



# Advancing Nanobody Discovery and Development

## —MonoRab™ Anti-VHH Antibody

VHH nanobodies are powerful tools in genetic engineering, capable of being customized into monovalent, bivalent, bispecific, or even multivalent antibodies. Their application in medical diagnostics, therapy, and molecular imaging shows great potential, particularly in tumor therapy.

### GenScript's MonoRab™ Platform

GenScript's MonoRab™ platform provides a comprehensive suite of high-performance tools for identifying target-specific nanobodies. The anti-VHH antibodies are innovative products engineered for exceptional specificity, versatile applicability, and high quality.



#### Exceptional Specificity

No cross-reactivity with mouse, rat, rabbit, goat, or human immunoglobulins, enabling broad detection capabilities



#### Versatile Applicability

Designed to recognize camelid and humanized VHHs



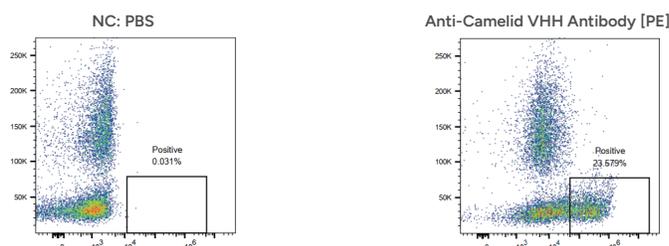
#### High Quality and Consistency

Monoclonal manufacturing ensures top-tier performance and reliability.

### Application Data

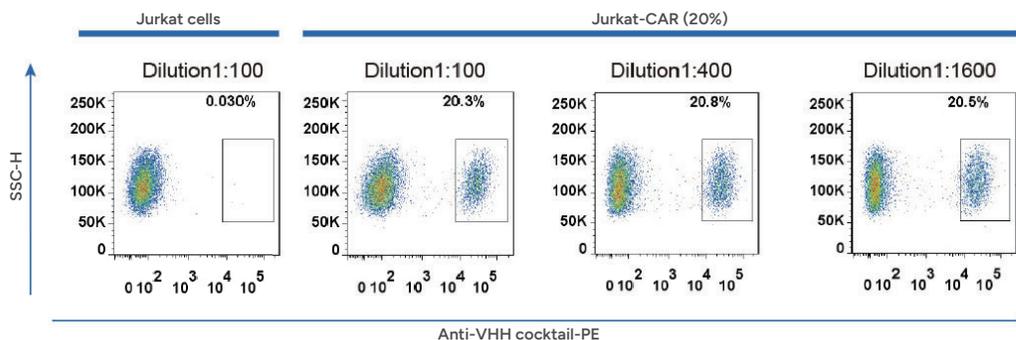
#### ▼ Sorting PBMCs Expressing VHH Antibody

FACS sorting of VHH+ PBMCs from non-immunized camels using 2 µg of MonoRab™ Rabbit Anti-Camelid VHH Cocktail [PE] (GenScript, A02018) demonstrates approximately 23.579% VHH+ PBMCs, confirming the high specificity of A02018 for VHH+ PBMCs.



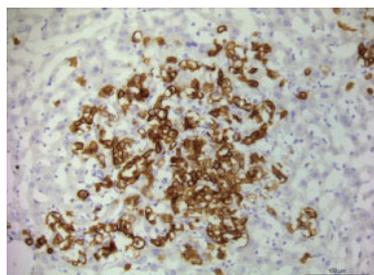
#### ▼ Characterization of CAR-T Cells

GenScript's Anti-VHH antibody demonstrates exceptionally high specificity for CAR-T cells with an extracellular VHH domain. Antibodies at various dilution ratios can accurately detect the number of VHH CAR-T cells in a sample.

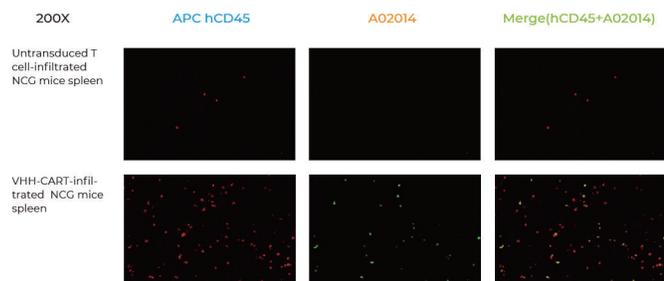


## ▼ Localization of VHH-Based CAR-T Cells

MonoRab™ Anti-Camelid VHH Cocktail specifically binds to the VHH-infiltrated liver of PDX mice (left) and VHH-transduced CAR-T cells infiltrating the spleen of NCG mice (right). Both the immunohistochemistry (left) and immunofluorescence (right) analyses display the detection and distribution of CAR-T cells in tissues.



Primary Ab: MonoRab™ Rabbit Anti-Camelid VHH Cocktail (A02014)  
Secondary Ab: Biotin-labeled Anti-Rabbit IgG (H+L)

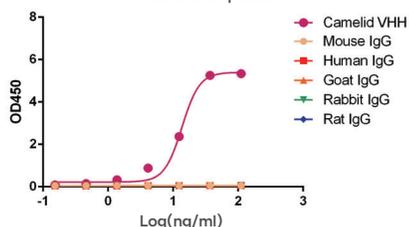


Primary Ab: MonoRab™ Rabbit Anti-Camelid VHH Cocktail (A02014)  
Secondary Ab: Anti-Rabbit IgG (H+L) [Alexa Fluor 488] (green)

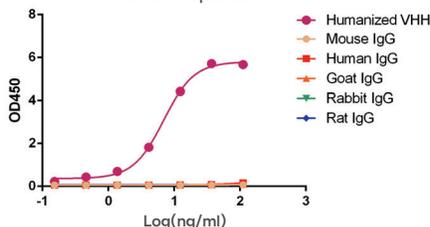
## ▼ Anti-VHH Antibody Specificity

MonoRab™ Rabbit Anti-Camelid VHH (A01860) binds camelid VHH, Anti-Humanized VHH (A02165) binds humanized VHH, and Anti-Camelid VHH Cocktail (A02014) binds both. These antibodies do not cross-react with IgG from mouse, rat, rabbit, goat, or human, making them ideal for quantitative drug analysis.

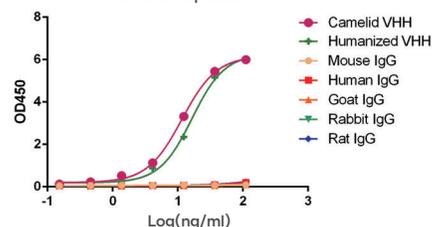
Cross reactivity of A01860 with IgG of different species



Cross reactivity of A02165 with IgG of different species



Cross reactivity of A02014 with IgG of different species



## Selection Guide

Antibody Description	Species Specificity	Unconjugated	Conjugated						
			HRP	Biotin	iFluor 488	iFluor 555	iFluor 647	PE	FITC
Anti-Camelid VHH, mAb	Llama, Camel, Alpaca	A01860	A01861	A01995	A01862	A01863	A01994	A02227	A02226
Anti-Humanized VHH, mAb	Humanized, Llama, Camel, Alpaca	A02165	A02167	A02166	A02168	A02169	A02170	A02171	A02172
Anti-Camelid VHH, mAb Cocktail	Llama, Camel, Alpaca	A02014	A02016	A02015	A02021	A02020	A02019	A02018	A02017

## Anti-VHH Derivative Products

Lot. No	Product Name
L00905	MonoRab™ Anti-Camelid VHH Affinity Resin
L00946	MonoRab™ Rabbit Anti-Camelid VHH Antibody Plate (Clear, 8×12 strip)
L00951	MonoRab™ Anti-Humanized VHH Affinity Resin FF
L01008	MonoRab™ Rabbit Anti-VHH Microbeads
L01033	VHH Affinity Ligand ELISA kit
L01034	MonoRab™ Anti-VHH Affinity Magnetic Beads