

# What are High-Affinity Probes?

High-Affinity Probes (HAPs) are engineered molecular tools designed for *in situ* detection and quantification of therapeutic binding sites on patient tumor tissue. They enable precise assessment of target accessibility, binding site density, and spatial distribution, providing critical insights for biomarker validation, patient stratification, and therapy optimization. HAPs are compatible with a wide range of therapeutics, including small molecules, monoclonal antibodies, bispecific antibodies, ADCs, radioligands, and CAR-T cell targets, making them versatile solutions for advancing precision oncology.

## **Key Benefits of HAPs**



Quantitative Target Validation: Confirm therapeutic target accessibility and binding affinity with precision.



**Fast Turnaround and Integration:** Technology allows for rapid iteration and validation. Integrates seamlessly into standard pathology workflows to meet diagnostic requirements.



**Biomarker co-development:** Clinically predictive HAPs can be converted into CDx-ready monocloncal antibodies.

# Advancing Drug Development with High-Affinity Probe Technology

#### Specific Examples of HAP Products by Stage

High-Affinity Probes (HAPs) offer a wide range of applications across the drug development lifecycle. Here are just a few examples of how HAP-based products can support different stages:



**Preclinical Development:** HAP-Based Preclinical Tumor Profiling - Validate therapeutic target accessibility and binding site density in preclinical models or primary tumor samples to guide your clinical trial design.



Clinical Trials: HAP-Based Clinical Trial Stratification -Stratify patients based on the presence and accessibility of drug targets in tumor tissues to enrich trial populations pro- or retrospectively.



**Post-Marketing:** HAP-Based Personalized Therapy Identification – Use HAPs to assess drug-target interactions in tumor samples from patients with recurrent or refractory disease, providing tailored treatment recommendations and exploring new therapeutic opportunities.

Discover how High-Affinity Probes (HAPs) can transform your drug development process.

Contact us at info@bav.bio or visit www.bav.bio to learn more and explore how HAP technology can support your pipeline or asset.

## Contact us:





