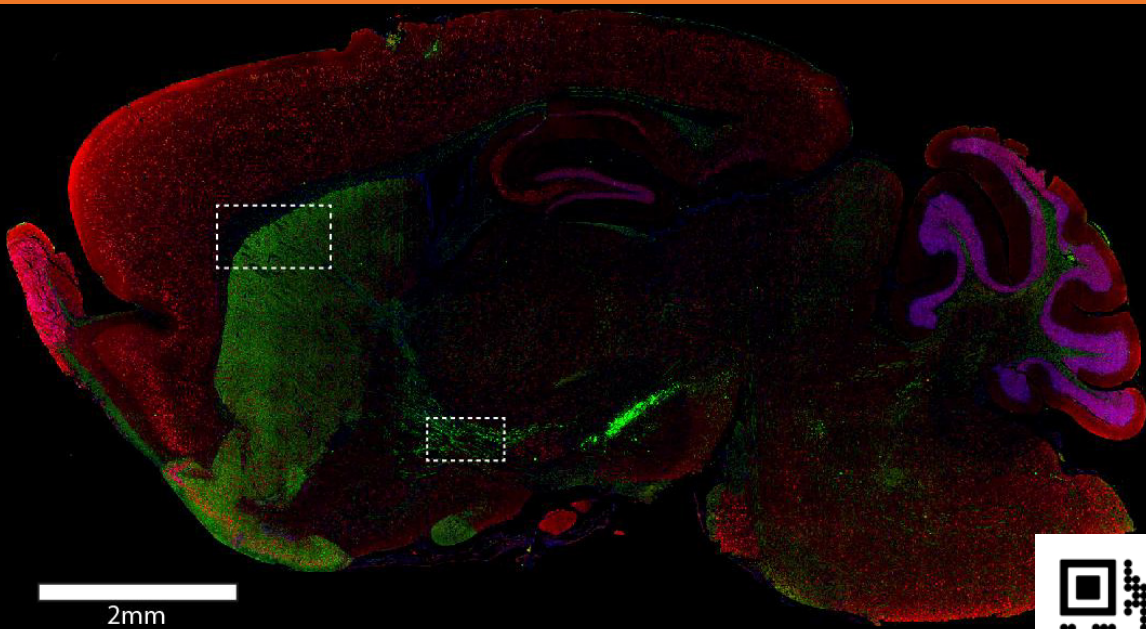


AMPLIFY THE DETAIL

AffiniPure-VHH™ Secondary Antibodies



Focus: Imaging
with Jackson ImmunoResearch



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JIR AffiniPure-VHH™ Secondary Antibodies enable high-precision staining by combining the exquisite specificity of our minimally cross-reactive antibodies with the unique penetrative capabilities of the small VHH fragment format.

Read our article to explore how they behave in mouse brain tissue.

AMPLIFY THE DETAIL

AffiniPure-VHH™ Secondary Antibodies



Staining any tissue requires experimental considerations; sometimes, it's about the potential for crossreactivity, sometimes it's the permeability of the reagents, and sometimes it's about finding the right reporter molecule. When staining multiple targets, all three considerations are critical to generating results that illustrate clear, impactful, and visually appealing findings. Whether you want to determine protein expression, where it's localized, or if it colocalizes with another molecule, JIR AffiniPure-VHH™ Secondary Antibodies can help you amplify the detail.

Polyclonal Antibodies Let You Amplify the Detail

Polyclonal AffiniPure-VHH™ Secondary Antibodies offer excellent sensitivity through signal amplification. As seen in **Figure 2**, polyclonal antibodies achieve higher labeling efficiency than monoclonal antibodies by binding to multiple locations across the primary antibody, generating a brighter signal.

Min-X for Exquisite Differentiation

When visualizing multiple targets, cross-adsorbed antibodies allow you to build up a multicolored image without worrying about the off-target signal from cross-reacting antibodies. AffiniPure-VHH™ Secondary Antibodies are available cross-adsorbed (min X) to commonly used species which can reduce background and enhance specificity, enabling you to experience exquisite differentiation of target proteins.

Small Means Better Penetration

One-tenth the size of conventional antibodies, these tiny antibody fragments offer excellent tissue penetration allowing you to reduce incubations or access targets that require specialized permeabilization treatment. Nanobodies* lack an Fc effector domain which allows enhanced clearance and aids live-cell imaging techniques such as Immuno-PET.

Better Choice – Choose From the Whole Spectrum

Don't be limited by conjugate availability; when a directly conjugated antibody isn't available, JIR AffiniPure-VHH™ Secondary Antibodies give you access to a range of dyes without compromising resolution.

We offer DyLight, Alexa Fluor®, and Cyanine™ dyes covering the spectrum, so you can choose suitable conjugates for your filter set.

Fluorophores	Excitation Peak	Emission Peak
DyLight™ 405	400 nm	421 nm
Alexa Fluor® 488	493 nm	519 nm
Fluorescein, FITC/DTAF	492 nm	520 nm
Alexa Fluor® 555	552 nm	572 nm
R-Phycoerythrin, R-PE	many, 488 nm	580 nm
Rhodamine Red™-X, RRX	570 nm	590 nm
Alexa Fluor® 568	577 nm	602 nm
Alexa Fluor® 594	591 nm	614 nm
Alexa Fluor® 647	651 nm	667 nm
Indodicarbocyanine, Cy™5	650 nm	670 nm

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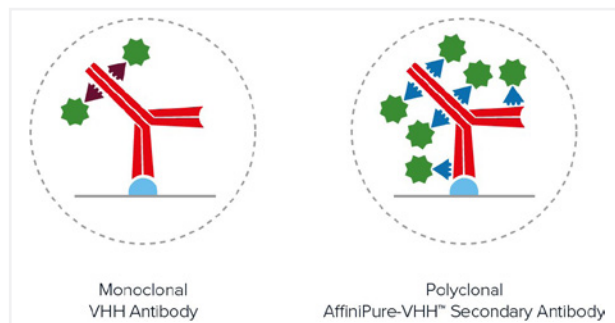


Figure 2

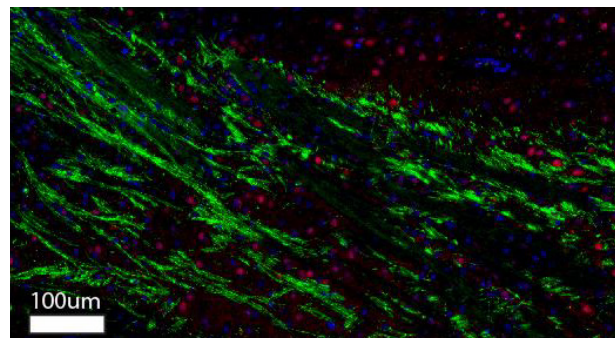
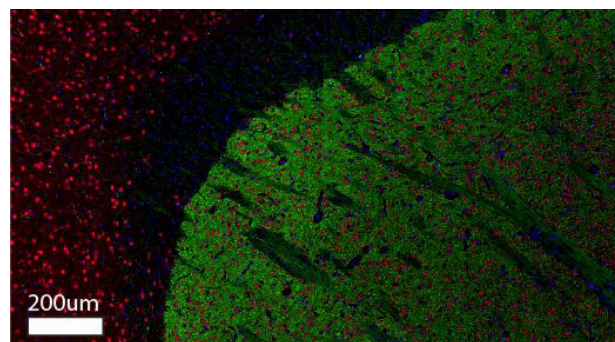


Figure 3: IHC of mouse brain. Sagittal sections of brain were blocked with 5% normal alpaca serum. Dopaminergic and noradrenergic neurons were stained with (green) using rabbit Anti-Tyrosine Hydroxylase followed by Alexa Fluor® 488 AffiniPureVHH™ Anti-Rabbit IgG (H+L). Mature neurons were identified in red using mouse Anti-NeuN followed by Cy3 AffiniPure-VHH™ Anti-Mouse IgG (H+L), nuclei were visualized with DAPI (blue). Images by UNC's Histology Research Core Facility.

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