

Optimise your purification process

This decision tree will help you identify the right purification solution to optimise your downstream process.



Design your purification process

With the development of novel biotherapeutics such as antibody formats, new purification challenges for these molecules arise. We developed a portfolio of unique affinity resins to address the industry need for alternative purification solutions.

Explore the best tools for your workflow from our broad selection of resins for the purification of biotherapeutics.

Antibody
therapeutics →



Viral
vectors →



Vaccines →



Proteins &
hormones →



Plasmid
DNA →



mRNA →





Antibody therapeutics

We have developed an innovative portfolio of affinity chromatography resins to support you in the downstream process of next-generation antibody therapeutics. These resins are specifically designed for the purification of monoclonal antibodies (mAbs) and engineered antibody modalities such as Fab fragments, bi-specific antibodies and Fc-fusion proteins.

Standard Mab

+ CAPTURE + POLISH

Fc-fusion proteins

+ CAPTURE + POLISH

Custom Resins

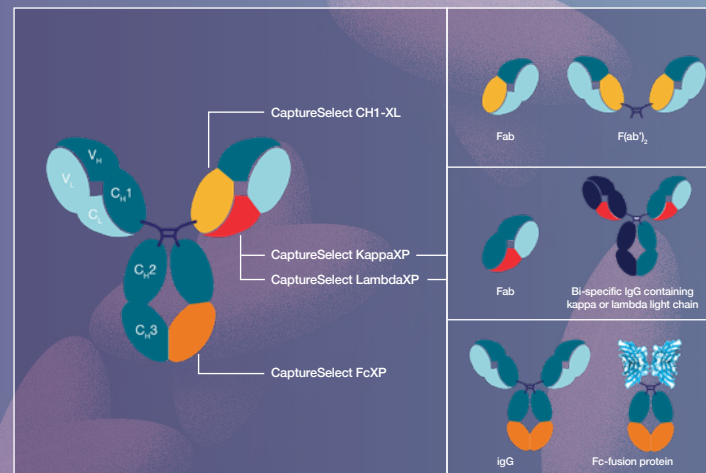
+ MORE

Fab (and Fab2) fragments

+ CAPTURE + POLISH

Bi-specific full length mAbs

+ CAPTURE + POLISH





Viral Vectors

The rapidly growing interest in gene therapy has led to the need for more cost-effective and scalable downstream purification platforms to deliver these therapies. Adeno-associated virus has become the vector of choice as it stands out for its safety profile since infection with the vector is not pathogenic. Explore our AAV affinity resins, specifically designed for the purification of a large subset of AAV serotypes.

In addition, the development pipeline of lentiviral particle-based therapies is growing and so is the need for efficient and productive production tools. Here we present a new affinity chromatography resin, specifically designed for the purification of VSV-G pseudotyped lentivirus particles from suspension cultivation.

AAV

[+ CAPTURE](#) [+ POLISH](#)

Custom Resins

[+ MORE](#)

Lentivirus

[+ CAPTURE](#) [+ POLISH](#)

Adenovirus serotype 5

[+ CAPTURE](#)



Vaccines

Vaccines are a critical step form of defence against disease. A key step in vaccine production is a high-quality purification of the molecule that ultimately triggers an immune response. Innovative affinity purification greatly supports to shorten processing times, allow for higher productivity and reduced cost during the development and manufacture of vaccines.

DNA

+ CAPTURE + POLISH

mRNA

+ CAPTURE + POLISH

Protein subunit

+ CAPTURE + POLISH

Whole virus (attenuated)

+ CAPTURE + POLISH

Viral vector

+ CAPTURE

Custom Resins

+ MORE



Proteins & hormones

Explore a unique set of affinity resins for the purification of recombinant proteins including blood proteins and hormones. In addition, explore a novel affinity tag system for the purification of recombinant proteins.

Factor X

[+ CAPTURE](#) [+ POLISH](#)

FSH

[+ CAPTURE](#) [+ POLISH](#)

hCG

[+ CAPTURE](#) [+ POLISH](#)

hGH

[+ CAPTURE](#) [+ POLISH](#)

Human Albumin

[+ CAPTURE](#) [+ POLISH](#)

TSH

[+ CAPTURE](#) [+ POLISH](#)

Enzymes

[+ CAPTURE](#) [+ POLISH](#)

tPA

[+ CAPTURE](#) [+ POLISH](#)

Custom Resins

[+ MORE](#)



Plasmid DNA

The demand for plasmid DNA (pDNA) has increased in recent years in both cell and gene therapies and mRNA therapeutics. Typical downstream process for plasmids normally has multiple steps after fermentation and anion exchange followed by HIC chromatography. Thermo Fisher Scientific has developed a variety of affinity resins and polish solutions well-suited for these process steps to simplify workflows and increase purity and yield.

plasmid DNA

[+ CAPTURE](#) [+ POLISH](#)

Custom
Resins

[+ MORE](#)



mRNA

The diversity of potential mRNA-based therapies has led to increased interest in using synthetic mRNA as a tool in the treatment of multiple diseases, such as cancer, stem cell therapies and infectious diseases. Current mRNA production methods require multiple purification steps and various chemicals, thereby creating a bottleneck for large-scale manufacturing of in vitro transcribed (IVT) mRNA. To overcome these challenges, we offer an affinity chromatography resin for the isolation and purification of mRNA.

mRNA

[+ CAPTURE](#) [+ POLISH](#)

Custom Resins

[+ MORE](#)

The background of the entire page is a light blue color. It features a large, abstract graphic on the right side that resembles a molecular structure or a network. This graphic is composed of several white circles connected by thin blue lines. Surrounding these circles are numerous red arrows pointing in various directions, some towards the circles and others away from them. The overall effect is one of dynamic connectivity and flow.

Connect with us to simplify your purification process.

Contact us

For Research Use or Further Manufacturing. Not for diagnostic use or direct administration into humans or animals.

COL34946 © 2022 Thermo Fisher Scientific Inc. All rights reserved.

All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified.