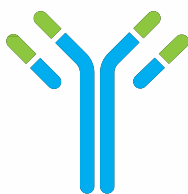




Custom Services

We have your project covered

Custom Antibody
Development



ELISA Development,
validation and
manufacturing



CUSTOM
SERVICES

Cloning, protein
expression and
purification



High Throughput
antibody screening
and validation





CUSTOM ANTIBODY DEVELOPMENT

Aviva specializes in developing custom antibodies tailored to meet the specific needs of the pharmaceutical and diagnostics industry. We employ a meticulous development and validation process that begins with AI-informed antigen development and finishes with antibody purification. To ensure the highest quality of antibodies, our rigorous five-step validation protocol sets us apart from other suppliers.

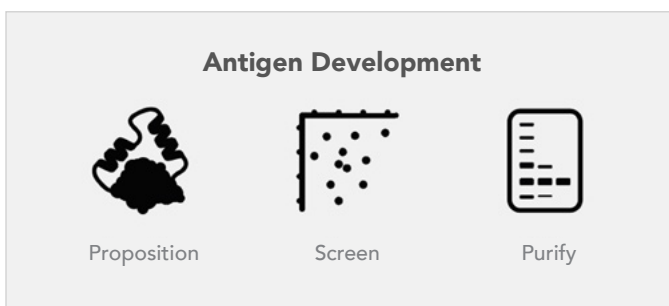
Single B Cell cloning for Rabbit Recombinant Antibody development

For recombinant antibodies, we start by designing, screening and antigen purification. Following immunization, single B cells are collected and cloned, antibodies are tested across a variety of applications. To identify the best binders, we leverage high-throughput SPR for kinetic profiling, epitope binning, and epitope mapping. Antibodies can be validated across multiple applications, including Western Blot, ICC, IHC, and ELISA to meet your needs. We have the capability of small to medium scale expression in HEK293 and CHO cells.

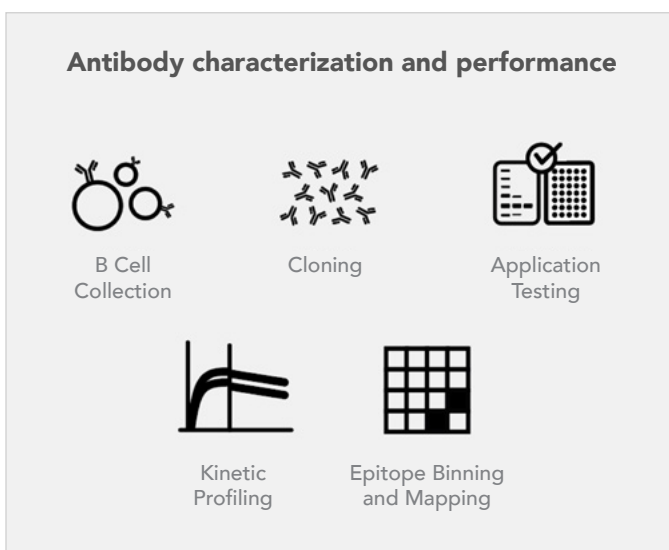
Custom Polyclonal Antibody Development

For our polyclonal antibody service, validation starts at serum collection. The serum is peptide affinity purified, and further validated by Immunohistochemistry, Western blot and ELISA. This comprehensive validation process ensures that we deliver the best possible antibody to meet your research and application needs.

Custom Recombinant Antibody Development



Immunization and affinity maturation (in vivo)



CLONING AND PROTEIN EXPRESSION SERVICES

Aviva provides customized solutions to each protein expression project. Our custom protein expression service begins with design and consultation. Following a feasibility study, we produce and purify your protein.

Whether your needs are small-scale research or large-scale cGMP, we can meet your needs. Expression systems include E.Coli, Mammalian and yeast.

Protein purifications services include:

✓ Affinity Chromatography

- Anti-Flag
- Glutathione Sepharose
- Heparin Sepharose
- Ni-NTA
- Protein A
- Protein G
- Streptavidin Sepharose
- Talon resin

✓ Ion Exchange Chromatography

- ANX
- CM Sepharose
- DEAE Sepharose
- Mono-Q
- Q Sepharose Fast Flow
- Q Sepharose XL
- Resource Q
- SP Sepharose

✓ Hydrophobic Interaction Chromatography

- (CH2)n Sepharose
- Phenyl Sepharose

✓ Size Exclusion Chromatography

✓ Optional Services

- Tag Removal
- Endotoxin Removal
- Protein solubilization and refolding

Protein on Demand Semi-Custom protein expression

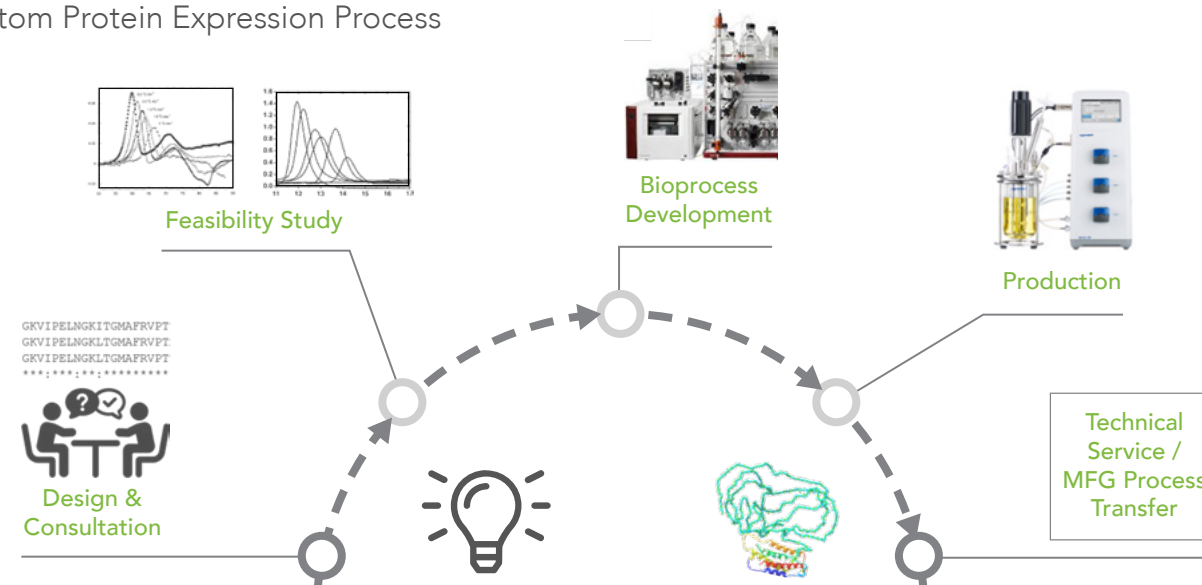
If you need small to mid-scale recombinant protein expression, Aviva offers Protein on Demand.

Protein on Demand is a catalog of semi-custom recombinant proteins. The catalog contains:

- 300,000 protein targets across a wide variety of species.
- 4 expression systems.
- Small quantities available: 20 ug - 1 mg.
- Regardless of your application, Protein on Demand has the unique recombinant protein you need to succeed.

Protein on Demand is Easy. Visit <https://www.avivasysbio.com/products/protein-on-demand-custom-recombinant-proteins> to select your protein, expression system, tag and size.

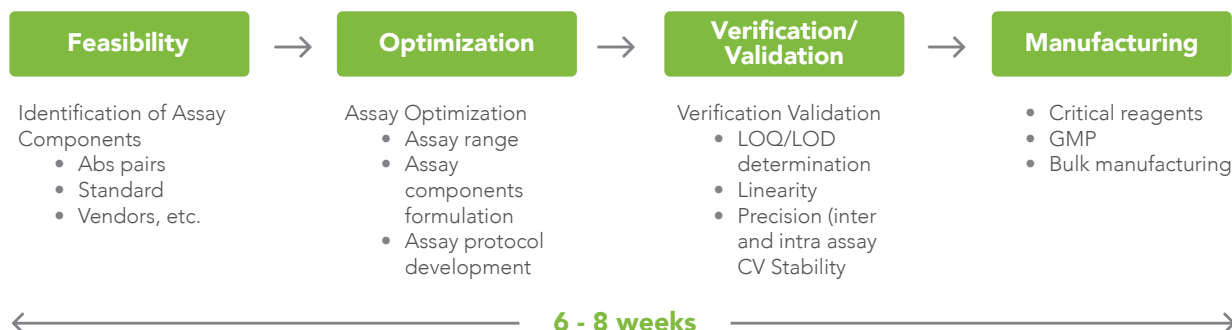
Custom Protein Expression Process



ELISA DEVELOPMENT PROCESS

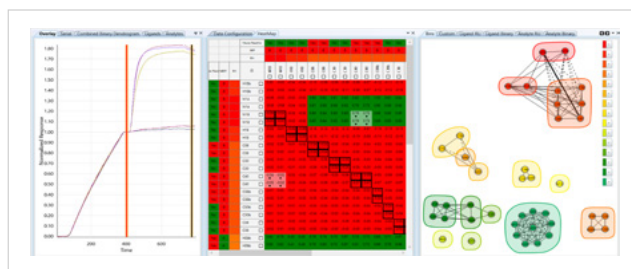
Our portfolio of 24,000 in-house developed antibodies enables rapid ELISA development. If we have antibodies to your target of interest, we can product an ELISA kit in 6-8 weeks with colorimetric, fluorescent or chemiluminescent detection.

ELISA Development Process



HTS SPR ANTIBODY SCREENING AND VALIDATION

- Antibody-antigen binding kinetics
- Epitope binning and epitope mapping
- Identification of antibody pairs for developing high-precision ELISA or multiplex assays



Benefits of using our HTS Screening and Validation Service:

- ✓ **High throughput:** Kinetically screen and rank up to 1,152 mAbs, 384 clones at one time in parallel
- ✓ **Fast turnaround time:** Powerful software tools enable large data sets to be rapidly fitted and visualized
- ✓ **Small sample requirement:** < 200 µl of each interactant required
- ✓ **Data integration:** Combine binning and kinetics screening data for unparalleled mAb evaluation
- ✓ **Multiple surface binding chemistries are available:**
 - Polycarboxylate hydrogel: General use
 - Carboxymethyldextran: General Use
 - Streptavidin: biotinylated ligand capture
 - Poly – NTA: His Tag ligand capture
 - Protein A/G: Multi-species IgG

Find a trusted partner for your next project

Ordering Information
Technical Support

Aviva Systems Biology
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San Diego, CA 92121
www.avivasysbio.com

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