# **Chromatographic column**

for the purification of protein-DNA conjugates

This anion exchange column is used for the purification of protein-DNA conjugates.

### **Product description**

Order Number TB-CC-1-1

Column Specifications		Media Specifications	Strong anion exchanger Q
Column volume (mL)	1	Matrix	Hydrophilic porous polymer beads
Column material	Polypropylene	Particle size (µm)	30
Column size length x I.D. (mm)	26 x 7.0	Functional group	-R-N+(CH3)3
Recommended flow rate (mL/min)	1	pH range	2 – 12
Maximum flow rate (mL/min)	4	Temp. range (°C)	4 - 60
Max. pressure (MPa)	0.3	Shipping solvent	20 % EtOH aqueous solution

#### **Storage and lifetime**

20 % ethanol Store at 4 – 35 °C

• Flush the column with water, afterwards with 20 % EtOH solution. Make sure to close the ends tightly to avoid drying out.



#### **Equilibration and elution**

- Protein-DNA conjugates are electrostatically bound to the matrix of the column with Buffer A (150 mM NaCl) as a first mobile phase, then eluted with a salt-concentration gradient method (Buffer B, 1 M NaCl).
- Water-soluble organic solvent (maximum of 30 %) can be added in the mobile phase. Before adding such solvent, make sure that the salt will not precipitate.

#### Cleaning

- A change of retention time of free DNA or peak shape and/or pressure increase may be caused by
  precipitated impurities of the sample. In such case, flush the column with 5-10 column volumes of
  Buffer B. After cleaning, sufficiently equilibrate the column with Buffer A. To prevent exposure of
  the column to excessive pressure, adjust the flow-rate appropriately during column cleaning.
- If performance does not recover, first wash with sodium hydroxide (about 0.1 M to 0.5 M) and then flush with Buffer B, followed by Buffer A.

#### **Useful Order Numbers**

Product Name	Order number
10x Buffer A pH 7.2 (50 mL of: 500 mM Na <sub>2</sub> HPO <sub>4</sub> /NaH <sub>2</sub> PO <sub>4</sub> , 1.5 M NaCl) Yields 0.5 L of: 50 mM Na <sub>2</sub> HPO <sub>4</sub> /NaH <sub>2</sub> PO <sub>4</sub> , 150 mM NaCl	BU-P-150-10
5x Buffer B pH 7.2 (50 mL of: 250 mM $Na_2HPO_4/NaH_2PO_4$ , 5 M NaCl) Yields 0.25 L of: 50 mM $Na_2HPO_4/NaH_2PO_4$ , 1 M NaCl	BU-P-1000-5
Amine coupling kit 1 for proteins (>5 kDa); cNL-B48 and NHS modifier, sufficient for 5 conjugation series	CK-NH2-1-B48
Amine coupling kit 1 for proteins (>5 kDa); cNL-B96 and NHS modifier, sufficient for 5 conjugation series	CK-NH2-1-B96



### **My Notes**



## Contact

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