purified by affinity chromatography. Resins containing an immobilized ligand (e.g., protein A, protein G, or protein L) are used to capture antibodies and antibody fragments.

Tips for choosing protein A antibody purification columns

- Choose MabSelect PrismA as a first choice for optimal performance, high binding capacity, and alkaline stability (up to 1 M).

Product name	Columns per pack × bed volume	Product code	Typical loading range (mg/column)	Flow rate (rec. | max.), mL/min	Column format*	Resin	pH (regular use)	Particle size, d_{50v}†
Protein A for purifying human IgG								
HiTrap MabSelect PrismA	1 × 1 mL	17549851	1–40 (human IgG)	0.5 | 4	HiTrap 1 mL	MabSelect PrismA	3 to 12	~ 60 µm
	5 × 1 mL	17549852						
	1 × 5 mL	17549853	5–200 (human IgG)	2.5 | 20	HiTrap 5 mL			
	5 × 5 mL	17549854						
HiScreen MabSelect PrismA	1 × 4.7 mL	17549815	5–200 (human IgG)	1.8 | 4.7	HiScreen 4.7 mL			
MabSelect PrismA Validation column	1 × 15.7 mL	29321909	50–630 (human IgG)	Not available	Tricorn 10 mm			
HiTrap Fibro PrismA	1 × 0.4 mL	17549855	12 (human IgG)	16 l –	HiTrap Fibro	Fibro PrismA	2 to 14	Cellulose fiber matrix
	4 × 0.4 mL	17549856						
HiScreen Fibro PrismA	1 × 3.75 mL	17549816	112 (human IgG)	30 l –	HiScreen Fibro			
HiTrap MabSelect	5 × 1 mL	28408253	1–30 (human IgG)	0.5 | 4	HiTrap 1 mL	MabSelect	3 to 10	85 µm
	1 × 5 mL	28408255	5–150 (human IgG)	2.5 | 20	HiTrap 5 mL			
	5 × 5 mL	28408256						
HiScreen MabSelect	1 × 4.7 mL	28926973	5–150 human IgG)	1.8 | 3.9	HiScreen 4.7 mL			
HiTrap MabSelect Xtra™	5 × 1 mL	28408258	1–40 (human IgG)	0.5 | 4	HiTrap 1 mL	MabSelect Xtra	3 to 10	75 µm
	1 × 5 mL	28408260	5–200 (human IgG)	2.5 | 20	HiTrap 5 mL			
	5 × 5 mL	28408261						
HiScreen MabSelect Xtra	1 × 4.7 mL	28926976	5–200 (human IgG)	1.2 | 2.3	HiScreen 4.7 mL			
HiTrap MabSelect SuRe™	1 × 1 mL	29049104	1–30 (human IgG)	0.5 | 4	HiTrap 1 mL	MabSelect SuRe	3 to 12	85 µm
	5 × 1 mL	11003493						
	1 × 5 mL	11003494	5–150 (human IgG)	2.5 | 20	HiTrap 5 mL			
	5 × 5 mL	11003495						
HiScreen MabSelect SuRe	1 × 4.7 mL	28926977	5–150 (human IgG)	1.8 | 3.9	HiScreen 4.7 mL			
MabSelect SuRe Validation column	1 × 15.7 mL	29315187	50–500 (human IgG)	Not available	Tricorn 10 mm			
HiTrap MabSelect SuRe LX	5 × 1 mL	29268402	1–30 (human IgG)	0.5 | 4	HiTrap 1 mL	MabSelect SuRe LX	3 to 12	85 µm
	5 × 5 mL	29157185‡	5–150 (human IgG)	2.5 | 20	HiTrap 5 mL			
HiScreen MabSelect SuRe LX	1 × 4.7 mL	17547415	5–150 (human IgG)	0.9 | 3.9	HiScreen 4.7 mL			
MabSelect SuRe LX Validation column	1 × 15.7 mL	29340185	50–500 (human IgG)	Not available	Tricorn 10 mm			
HiTrap MabSelect SuRe pcc	5 × 1 mL	17549111	1–60 (human IgG)	0.5 | 4	HiTrap 1 mL	MabSelect SuRe pcc	3 to 12	50 µm
	1 × 5 mL	17549112	5–300 (human IgG)	2.5 | 20	HiTrap 5 mL			
HiTrap Protein A HP	1 × 1 mL	29048576	1–25 (human IgG)	0.5 | 4	HiTrap 1 mL	Protein A Sepharose High Performance	3 to 10	34 µm
	2 × 1 mL	17040203						
	5 × 1 mL	17040201						
	1 × 5 mL	17040301	5–125 (human IgG)	2.5 | 20	HiTrap 5 mL			
	5 × 5 mL	17040303						
HiTrap rProtein A FF	2 × 1 mL	17507902	1–28 (human IgG)	0.5 | 4	HiTrap 1 mL	rProtein A Sepharose Fast Flow	3 to 10	90 µm
	5 × 1 mL	17507901						
	1 × 5 mL	17508001	5–140 (human IgG)	2.5 | 20	HiTrap 5 mL			
	5 × 5 mL	17508002						

* Check compatibility of the column format with your ÄKTA system on page 4.
† Median particle size of the cumulative volume distribution.
‡ This product is part of our Custom Design Media program. Delivery time might be longer than for standard products.

HiTrap Protein A HP columns, 1 mL and 5 mL.

◀ CHECK COMPATIBILITY WITH ÄKTA SYSTEMS, P.4

Product name	Columns per pack × bed volume	Product code	Typical loading range (mg/column)	Flow rate (rec. | max.), mL/min	Column format*	Resin	pH (regular use)	Particle size, d_{50v}†
Protein G for purifying IgG from most species, including rat								
HiTrap Protein G HP	1 × 1 mL	29048581	1–25 (human IgG)	1 | 4	HiTrap 1 mL	Protein G Sepharose High Performance	3 to 9	34 µm
	2 × 1 mL	17040403						
	5 × 1 mL	17040401						
	1 × 5 mL	17040501	5–125 (human IgG)	5 | 20	HiTrap 5 mL			
	5 × 5 mL	17040503						
Purification of antibody variance and fragments								
HiTrap Protein L	1 × 1 mL	29048665	1–25 (Fab)	1 | 4	HiTrap 1 mL	Capto L	2 to 10	85 µm
	5 × 1 mL	17547851						
	1 × 5 mL	17547815	1–125 (Fab)	5 | 20	HiTrap 5 mL			
	5 × 5 mL	17547855						
HiScreen Capto L	1 × 4.7 mL	17547814	1–125 (Fab)	1.8 | 3.9	HiScreen 4.7 mL			
Hitrap Mabselect VL	1 × 1 mL	17542051	1-40 (mAb) 1-60 (Fab)	0.5/4	Hitrap 1 mL	Mabselect VL	2 to 10	60 µm
	5 × 1 mL	17542052						
	1 × 5 mL	17542053	5-200 (mAb) 5-300 (Fab)	2.5/20	Hitrap 5 mL			
	5 × 5 mL	17542054						
Hiscreen Mabselect VL	1 × 4.7 mL	17542015	5-200 (mAb) 5-300 (Fab)	1.8/2.3	Hiscreen 4.7 mL			
Purification of IgM and IgY								
HiTrap IgM Purification HP	1 × 1 mL	17511001	0.25–5 (human IgM)	1 | 4	HiTrap 1 mL	2-mercaptopyridine Sepharose High Performance (2 mg/mL)	3 to 11	34 µm
HiTrap IgY Purification HP	1 × 5 mL	17511101	5–100 (IgY)	5 | 20	HiTrap 5 mL	2-mercaptopyridine Sepharose High Performance (3.5 mg/mL)		

HiTrap Blue HP columns.

Affinity columns for specific groups of biomolecules

Product name	Columns per pack × bed volume	Product code	Typical loading range (mg/column)	Flow rate (rec. | max.), mL/min	Column format*	Resin	pH (regular use)	Particle size, d_{50v}†
Group-specific affinity columns								
HiTrap Heparin HP	5 × 1 mL	17040601	0.2–3 (bovine antithrombin III)	1 | 4	HiTrap 1 mL	Heparin Sepharose High Performance	5 to 10	34 µm
	1 × 5 mL	17040701	1–15 (bovine antithrombin III)	5 | 20	HiTrap 5 mL			
	5 × 5 mL	17040703						
HiPrep Heparin FF 16/10	1 × 20 mL	28936549	5–40 (bovine antithrombin III)	5 | 10	HiPrep 16 mm	Heparin Sepharose Fast Flow	4 to 12	90 µm
HiTrap Blue HP	5 × 1 mL	17041201	1–20 (HSA)	1 | 4	HiTrap 1 mL	Blue Sepharose High Performance	4 to 12	34 µm
	1 × 5 mL	17041301	5–100 (HSA)	5 | 20	HiTrap 5 mL			
HiScreen Capto Blue	1 × 4.7 mL	28992474	5–150 HSA	1.2 | 4.6	HiScreen 4.7 mL	Capto Blue	3 to 13	90 µm
HiScreen Blue FF	1 × 4.7 mL	28978243	5–90 (HSA)	2.3 | 4.6	HiScreen 4.7 mL	Blue Sepharose Fast Flow	3 to 13	90 µm
HiTrap Con A 4B	5 × 1 mL	28952085	20–45 (porcine thyroglobulin)	1 | 4	HiTrap 1 mL	Con A Sepharose 4 B	4 to 9	90 µm
	5 × 5 mL	28952096	100–225 (porcine thyroglobulin)	5 | 20	HiTrap 5 mL			
HiTrap Streptavidin HP	5 × 1 mL	17511201	> 300 nmol biotin	1 | 4	HiTrap 1 mL	Streptavidin Sepharose High Performance	4 to 9	34 µm
HiTrap Benzamidine FF (high sub)	2 × 1 mL	17514302	1–35 (trypsin)	1 | 4	HiTrap 1 mL	Benzamidine Sepharose Fast Flow (high sub)	2 to 8	90 µm
	5 × 1 mL	17514301						
	1 × 5 mL	17514401	5–175 (trypsin)	5 | 20	HiTrap 5 mL			
Preactivated columns for preparing your own affinity column								
HiTrap NHS-activated HP	5 × 1 mL	17071601	application dependent	1 | 4	HiTrap 1 mL	NHS-activated Sepharose High Performance	Ligand dependent	34 µm
	5 × 5 mL	17071701	application dependent	5 | 20	HiTrap 5 mL			

* Check compatibility of the column format with your ÄKTA system on page 4.
† Median particle size of the cumulative volume distribution.

◀ CHECK COMPATIBILITY WITH ÄKTA SYSTEMS, P.4

Columns for hydrophobic interaction chromatography

HIC separates proteins according to differences in the surface hydrophobicities through a reversable interaction between the proteins and the hydrophobic ligand of a HIC resin.

Tips for choosing HIC chromatography columns

- The hydrophobicity of a protein is difficult to determine. Screen for the most suitable resin for each application using the HiTrap HIC Selection Kit or RESOURCE HIC Test kit. Otherwise, a good practice is to start with a phenyl ligand.
- Select the resin that gives the optimal resolution and loading capacity at a low salt concentration.

HiTrap Capto Octyl 1 mL and 5 mL.

Capto products for HIC chromatography

Product name	Columns per pack × bed volume	Product code	Dynamic binding capacity, Q_{b10} (BSA/mL)	Flow rate (rec. | max.), mL/min	Column format*	Resin	pH (regular use)	Particle size, d_{50v}†
HiTrap Capto Phenyl (high sub)	5 × 1 mL	17545108	27	1.0/4.0	HiTrap 1 mL	Capto™ Phenyl (high sub)	3 to 13	75
	5 × 5 mL	17545109		5.0/20.0	HiTrap 5 mL			
HiScreen Capto Phenyl (high sub)	1 × 4.7 mL	28992472		2.7/4.7	HiScreen 4.7 mL			
HiTrap Capto Butyl	5 × 1 mL	17545908	27	1.0/4.0	HiTrap 1 mL	Capto™ Butyl	3 to 13	75
	5 × 5 mL	17545909		5.0/20.0	HiTrap 5 mL			
HiScreen Capto Butyl	1 × 4.7 mL	28992473		2.7/4.7	HiScreen 4.7 mL			
HiTrap Capto Octyl	5 × 1 mL	17546508	25	1.0/4.0	HiTrap 1 mL	Capto™ Octyl	3 to 13	75
	5 × 5 mL	17546509		5.0/20.0	HiTrap 5 mL			
HiScreen Capto™ Octyl	1 × 4.7 mL	17546510		2.7/4.7	HiScreen 4.7 mL			
HiTrap Capto Phenyl Impres	5 × 1 mL	17548411	19	1.0/4.0	HiTrap 1 mL	Capto™ Phenyl Impres	3 to 13	40
	5 × 5 mL	17548412		5.0/20.0	HiTrap 5 mL			
HiScreen Capto Phenyl Impres	1 × 4.7 mL	17548410		1.2/2.3	HiScreen 4.7 mL			
HiTrap Capto Butyl Impres	5 × 1 mL	17548411	37	1.0/4.0	HiTrap 1 mL	Capto™ Butyl Impres	3 to 13	40
	5 × 5 mL	17548412		5.0/20.0	HiTrap 5 mL			
HiScreen Capto Butyl Impres	1 × 4.7 mL	17548410		1.2/2.3	HiScreen 4.7 mL			
Capto HIC selection kits								
HiTrap Capto HIC selection kit	5 × 1 mL	29321087	Depemds on resin	1/4	HiTrap 1 mL	Various	3 to 13	75 or 40

◀ CHECK COMPATIBILITY WITH ÄKTA SYSTEMS, P.4

Product name	Columns per pack × bed volume	Product code	Ligand density	Flow rate (rec. | max.), mL/min	Column format*	Resin	pH (regular use)	Particle size, d_{50v}†
HiTrap Butyl HP	5 × 1 mL	28411001	50 µmol/mL	1 | 4	HiTrap 1 mL	Butyl Sepharose High Performance	3 to 13	34 µm
	5 × 5 mL	28411005		5 | 20	HiTrap 5 mL			
HiScreen Butyl HP	1 × 4.7 mL	28978242		0.6 | 1.2	HiScreen 4.7 mL			
HiTrap Butyl-S FF	5 × 1 mL	17097813	10 µmol/mL	1 | 4	HiTrap 1 mL	Butyl-S Sepharose 6 Fast Flow	3 to 13	90 µm
HiScreen Butyl-S FF	1 × 4.7 mL	28926985		2.3 | 3.5	HiScreen 4.7 mL			
HiTrap Butyl FF	5 × 1 mL	17135701	40 µmol/mL	1 | 4	HiTrap 1 mL	Butyl Sepharose 4 Fast Flow	3 to 13	90 µm
	5 × 5 mL	17519701		5 | 20	HiTrap 5 mL			
HiPrep Butyl FF 16/10	1 × 20 mL	28936547		5 | 10	HiPrep 16 mm			
HiScreen Butyl FF	1 × 4.7 mL	28926984		1.2 | 1.9	HiScreen 4.7 mL			
HiScreen Capto Butyl	1 × 4.7 mL	28992473	53 µmol/mL	1.2 | 4.6	HiScreen 4.7 mL	Capto Butyl	3 to 13	90 µm
HiTrap Phenyl HP	5 × 1 mL	17135101	25 µmol/mL	1 | 4	HiTrap 1 mL	Phenyl Sepharose High Performance	3 to 13	34 µm
	5 × 5 mL	17519501		5 | 20	HiTrap 5 mL			
HiPrep Phenyl HP 16/10	1 × 20 mL	29018184		2.5 | 5	HiPrep 16 mm			
HiScreen Phenyl HP	1 × 4.7 mL	28950516		0.6 | 1.2	HiScreen 4.7 mL			
HiTrap Phenyl FF (low sub)	5 × 1 mL	17135301	25 µmol/mL	1 | 4	HiTrap 1 mL	Phenyl Sepharose 6 Fast Flow (low sub)	3 to 13	90 µm
	5 × 5 mL	17519401		5 | 20	HiTrap 5 mL			
HiScreen Phenyl FF (low sub)	1 × 4.7 mL	28926989		2.3 | 3.5	HiScreen 4.7 mL			
HiTrap Phenyl FF (high sub)	5 × 1 mL	17135501	25 µmol/mL	1 | 4	HiTrap 1 mL	Phenyl Sepharose 6 Fast Flow (high sub)	3 to 13	90 µm
	5 × 5 mL	17519301		5 | 20	HiTrap 5 mL			
HiPrep Phenyl FF (high sub) 16/10	1 × 20 mL	28936545		5 | 10	HiPrep 16 mm			
HiScreen Phenyl FF (high sub)	1 × 4.7 mL	28926988		2.3 | 3.5	HiScreen 4.7 mL			
HiScreen Capto Phenyl (high sub)	1 × 4.7 mL	28992472	27 µmol/mL	1.2 | 4.6	HiScreen 4.7 mL	Capto Phenyl (high sub)	3 to 13	90 µm
HiTrap Octyl FF	5 × 1 mL	17135901	5 µmol/mL	1 | 4	HiTrap 1 mL	Octyl Sepharose 4 Fast Flow	3 to 13	90 µm
	5 × 5 mL	17519601		5 | 20	HiTrap 5 mL			
HiPrep Octyl FF 16/10	1 × 20 mL	28936548		5 | 10	HiPrep 16 mm			
HiScreen Octyl FF	1 × 4.7 mL	28926986		1.2 | 1.9	HiScreen 4.7 mL			
SOURCE 15 PHE 4.6/100 PE	1 × 1.7 mL	17518601	Not available	1 | 5	Tricorn 4.6 mm	SOURCE 15 PHE	2 to 12	15 µm
RESOURCE ETH	1 × 1 mL	17118401	Not available	2 | 9.6	RESOURCE 1 mL	SOURCE ETH	2 to 12	15 µm
RESOURCE ISO	1 × 1 mL	17118501	Not available	2 | 9.6	RESOURCE 1 mL	SOURCE ISO	2 to 12	15 µm
RESOURCE PHE	1 × 1 mL	17118601	Not available	2 | 9.6	RESOURCE 1 mL	SOURCE PHE	2 to 12	15 µm
HIC selection kits								
HiTrap HIC Selection Kit	7 × 1 mL	28411007	Depends on resin	1 | 4	HiTrap 1 mL	Various‡	3 to 13	90 or 34 µm
RESOURCE HIC Test Kit	3 × 1 mL	17118701	Not available	2 | 9.6	RESOURCE 1 mL	Various§	2 to 12	15 µm

* Check compatibility of the column format with your ÄKTA system on page 4.
† Median particle size of the cumulative volume distribution.
‡ HiTrap HIC Selection Kit content: Seven HITrap columns packed with the following resins: Phenyl Sepharose High Performance, Butyl Sepharose High Performance, Phenyl Sepharose 6 Fast Flow (low sub), Phenyl Sepharose 6 Fast Flow (high sub), Butyl-S Sepharose 6 Fast Flow, Butyl Sepharose 4 Fast Flow, and Octyl Sepharose 4 Fast Flow.
HiTrap Capto HIC selection kit coontent: Five 1 mL HiTrap columns with the following resins Capto Phenyl (high sub), Capto Phenyl ImpRes, Capto Butyl, Capto Butyl ImpRes, and Capto Octyl.
§ RESOURCE HIC Test Kit content: RESOURCE PHE, RESOURCE ISO, and RESOURCE ETH.

HiTrap HIC Selection Kit.

◀ CHECK COMPATIBILITY WITH ÄKTA SYSTEMS, P.4

Columns for multimodal chromatography

Product name	Columns per pack × bed volume	Product code	Typical loading range (mg/column)	Flow rate (rec. | max.), mL/min	Column format*	Resin	pH (regular use)	Particle size, d_{50v}†
HiTrap Capto adhere ImpRes	5 × 1 mL	17371510	45–85 mAb	1 | 4	HiTrap 1 mL	Capto adhere ImpRes	3 to 12	36–44 µm
HiScreen Capto adhere ImpRes	1 × 4.7 mL	17371520	225–425 mAb	1.2 | 2.3	HiScreen 4.7 mL			
HiTrap Capto adhere	5 × 1 mL	28405844	Not available	1 | 4	HiTrap 1 mL	Capto adhere	3 to 12	75 µm
	5 × 5 mL	28405846	Not available	5 | 20	HiTrap 5 mL			
HiScreen Capto adhere	1 × 4.7 mL	28926981	Not available	2 | 4.7	HiScreen 4.7 mL			
Capto adhere Validation column	1 × 15.7 mL	29315195	Not available	Not available	Tricorn 10 mm			
HiTrap Capto MMC ImpRes	5 × 1 mL	17371610	60–90 mAb	1 | 4	HiTrap 1 mL	Capto MMC ImpRes	3 to 12	36–44 µm
HiScreen Capto MMC ImpRes	1 × 4.7 mL	17371620	300–450 mAb	1.2 | 2.3	HiScreen 4.7 mL			
HiTrap Capto MMC	5 × 1 mL	11003273	5–45 (BSA at 30 mS/cm)	1 | 4	HiTrap 1 mL	Capto MMC	2 to 12	75 µm
	5 × 5 mL	11003275	25–200 (BSA at 30 mS/cm)	5 | 20	HiTrap 5 mL			
HiScreen Capto MMC	1 × 4.7 mL	28926980	25–200 (BSA at 30 mS/cm)	2 | 4.7	HiScreen 4.7 mL			
HiTrap Capto Core 700	5 × 1 mL	17548151	1–13 ovalbumin	1 | 3.2	HiTrap 5 mL	Capto Core 700	3 to 13	85 µm
HiScreen Capto Core 700	1 × 4.7 mL	17548115	5–65 ovalbumin	1.2 | 3.9	HiScreen 4.7 mL			
HiTrap Capto Core 400	5 × 1 mL	17372411	1.0-22	1.0/4.0	HiTrap 1 mL	Capto Core 400	3 to 13	90 µm
HiScreen Capto Core 400	1 × 4.7 mL	17372410	5-110	1.2/5.4	HiTrap 5 mL			

HiScreen Capto MMC and HiTrap Capto MMC 1 mL and 5 mL.

Columns for reversed phase chromatography

Product name	Columns per pack × bed volume	Product code	Typical loading range (mg/column)	Flow rate (rec. | max.), mL/min	Column format*	Resin	pH (regular use)	Particle size, d_{50v}†
SOURCE 15RPC ST 4.6/100	1 × 1.7 mL	17506801	1–17 (BSA)	2 | 5	Stainless steel column‡	SOURCE 15RPC	1 to 12	15 µm
RESOURCE RPC, 1 mL	1 × 1 mL	17118101	1–10 (BSA)	2 | 10	RESOURCE 1 mL			
RESOURCE RPC, 3 mL	1 × 3 mL	17118201	3–30 (BSA)	2 | 10	RESOURCE 3 mL			

* Check compatibility of the column format with your ÄKTA system on page 4.
† Median particle size of the cumulative volume distribution.
‡ This column format is compatible with ÄKTAexplorer, ÄKTAmicro, ÄKTApurifier, ÄKTA pure, and ÄKTA avant.

SOURCE15 RPC ST 4.6/100 columns.

◀ CHECK COMPATIBILITY WITH ÄKTA SYSTEMS, P.4

Check out Cytiva's complete range of ÄKTA systems for research and process development

With ÄKTA protein purification systems, backed by Cytiva's columns and chromatography resins, you get reliable results from lab bench to pilot and production scale.

	 ÄKTA start	 ÄKTA go	 ÄKTA pure	 ÄKTA avant
Applications	Transition from manual to automated protein purification/education in protein purification	Achieve desired purity with ease in routine purifications—make the most of valuable bench/cold-room space	Flexibility in research—match most current and future purification challenges	Productivity in process development—fast and secure development of purification processes
Automated and reproducible protein purification including support for gradient elution	●	●	●	●
Support for affinity chromatography, ion exchange chromatography, and multimodal (mixed mode) chromatography	●	●	●	●
Support for size exclusion chromatography	Limited capabilities	●	●	●
Support for hydrophobic interaction chromatography		Limited capabilities	●	●
Software compatible with regulatory requirements, e.g., GLP, GMP		●	●	●
Automated buffer preparation including pH scouting				●
Scale-up, process development			Optional	●
Method development and optimization using design of experiments (DoE)			Optional	●
Automated resin or column scouting			Optional	●
Automated multistep purification			Optional	Optional
Recommended flow rate (mL/min)	0.5–5.0	0.01–25.0	0.001–25/0.01–150	0.001–25/0.01–150
Max. operating pressure (MPa)	0.5	5	20/5	20/5

Upgrade your ÄKTA system

ÄKTA systems have offered versatile and reliable protein purification since the 1990s. As a consequence of the renewal of the ÄKTA system platform, production of ÄKTAexplorer, ÄKTApurifier, ÄKTAFPLC, ÄKTAprime plus, ÄKTAxpress and ÄKTAmicro has been discontinued. To improve your protein purification output, we recommend upgrading to ÄKTA avant, ÄKTA pure, and ÄKTA go, as outlined in this table.

Discontinued system		Upgrade to	Product code
ÄKTAexplorer 10 ÄKTAexplorer 10S	▶	ÄKTA avant 25	28930842
ÄKTAexplorer 100 ÄKTAexplorer 100 Air	▶	ÄKTA avant 150	28976337
ÄKTAFPLC ÄKTApurifier UPC 10	▶	ÄKTA go ÄKTA pure 25 L	29383015 29018224
ÄKTApurifier 10 ÄKTApurifier 10 plus	▶	ÄKTA pure 25 M	29018226
ÄKTApurifier UPC 100	▶	ÄKTA pure 150 L	29046665
ÄKTApurifier 100 ÄKTApurifier 100 plus	▶	ÄKTA pure 150 M	29046694
ÄKTAprime plus	▶	ÄKTA go ÄKTA pure 25 L	29383015 29018224
ÄKTAxpress	▶	ÄKTA pure 25 configured for automated multistep purification	*
ÄKTAmicro	▶	ÄKTA pure micro	29302479

* Contact your local sales representative for further information.

Download Cytiva's protein purification handbooks

Protein purification handbooks

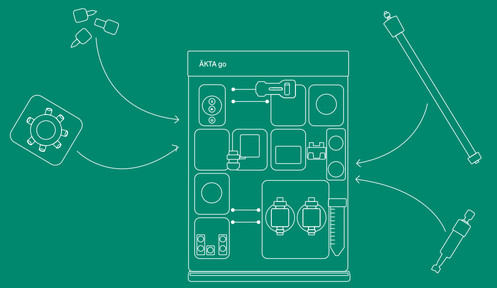
In-depth theory and practical tips to help make your experiments a success.

Available at cytiva.com/handbooks

Get further guidance on product selection

Visit the Purify app to select chromatography columns and resins, configure ÄKTA systems, and find accessories.

Go to cytiva.com/purify-app



cytiva.com

For local office contact information, visit cytiva.com/contact

CY14019-30Aug23-BR

Explore our ÄKTA systems, accessories and pre-packed columns ▶

cytiva