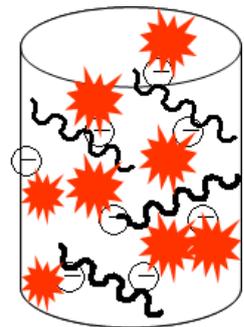


Cellufine™

Pseudo Affinity Media for Capture and Purification of Viral and VLP Particles

NEW Cellufine™ MAX DexS-VirS

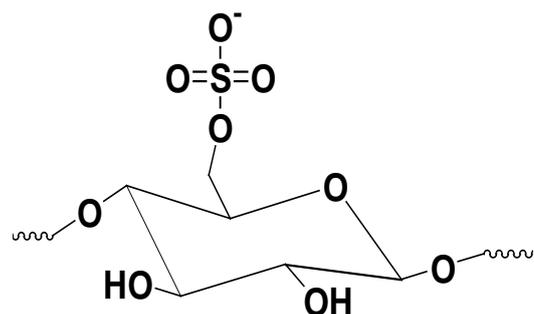
Cellufine MAX DexS-VirS is a new pseudo affinity ligand based on high molecular weight Dextran sulfate polymer modification. The cross-linked cellulose base bead has been optimized for high flow applications and is fully compatible up to 0.5 M NaOH for CIP. This new resin has been developed to improve the viral capture efficiency with Influenza virus particles from allantoic and cell culture sources.



- High molecular weight Dextran sulfate polymer surface modification
- Elution and recovery with high salt
- Very stable cross-linked cellulose base bead
- Very stable in 0.5 M NaOH
- Shows a 50% increase in 10% DBC compared to CS with Influenza viral particles

Cellufine™ Sulfate

Cellufine Sulfate (CS) is a pseudo affinity ligand that mimics heparin. CS has been used to purify a wide range of viral vaccines, such as influenza, rabies and Japanese encephalitis virus from egg allantoic and more recently cell culture upstream processes. Adsorbed viral particles are recovered by mild high salt conditions at neutral pH. This resin has been produced at up to 600 L volume scale with a detailed regulatory file available on request.



- Pseudo affinity single point attachment Sulfate ester ligand
- 90 µm average diameter rigid, cellulose bead, < 3000 Da exclusion limit
- Very low non-specific binding (NSB)
- Elution with high salt (1.5 M NaCl) at pH 7.4
- Low retention of endotoxins

Common Features

- Flow rates up to 250 cm/h at < 0.2 MPa backpressure
- Base stable at up to 0.5 M NaOH
- Very stable cellulose bead structure

Cellufine Sulfate Features

- Pseudo affinity heparin mimic
- Mild elution conditions in salt
- Very low NSB
- Autoclave to sterilize multiple cycles

- Can be used for up to 100 cycles of re-use with 0.5 M NaOH CIP

NEW Cellufine MAX DexS-VirS Features

- High salt tolerance up to 0.25 M NaCl
- Very stable highly cross-linked cellulose bead structure
- High recovery (>80 %) of viral particles in high salt at neutral pH,
- Base stable at up to 0.5 M NaOH
- Enhanced viral capture compared to CS

Additional Cellufine Products used during Viral Purification

Cellufine ET clean (poly(ϵ -lysine)) - can remove endotoxin from a cellular product solution at physiological pH, ionic strength of $\mu = 0.02$ -1.0, and 4 -25 C°.

Cellufine GH-25 desalting media - based on porous, spherical, highly crosslinked cellulose particles. The sharp 3 kDa exclusion limit allows proteins to pass through the column in the void volume while retarding smaller molecular weight solutes in the internal pores.

Description	Quantity	Catalogue No.
Cellufine™ MAX DexS-VirS	5 x 1 mL mini column	21 800-51
	1 x 5 mL mini column	21 800-15
	10 mL	21 800
	50 mL	21 801
	500 mL	21 802
	5 L	21 803
	10 L	21 804
Cellufine™ Sulfate	5 x 1 mL mini column	19 845-51
	1 x 5 mL mini column	19 845-15
	10 mL	676 943 324
	50 mL	19 845
	500 mL	19 846
	5 L	19 847
	10 L	19 849

Purchase/Technical Support

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