



## Coxsackie

# Immunoenzymatic kits for the detection of Coxsackie B

**ELISA** kits are optimized and validated for detection of IgA, IgG and IgM antibodies in human serum or plasma



Kit for professional use.  
For research use only.



## Introduction

**Coxsackievirus** group B1-B6 is a member of the family *Picornaviridae*, genus *Enterovirus*. *Enterovirus* (EV) is a single-stranded RNA virus, named after the enteric or gastrointestinal route of transmission. Enteroviruses are a major cause of the viral prodrome, which includes fever, fatigue, malaise, myalgia, gastrointestinal symptoms such as nausea, vomiting, diarrhoea and abdominal pain, pancreatitis leading to beta cell destruction and type 1 diabetes mellitus, viral meningitis in adults, infants and children under the age of five, encephalitis in all age groups with a slight tendency towards children and young adults, pleurodynia most commonly in adults. Of the 21 viruses that can cause cardiovascular disease, Coxsackie B virus is the most common cause of viral myocarditis, particularly in newborn babies and younger children. Infection usually occurs during the warm summer months.

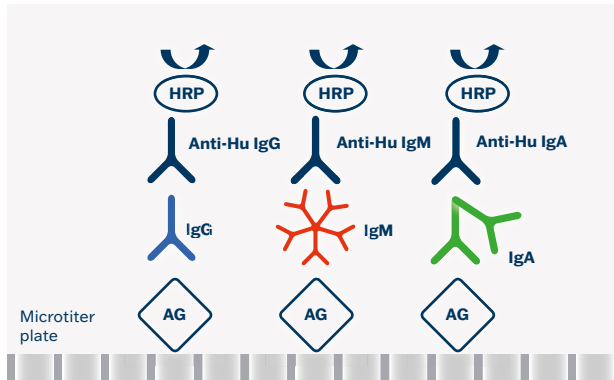
## Antibody Response

The neutralizing antibody response typically appears from the second week after infection and reaches its maximum between the fourth and fifth week. IgA class antibodies appear first; they are often observed in children and show their highest levels in the fourth week of infection. IgM class antibodies emerge between the second and fourth week, while IgG class antibodies become measurable from the third week onward and may persist for several years.

# ELISA

## Test Principle

The assays are based on a sandwich type of ELISA method.



## Protocol Summary

Step	Test steps
	<b>1.</b> Dilute samples – serum/plasma 1:101 (10 µl + 1 ml)
	<b>2.</b> Pipette calibrators and diluted samples – 100 µl – blank = empty well
	<b>3.</b> Incubate at 37 °C for 30 min
	<b>4.</b> Aspirate and wash the wells 5x
	<b>5.</b> Pipette Conjugate – 100 µl – blank = empty well
	<b>6.</b> Incubate at 37 °C for 15 min
	<b>7.</b> Aspirate and wash the wells 5x
	<b>8.</b> Pipette Substrate (TMB-Complete) – 100 µl – Including blank
	<b>9.</b> Incubate at 37 °C for 15 min
	<b>10.</b> Pipette Stop Solution – 100 µl – Including blank
	<b>11.</b> Read colour intensity at 450 nm

## Antigens

Recombinant *Coxsackievirus* B1-B5 antigen

## Application

- Screening test for the detection of specific IgA, IgG and IgM antibodies in human serum or plasma
- Differential detection of Enteroviruses in the sample

## User Comfort

- Ready-to-use components
- Colour-coded components
- Interchangeable components
- Breakable colour-coded microplate strips
- CUT-OFF and calibrators included
- Semiquantitative evaluation of results (Index of Positivity) or quantitative evaluation of results (U/ml)

## Advantages

- High reproducibility
- High dynamics of antibody response
- Identical assay procedure
- Short total assay time
- Ready for automation
- Customer support



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## Ordering Information

ELISA

<b>Cat. No.</b>	<b>Product</b>	<b>No. of Wells</b>
CoXA96	EIA Cocksackie IgA	96
CoXG96	EIA Cocksackie IgG	96
CoXM96	EIA Cocksackie IgM	96



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