



Fact Sheet

AnyFormat Manufacturing: Protein Production Capability

EXPICHO™ & EXPI293™ | E. COLI | MULTI-SPECIFICS | μ G TO >200 L



AnyFormat Manufacturing is FairJourney Bio's protein production capability. Our workflows are designed to deliver developable leads, not just hits at every scale, from screening to IND filing

Producing high-quality material at any scale is an integral part of it. As an antibody discovery expert with 900 antibody backbones available in-house, FJBio produces standard formats, complex multi-specifics and antigens across mammalian and bacterial systems, with QC and post-processing matched to your downstream needs. With 98% of projects delivered on time and 42% ahead of time our team is sure to fulfill all project needs.

WHY PARTNER WITH FJBIO FOR EVERY SCALE PROTEIN PRODUCTION

Any format, by design >75 different formats produced; >1,500 multi-specifics successfully delivered.	>90% multi-specific success rate Across multiple technologies.	Screening to IND in one workflow HTP plate/15mL → flask scale (50 mL to >200 L), GLP-certified, IND-filing support.
Antigens too >500 antigens produced across >65 families and >15 species; ~90 mg/L general yield on top families.	On time, on spec 98% on-time delivery; 42% delivered ahead of schedule.	QC depth μCE-SDS, SEC-HPLC, Intact-MS Included in all formats, endotoxin testing — with CoA on every batch.

WORKFLOW AT A GLANCE

	Formats	System	Workflow	QC	Final Deliverables	Fit for purpose
HTP scale (24-well plate)	Standard formats	ExpiCHO™ Expi293 PRO™	One-step affinity: Protein A Protein L IMAC CH1	μCE-SDS	Certificate of analysis (CoA) Purified antibodies	Screening (μg scale)
HTP scale (15 mL)	Standard formats Complex formats	ExpiCHO™	Two step purification: Affinity followed by polishing SEC (tandem system)	μCE-SDS SEC-HPLC Intact-MS (for complex formats)	Certificate of analysis (CoA) Overview report for complex formats (PPT) Purified antibodies	PoC Format screening (mg scale)
FLASK scale (From 50 mL to above 200 L)	Any format	ExpiCHO™ Expi293 PRO™	Customizable DSP workflows: multiple affinity and polishing chromatography techniques available	μCE-SDS SEC-HPLC Intact-MS Endotoxin testing Additional QC available	Certificate of analysis (CoA) Overview report for complex formats (PPT) Purified antibodies	Large-scale GLP certified Support with reports for IND filing

WORKFLOW AT A GLANCE

>1200

ANTIBODY BACKBONES
IN-HOUSE

75+

DIFFERENT FORMATS
PRODUCED

1,500+

MULTI-SPECIFICS
SUCCESSFULLY DELIVERED

98% / 42%

ON-TIME /
AHEAD-OF-TIME DELIVERY

Protein Production — Capability Detail

Scale & expression systems

- HTP scale (24-well plate, µg) for screening
- HTP scale (15 mL, µg–mg) for PoC and format screening
- Flask scale (50 mL to >200 L) for large-scale, GLP-certified, IND-filing support
- Mammalian: ExpiCHO™, Expi293 PRO™ / Bacterial: E. coli BL21 (DE3), E. coli Shuffle

Multi-specifics & complex formats

- >1,500 multi-specific antibodies successfully produced
- >90% success rate across multiple technologies
- Customizable DSP workflows: multiple affinity and polishing chromatography techniques
- Specialized affinity chromatography for high-purity, high-yield complex formats

QC, antigens & post-processing

- Standard QC: µCE-SDS, SEC-HPLC, Intact-MS (complex formats), endotoxin testing
- Additional QC: Western blot, customized assays on request
- Post-processing: biotinylation, conjugation, labelling and digestion

EXAMPLES OF HOW FJBIO ADDRESSES PROTEIN PRODUCTION CHALLENGES

Proof in practice: Multispecific Antibody Production

Multispecific antibodies bind more than one antigen or epitope, often on different targets, giving them great potential as therapeutics. As competition and clinical expectations increase, developing high-quality, manufacturable multispecific antibodies has become critical for both clinical success and commercial viability. However, their production and development carry several challenges such as mispaired chains and side species removal, giving them complexity in design, manufacturing and purification methods. These impurities often share physicochemical properties with the target product, making traditional separation methods ineffective. Thus, diversification of purification strategies, for example high-affinity resins, and the right polishing chromatography targeting specific subdomains, are crucial for achieving the required purity and improved yields. In practice, additional purification and polishing steps are not applied by default, they are selected per construct, based on the sequence, and the theoretical properties predicted from it. **Figure 1** shows examples of both routes applied: an additional Kappa LC affinity purification raised SEC-HPLC purity from 88% to 100%, and charge-based polishing chromatography from 89% to 100%, in each case removing the species the preceding step had co-eluted.

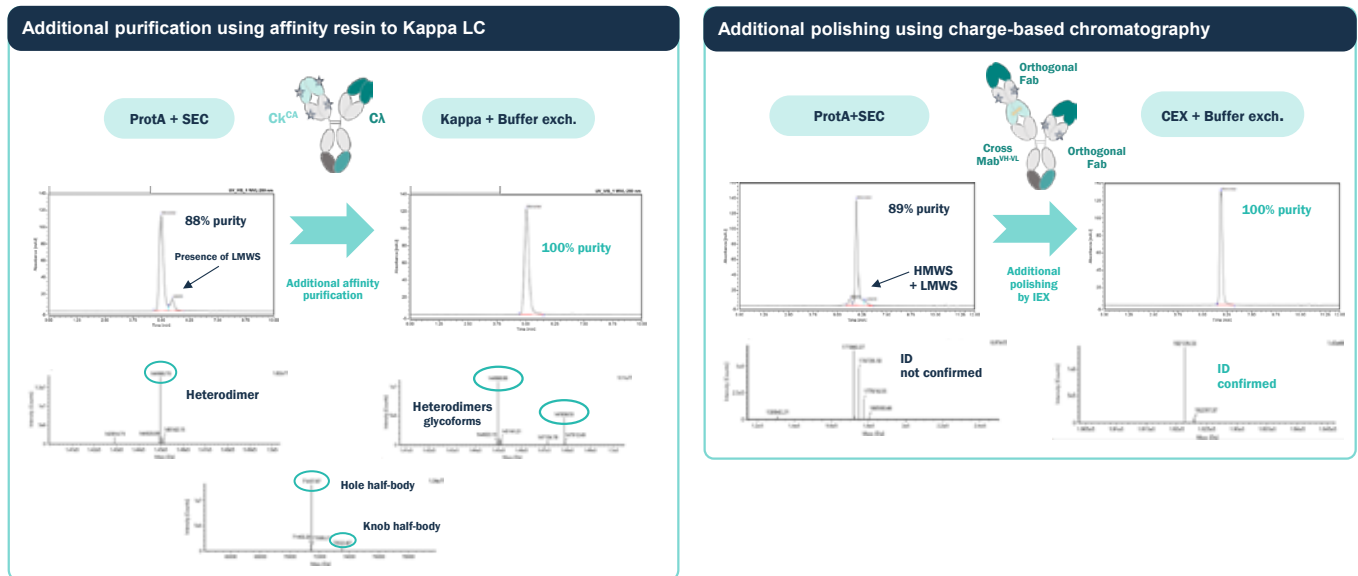


Figure 1. (Left) The SEC-HPLC showed the presence of LMWS, corresponding to be knob and hole half-bodies. An additional affinity purification step increased purity by eliminating these LMWS. **(Right)** SEC-HPLC revealed the presence of HMWS and LMWS, and the ID could not be confirmed by LC-MS. Additional polishing using charge-based chromatography (CEX) improved the purity and enabled successful ID confirmation.

**Microgram to gram. Format-agnostic.
On time, on spec**

[Click here to Request a Quote →](#)

Let's talk about your programme

Bring your target, your timeline and your tough questions to a scoping conversation.

info@fjbio.com | fjbio.com

Porto · Cambridge · San Diego

