

Influenza A Nucleocapsid Antibodies: Validation and Performance

Antibodies Overview

Our specialized antibodies are meticulously designed to target the Nucleocapsid Protein of Influenza A viruses. These antibodies are vital tools that enable accurate detection and characterization of Influenza A infections, crucial for diagnostic and research applications.

Epitope Binning Insight: Unraveling Binding Specificity

Epitope binning is vital for selecting the right antibody pairs in immunoassays. The data below highlights how selecting antibody pairs from distinct epitope bins enhances assay accuracy, sensitivity, and reliability. Antibodies from different bins are less likely to compete or interfere with each other's binding, resulting in minimized background noise and improved precision. This optimized combination of antibodies ensures harmonious interactions, ultimately elevating the overall quality of the immunoassay results.

		Second Antibody																									
		FluAH1-1A1	FluAH1-1F1	FluAH1-3G7	FluAH3-1D2	FluAH1-3B3	FluAH3-1G6	FluAH3-1C7	FluAH3-1F4	FluAH3-3F4	FluAH3-3E5	FluAH1-1A3	FluAH1-1E3	FluAH1-1G6	FluAH1-3C2	FluAH1-3G8	FluAH1-3D5	FluAH1-1A6	FluAH1-3E6	FluAH1-1D5	FluAH3-1G5	FluAH1-1D4	FluAH1-3D6	FluAH3-1D5	FluAH1-3E7	FluAH1-1E7	
First Antibody	FluAH1-1A1	■	■	■																							
	FluAH1-1F1	■	■	■																							
	FluAH1-3G7	■	■	■																							
	FluAH3-1D2				■	■	■	■	■	■	■																
	FluAH1-3B3				■	■	■	■	■	■	■																
	FluAH3-1G6				■	■	■	■	■	■	■																
	FluAH3-1C7				■	■	■	■	■	■	■																
	FluAH3-1F4				■	■	■	■	■	■	■																
	FluAH3-3F4				■	■	■	■	■	■	■																
	FluAH3-3E5				■	■	■	■	■	■	■																
	FluAH1-1A3											■	■	■	■												
	FluAH1-1E3											■	■	■	■												
	FluAH1-1G6											■	■	■	■												
	FluAH1-3C2											■	■	■	■												
	FluAH1-3G8														■	■											
	FluAH1-3D5														■	■											
	FluAH1-1A6																■	■	■	■	■	■				■	
	FluAH1-3E6																■	■	■	■	■	■				■	
	FluAH1-1D5																■	■	■	■	■	■				■	
	FluAH3-1G5																■	■	■	■	■	■				■	
	FluAH1-1D4																■	■	■	■	■	■				■	
	FluAH1-3D6																■	■	■	■	■	■				■	
	FluAH3-1D5																■	■	■	■	■	■				■	
	FluAH1-3E7																		■	■	■	■				■	
	FluAH1-1E7																									■	

Figure A: Analysis of epitope characterization for antibodies targeting the Influenza A nucleocapsid protein. The antibodies are categorized into groups based on whether they bind or do not bind. Additionally, the catalog number of each antibody is presented.

Potency in Action: EC50 Data

The EC50 data, signifying the concentration at which an antibody attains 50% maximum binding, holds significant importance within immunoassays. This measure provides a direct glimpse into the antibody's strength, sensitivity, and binding affinity—key factors for optimizing assays. With our antibody displaying a lower EC50 value, denoting elevated sensitivity and affinity, it exhibited robust binding efficacy even at a minimal concentration. This data aids in refining assay conditions, ensuring precise detection even in scenarios involving low-concentration analytes. By steering the choice of optimal antibody concentration and enhancing sensitivity, the EC50 data bolsters the accuracy and efficiency of our immunoassay, reinforcing its trustworthiness in practical applications.

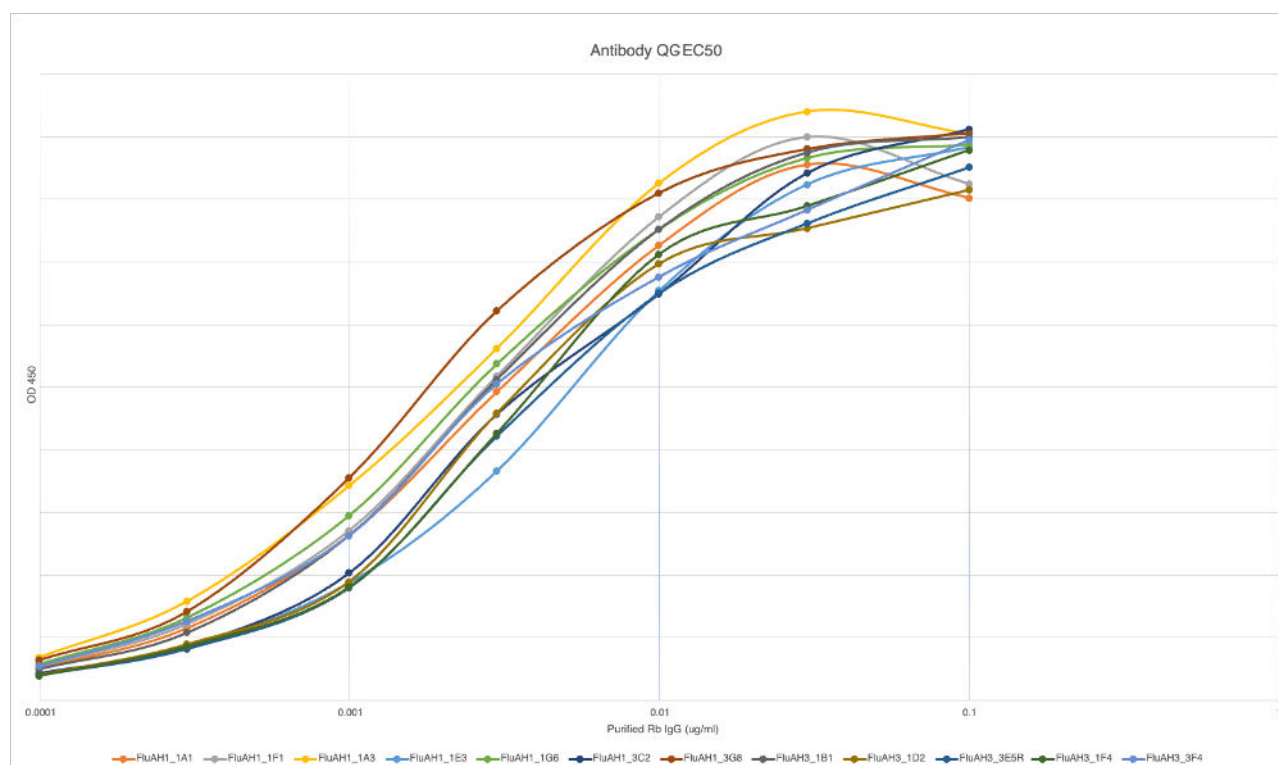


Figure A: EC50 assay of anti-NP FluA rabbit monoclonal antibodies. Full-length recombinant nucleocapsid protein was coated at 2 $\mu\text{g/ml}$. HRP conjugated goat anti-rabbit IgG antibody used for detection at 1:10,000. Data was modeled and analyzed with GraphPad-Prism.

Rigorous Quality Control ISO 17025:2017

We make sure our IVD grade antibodies meet the highest standards, and our ISO-controlled production process plays a key role. At every step, from making the antibodies to purifying them, we rigorously test to ensure they are consistent, reliable, and perform well. Following ISO standards means we have set procedures in place that help us maintain consistent quality, making sure every batch is just as good as the last. Our commitment to this process shows how dedicated we are to providing you with antibodies you can trust for your immunoassay need

About Influenza A

Influenza A recombinant rabbit monoclonal antibody—an innovative leap in viral diagnostics. With Influenza A's genetic variability, accurate detection is vital. Our technology, SPIN® harnesses rabbits' immune systems, yielding antibodies with unmatched specificity, high affinity, and broad cross-reactivity. These antibodies excel in recognizing diverse epitopes, offering stability and adaptability. This advancement transforms Influenza A diagnostics, enhancing our ability to combat evolving strains, bolstering global surveillance, and contributing to improved public health outcomes.

