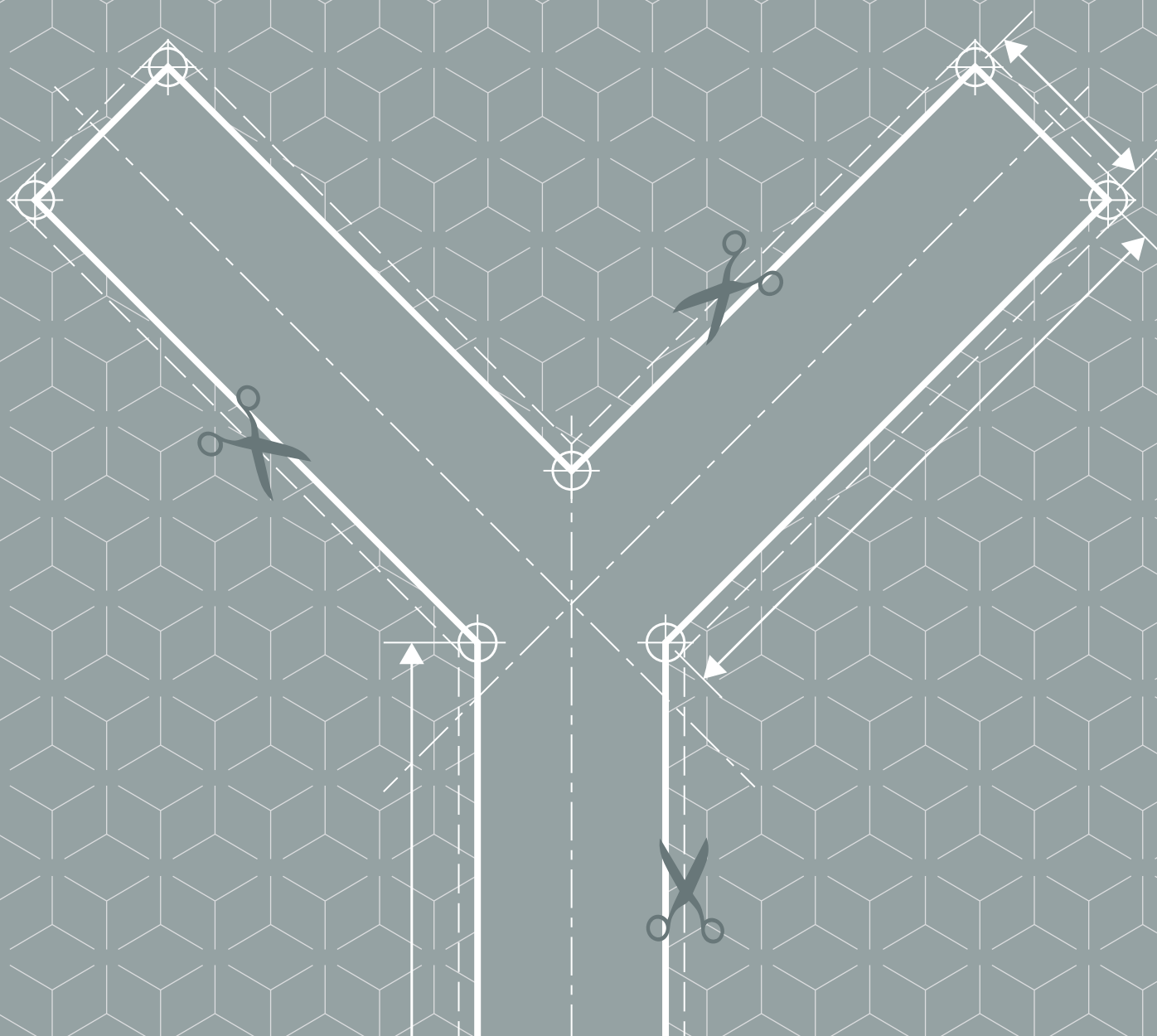


# Custom antibody services



# Your partner for antibody generation

We are the world's leading monoclonal antibody provider. With a broad offering of monoclonal antibodies in our catalogue, chances are you will find the right binder there.

However, if your project requires something different, our range of services and technologies can help you, from custom antibody generation to downstream assay development. Our experts have successfully concluded more than 3,000 custom projects, giving you the confidence that they will be able to generate the right antibody for your application.

## Get the antibody you need – no matter how challenging

With the broadest range of technologies on the market, our custom antibody development services will help you get the antibody you need – no matter how challenging your application may be.

## Full support from project planning to completion

Our expert team is ready to guide you every step of the way, ensuring you end up with the optimal antibody for your application. Each custom project is assigned a project manager, who gives you access to a team of experts to help you with every aspect of your project from selecting the right immunogen to downstream manufacturing, assay development, intellectual property management, and commercial licensing.

## Ensuring quality

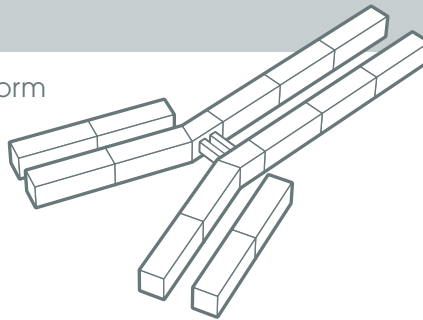
We manufacture our antibodies to the highest quality standards and offer ISO 9001 certification for all rabbit monoclonal antibodies, guaranteeing lot-to-lot consistency and security of supply. We also have an in-house GMP manufacturing group to produce IHC reagents.

# Custom services powered by novel antibody generation platforms

When you work with us, you'll get access to multiple industry leading antibody generation platforms, significantly increasing your chances of finding the right antibody for your application.

## RabMAb® technology

- Proprietary rabbit monoclonal antibody platform
- Higher specificity and sensitivity than mouse monoclonal antibodies
- Broad diversity of epitope recognition including short peptides, small molecules, point mutations and PTMs



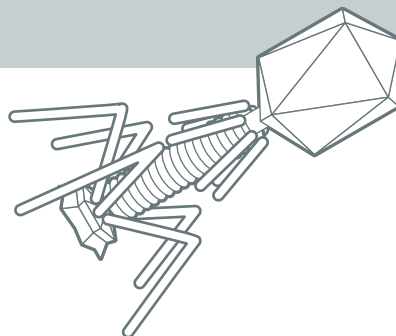
## NGS technology

- Single-cell paired sequencing with retained heavy and light chain pairing
- 10-100 fold increase in the number of antibody clones for evaluation
- Clustering algorithm for rational clone selection and discovery of rare binders



## Axiomx technology

- Rapid antibody discovery in 8 weeks
- Animal-free system for generating binders to toxic antigens
- CDR grafting, antibody framework optimization, CAR T-cells

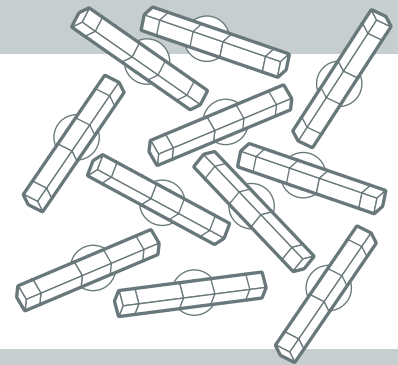


# Platforms for downstream assay development

As well as antibody development, we can support your downstream assay development using our novel platforms.

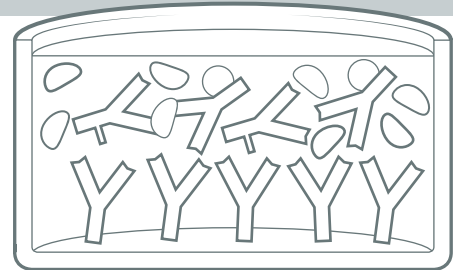
## Multiplex assays

- Multiplexed immunoassays or miRNA assays
- Work with as little as 12  $\mu$ L crude biofluid sample
- Up to 68 targets per well
- Readout on most standard flow cytometers



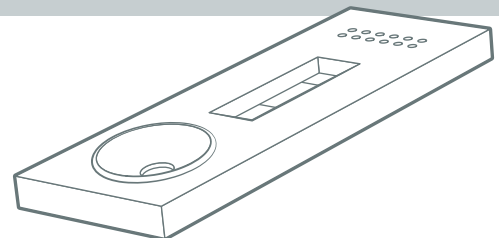
## SimpleStep ELISA<sup>®</sup> assays

- Single-step sample and antibody addition for results in 90 minutes
- Broad dynamic range reduces the need for multiple sample dilutions

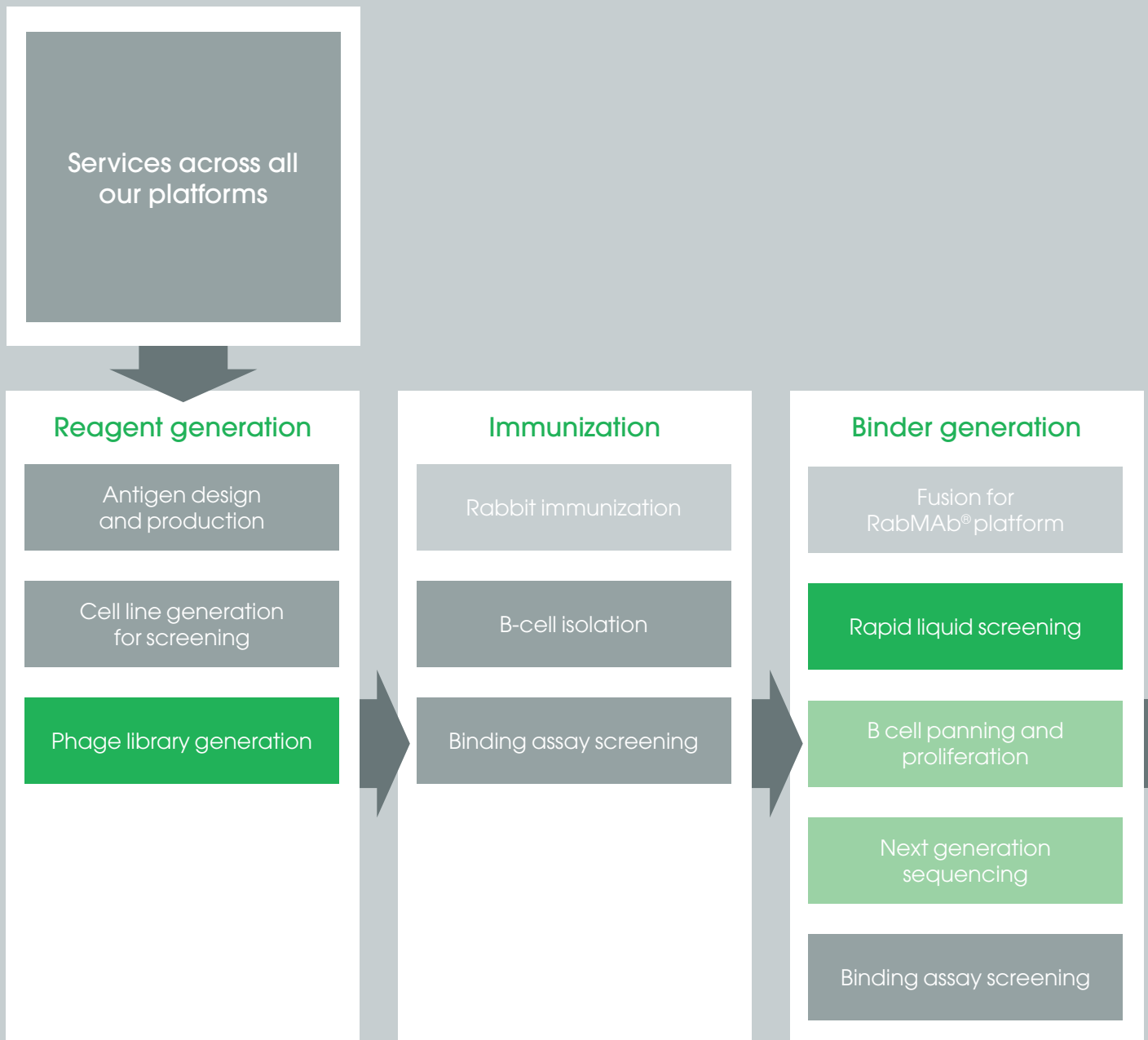


## Lateral flow assays

- Fast lateral flow prototyping
- Dipstick reader quantitative analysis



# What services can we help you with?

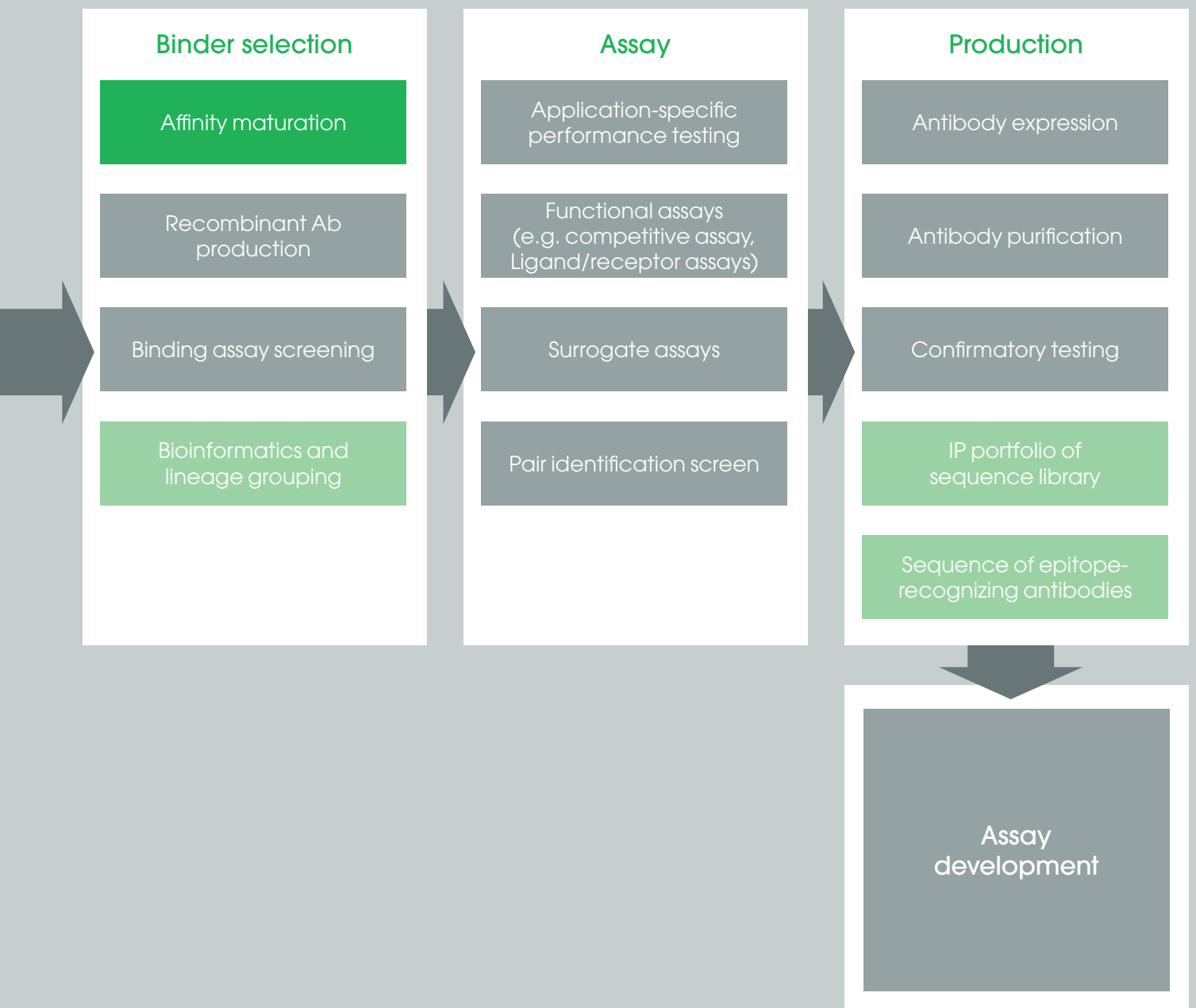


## Choose from our range of services throughout the antibody generation workflow and beyond

- Steps and deliverables for typical antibody discovery programs
- Multiple methodologies may be used to maximize success
- Each module represents an invoicing point and data report

### Legend

- RabMAb® platform
- NGS platform
- AxioMx platform
- All platforms



# RabMAb<sup>®</sup> antibody services

## Immunogen design and preparation

- Peptide design, synthesis, and conjugation for immunization and screening
- Recombinant protein production in bacterial or mammalian systems
- DNA and cell-based immunization

## Hybridoma development

- Fusion and screening of supernatants by ELISA or other binding assays
- Differential and comprehensive screening for phospho, point mutation, cleavage or isoform specific projects and application specific screening

## Phage Display

- Binders generated from proprietary libraries using a rapid discovery process

## RabMAb<sup>®</sup> antibody production

- Small-scale (<10 mg): hybridoma/recombinant
- Mid-scale (10 to 500 mg): recombinant/transient or stable cell lines
- Large-scale (>500 mg): recombinant/stable cell lines

## Transient and stable cell line development

- Heavy and light chain cloning into expression vectors
- Expression in eukaryotic cells

## Antibody Engineering

- CDR grafting
- Affinity maturation & specificity "tuning" services

## Assay development

- Bespoke assay cascade design and validation
- Sandwich and competition ELISAs
- Receptor-ligand binding, reporter assays, phosphorylation and functional cell-based assays
- IHC preparations and tissue microarray IHC profiling
- PK/PD assays

## Knockout validation

- Specificity validation using specific target gene knockout cells

# More than just antibody and assay generation

## A worry-free path to commercialization

We own or license the intellectual property behind our antibody discovery platforms to provide secure partnerships with the technology inventors allowing a worry-free path to product commercialization to our industry partners. Through a number of strategic partnerships, we also can help facilitate the uptake of novel biomarkers onto a range of industry-leading diagnostics platforms

With a flexible and collaborative approach to custom service partnerships, we can offer flexible licensing terms for larger opportunities and highly effective sales and marketing channels for out-licensing.

## Collaborative scientific project management

To support you throughout your project, you will have a dedicated scientific project manager to discuss technical data, assist with troubleshooting, and coordinate the schedule to ensure the best chance of success. We offer regularly scheduled meetings to ensure a clear and timely flow of information.

## Products of the highest quality

Central to managing and improving quality is our use of a quality management system that both helps us record and monitor appropriate data and control changes in our manufacturing processes.

- Our RabMAb<sup>®</sup> manufacturing site is ISO 9001:2015 certified, and all other sites follow the same guidelines
- Our IHC reagents site in California is registered with USFDA and operated under USFDA Quality System Regulation (21 CFR Part 820) and in compliance with ISO 13485:2003. In addition, this facility and its quality system has a Medical Device Manufacturing License granted by California Department of Public Health (CDPH)
- We conduct regular internal audits and welcome customer audits from our industrial partners



# Contact us

To discuss your requirements,  
contact us at:

**[service@abcam.com](mailto:service@abcam.com)**

