

WorkBeads

Custom Resins

WorkBeads – Next generation chromatography resins

WorkBeads™ are Bio-Works' advanced agarose-based resins, designed for purification of biomolecules.

They are produced in several different bead sizes and porosities for both preparative research and bioprocess manufacturing scales. This allows seamless scalability and reproducible results.

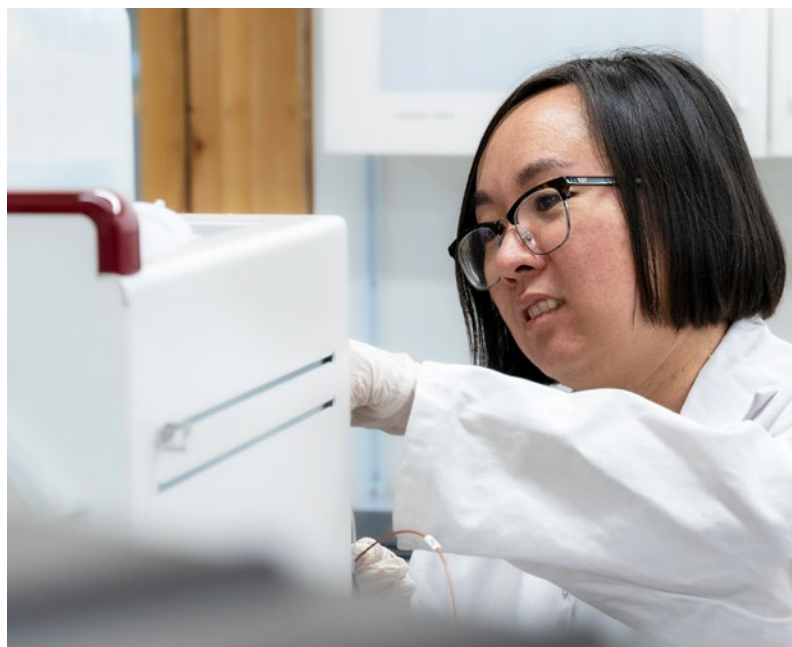
WorkBeads – Custom Resins

Biologics have become more and more diverse. The emergence of new technologies at the forefront of new drug development, e.g. gene therapy, is driving a demand for tailor-made solutions and cutting-edge expertise throughout the biopharma industry.

When off-the-shelf products don't meet your needs, our specialists can design a solution. We work with you to develop and produce a resin that fulfils your requirements regarding binding capacity, selectivity, and regulatory support documentation. We give you the flexibility to choose your own ligand, one of our ligands, or a third party ligand.

Bio-Works strategy when designing custom resins

- Projects/batches: Small scale to large scale
- Design the resin at your desired level; from scratch or from a subset of choices
- Experienced team with significant in-house knowledge
- Access to the know-how of the people that develop and manufacture the resins
- Transparency and communication throughout the process
- Final resin can be delivered as bulk or in a prepacked format
- Delivery of regulatory support documents if needed

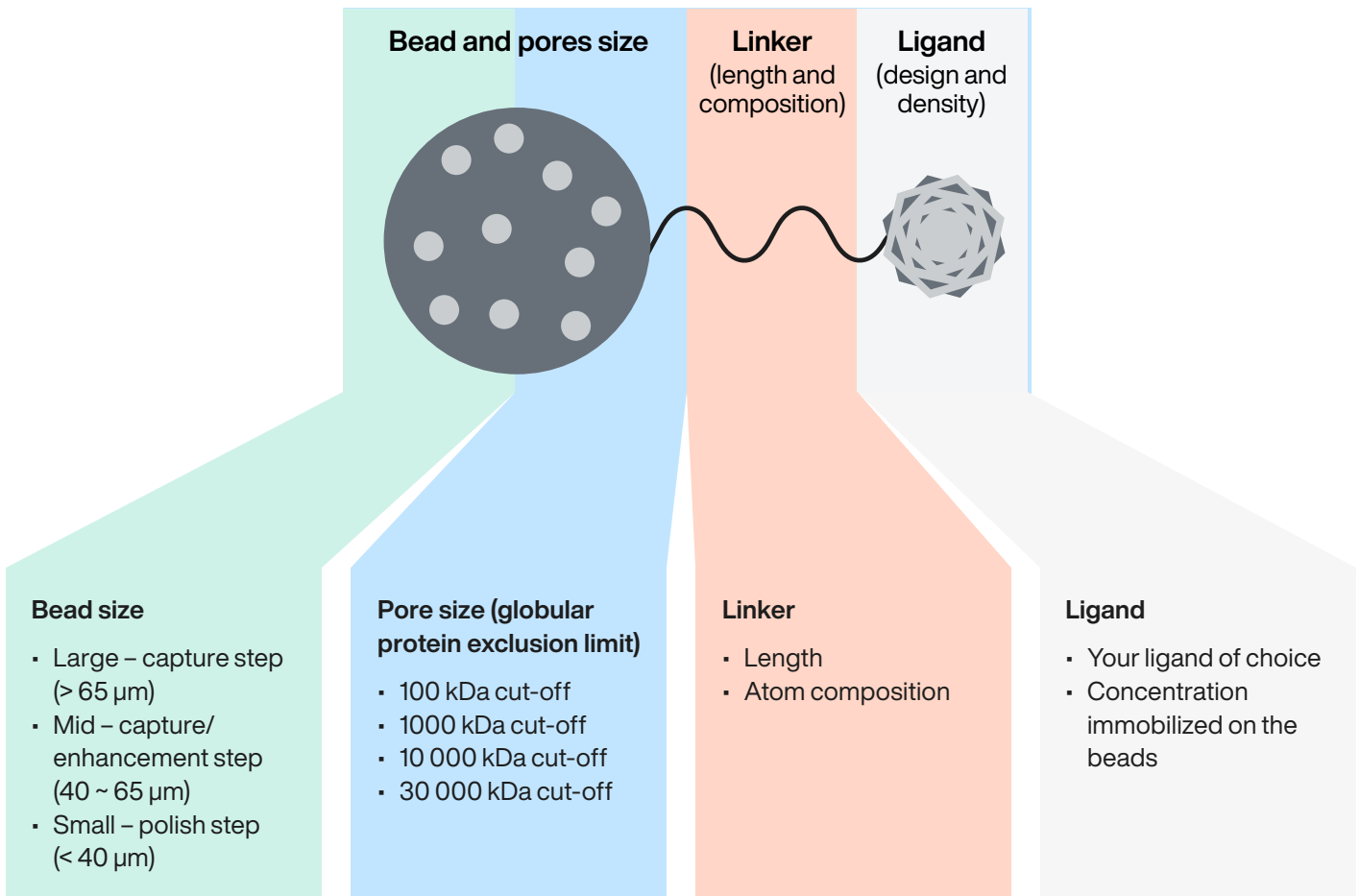


A custom resin developed precisely for your target molecule and process!

What is involved in customizing a resin?



Design your own resin



Ligand choice – basically anything with affinity for a specific target

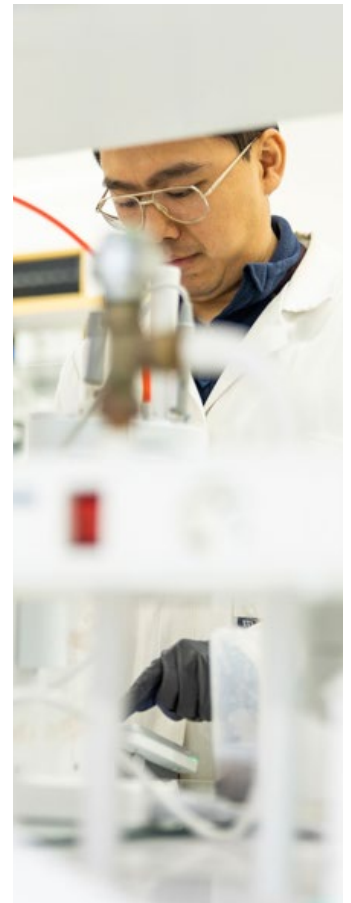
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|-----------------------------|-----------------------------------|
| • Proteins | enzymes, antibodies, antigens |
| • Oligonucleotides/aptamers | oligo (d)T – mRNA; aptamers – AAV |
| • Peptides | antibodies |

Ligand coupling – compatible functional groups on ligand and resin

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|------------------|------------------|--|
| • Amino | -NH ₂ | } Examples of common functional groups |
| • Thiol | -SH | |
| • Hydroxyl group | -OH | |
| • Aldehyde | -CHO | |

Linker design – to avoid steric hindrance and improve access to the binding site

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|--------------------|--|
| • Nature of linker | e.g. carbon chain, poly ether bridge |
| • Length of linker | depends on the ligand and the accessibility of the target binding site |



WorkBeads resins are available in a variety of formats for research, process development, scale-up and production. Bulk packages are available from 25 mL up to 10 L. GoBio prepacked formats enable turnkey operation in both lab and process-scale environments.