

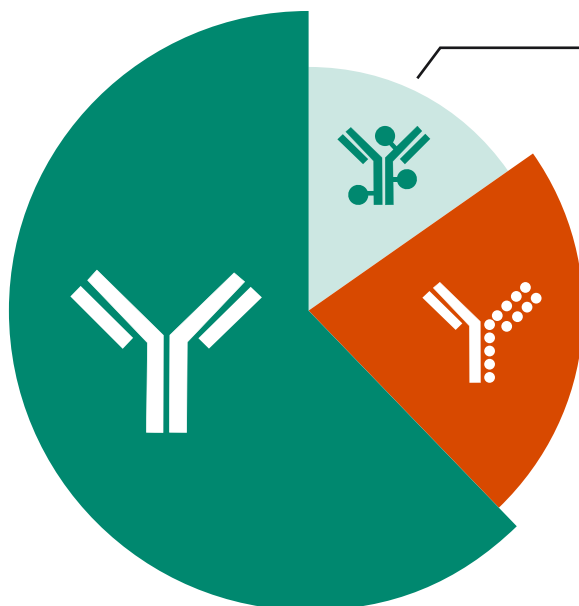
Top challenges in downstream process development for mAbs and antibody variants

The antibody pipeline is diversifying

Number of molecules in Phase I¹

357

Traditional antibodies (mAbs)



169

Antibody drug conjugates (ADCs)

177

Multispecific antibodies (msAbs)

Your top 3 purification challenges for antibody variants² and traditional mAbs³



Traditional mAbs



Antibody variants

1

Charge variant separation

2

Aggregate removal

3

HCP removal (host cell proteins)

1

Charge variant separation

2

Aggregate removal

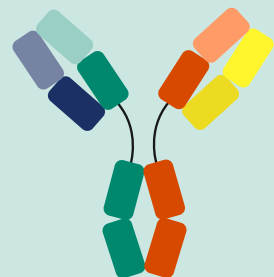
3

Mispairs removal

Tips for addressing purification challenges

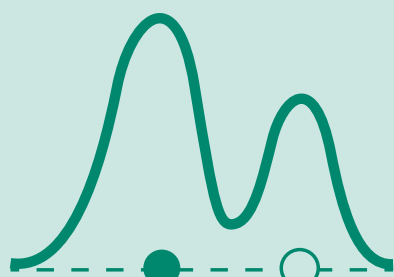
Select your affinity capture resin

depending on your molecule design to reduce mispairs

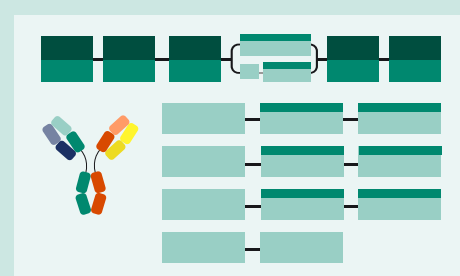


Consider multimodal chromatography

if your IEX⁴ resin doesn't provide sufficient impurity separation

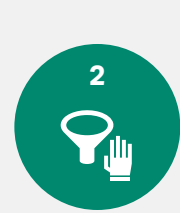


Download this guide for more recommendations



Click here

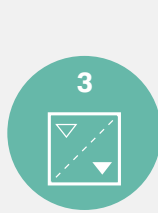
Your most challenging filtration step for process development³



Sterile filtration



Virus filtration



UF/DF⁵

Your biggest filtration challenges³

1

Batch harvest capacity and footprint

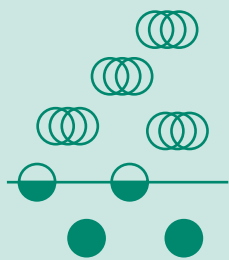
2

High viscosity feeds

3

Virus filtration capacity

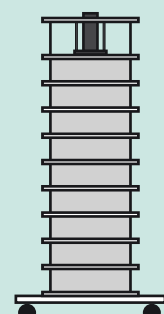
Tips for addressing filtration challenges



Learn about virus filtration process development ►



Read white paper on high-concentration mAbs ►



Consider StaxTM mAx clarification platform ►

Need more support?

[Contact a Cytiva specialist](#)

¹Source: Global Data 2026 – molecules with Phase I as highest development status.

²Multispecific antibodies, fragments, or antibody drug conjugates

³Source: Survey performed June-Sept 2024. n = 25 respondents.

⁴Ion exchange chromatography

⁵Ultrafiltration/Diafiltration