BioToolomics

**Solutions for Innovative Purification Technology**

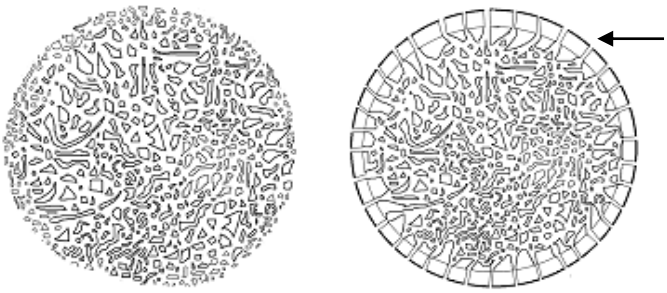
**Accelerating Your Purification Process**

LRQA CERTIFIED ISO 9001-2015 | UKAS MANAGEMENT SYSTEMS 0001

# Purification of Viruses and Viral-like-particles

BioToolomics has developed special chromatography media tailored for the purification of vaccines, viruses or VLPs. All type of resins can be supplied in pre-packed disposable columns for R&D or GMP use (with regulatory support files).

**Shelled Mixed-Mode Resins**: Purifying viral materials in flow-through mode, i.e. impurities smaller than a virus is adsorbed to the mixed-mode ligand inside the bead, meanwhile intact virus passes through the column. It is a very gentle method with little loss of product.




Conventional Bead  Shelled Bead

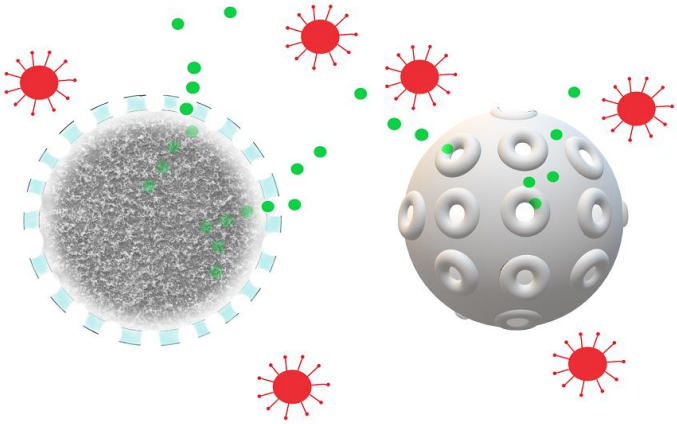
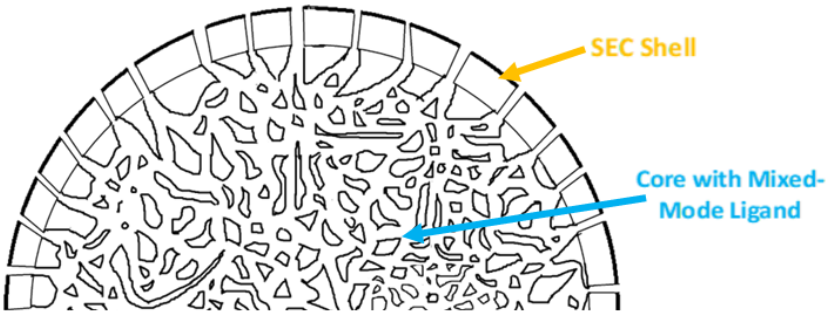


Illustration of the working mechanism of Shelled Chromatography Resin




**Distributed by:**

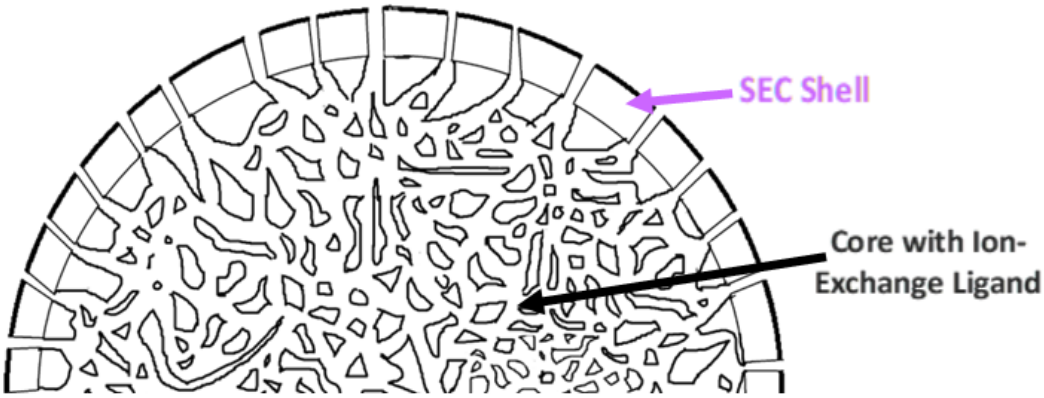
ViralPolish

CliniSciences Group

| Shelled Mixed-Mode Resin | Application Guide | Key Features |
|---|---|---|
| ViralPolish™ 5000A<br>ViralPolish™ 5000B | Good for small AAVs or large antigens | The inert out shell has size exclusion effect to block nano particles of different sizes.<br><br>Mixed-mode ligand is immobilised inside to capture impurities. “A” has mild hydrophobicity; “B” has stronger hydrophobicity. |
| ViralPolish™ 7000A<br>ViralPolish™ 7000B | Good for lentiviruses, adeno viruses, exosomes, vesicles, VLPs, larger AAVs, or for removing up to 1kb DNAs | |
| ViralPolish™ 10000A<br>ViralPolish™ 10000B | Good for exosomes, vesicles or any large nanoparticles, or for removing >1kb DNAs | |

*Other range of 6000, 8000, 9000 also available*

**Shelled Ion-Exchange Resins**: Purifying viral materials in flow-through mode, i.e. impurities smaller than a virus is adsorbed to the charged groups inside the bead and intact virus passes through the column. It is a very gentle method with little loss of product.




SepFast DUO Ion-Exchange

| Shelled IEX Resin | Application Guide | Key Features |
|---|---|---|
| SepFast™ DUO 5000 Q<br>SepFast™ DUO 5000 S<br>SepFast™ DUO 5000 DEA<br>SepFast™ DUO 5000 CM | Good for small AAVs or large antigens | The inert out shell has size exclusion effect to block nano particles of different sizes.<br><br>Ion-exchange ligand is immobilised inside to capture penetrated molecules .<br><br>Q: strong anion-exchanger<br>S: strong cation-exchanger<br>DEA: weak anion-exchanger<br>CM: weak cation-exchanger |
| SepFast™ DUO 7000 Q<br>SepFast™ DUO 7000 S<br>SepFast™ DUO 7000 DEA<br>SepFast™ DUO 7000 CM | Good for lentiviruses, adeno viruses, exosomes, vesicles, VLPs, larger AAVs, or for removing up to 1kb DNAs | |
| SepFast™ DUO 10000 Q<br>SepFast™ DUO 10000 S<br>SepFast™ DUO 10000 DEA<br>SepFast™ DUO 10000 CM | Good for exosomes, vesicles or any large nanoparticles, or for removing >1kb DNAs | |

*Other range of 6000, 8000, 9000 also available*

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