

# **Q**<sup>2</sup> Solutions

## Vaccine Laboratory Services

Q<sup>2</sup> Solutions vaccine laboratory services are supported by global, comprehensive central laboratory services to meet your development needs across the entire vaccine development life cycle. Our extensive test menu includes testing services for vaccine and anti-infective efficacy and immunogenicity. With over 35 years of experience in clinical vaccine development, our experts help you select the custom assay level most suited to the clinical phase of your compound: **Fit-for-purpose**, **Qualified**, or **Validated**.

We offer our experience in the following:

Vaccine/pathogen targets			
Adenovirus	Influenza (seasonal and pandemic strains)	Tetanus	
Chikungunya	Japanese encephalitis virus	Vaccinia	
Cholera	Measles	Varicella zoster virus	
Dengue	Mumps	West Nile virus	
Ebola virus	Norovirus	Yellow Fever virus	
H. influenzae type b	Respiratory syncytial virus	Zika virus	
Hepatitis B	Rubella		
Human papilloma virus	SARS-CoV-2		

Platforms and assay methods			
ELISA	NexGen Sequencing	Viral culture – conventional	
Enzyme-linked lectin assay (ELLA)	PCR, qualitative and quantitative	Viral culture – quantitative (TCID50)	
Hemagglutination inhibition assay (HAI)	RT-PCR, qualitative and quantitative	Viral neutralization with immunostaining	
Luminex platform	Plaque reduction neutralization (PRNT)	Viral neutralization with replicating viral particles (RVP)	
Microneutralization	Vibriocidal assay		

#### **Examples of assay development experience**

#### Adenovirus

- ELISA
- Type-specific microneutralization
- Vector-specific quantitative PCR (qPCR)

#### Dengue virus

- IgG/IgM/NS1 ELISA
- Serotype-specific neutralization (multiple platforms)
- Serotype-specific quantitative RT-PCR

#### Influenza

- Hemagglutination agglutination (HAI)
- Microneutralization
- Neuraminidase inhibitory antibody (ELLA)
- Influenza A/B detection and subtyping (RT-PCR)
- Influenza strain identification by NexGen Sequencing
- Influenza culture and viral expansion
- Quantitative viral culture (TCID50)

#### SARS-CoV-2

- · Multiplex Antibody Assay
- Viral Neutralization Assay



Infectious agents/test method	
Adenovirus Serotypes 4 and 7 Microneutralization (MN)	Influenza A/B/ RSV by Qualitative RT-PCR
Chikungunya Virus Microneutralization*	Influenza A/B Strain Sequencing (NGS Sequencing)*
Dengue IgG ELISA	Influenza Hemagglutination Inhibition (HAI) (Seasonal and pandemic strains)
Dengue IgM ELISA	Influenza Neuraminidase Inhibitory Antibody Detection by ELLA – N1 antigen*
Dengue IgG/IgM ELISA	Influenza Nueraminidase Inhibitory Antibody Detection by ELLA – N2 antigen*
Dengue IgG/IgM/NS1 ELISA	Influenza Quantitative Culture (TCID50)*
Dengue NS1 ELISA	Influenza Viral Expansion — MDCK
Dengue Virus Focus Reduction Neutralization (FRNT)	Influenza Viral Expansion – RhMK
Dengue Virus Qualitative RT-PCR	Influenza Virus Microneutralization (MN)*
Ebola Zaire ELISA (FANG ELISA)	MMRV Quantitative IgG by Luminex®
Ebola Zaire Plaque Reduction Neutralization Test (PRNT) (Not Wild type)*	Norovirus Histoblood Group Antigen Blocking ELISA*
Haemophilus influenzae Tybe b (Hib) IgG ELISA	Ross River Virus (RRV) IgG ELISA
Quantitative HBV Surface Antibody IgG (Vitros)	SARS-CoV-2 Multiplex Antibody Assay
Influenza A H1/H3 Subtyping by RT-PCR	SARS-CoV-2 Viral Neutralization Assay
Influenza A/B Conventional Culture – MDCK	Vaccinia Plaque Reduction Neutralization Test (PRNT)*
Influenza A/B Conventional Culture — RhMK	West Nile Virus Microneutralization (MN)
Influenza A/B RNA by Qualitative RT-PCR	Yellow Fever Plaque Reduction Neutralization Test (PRNT)*
Influenza A/B RNA by Quantitative RT-PCR	Zika Virus Microneutralization*

 $<sup>{}^{\</sup>star}\text{Custom assay development and validation available for these assays to meet your unique vaccine needs}$ 

To learn about our comprehensive services visit: www.Q2LabSolutions.com/Vaccines

### **Contact us**

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