

# Yersinia enterocolitica

## recomWell Yersinia IgG recomWell Yersinia IgA recomWell Yersinia IgM

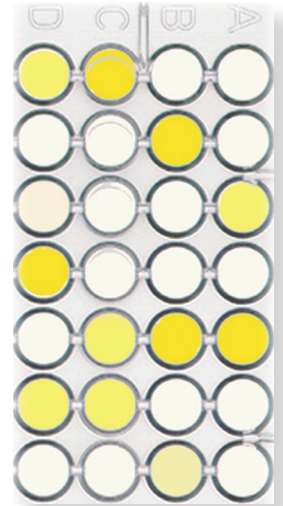
Enzyme immunoassay with recombinant antigens for the detection of IgG, IgA or IgM antibodies against *Yersinia enterocolitica* and *Yersinia pseudotuberculosis*

In the past years, *Yersinia enterocolitica* has become increasingly important as an intestinal bacterium that is pathogenic for human beings. This organism is transmitted orally by contaminated water or food. Typical symptoms of an acute Yersinia infection are diarrhoea, stomach ache, and fever.

Complications such as reactive arthritis, erythema nodosum and other rheumatic diseases can occur, especially with HLA-B27 carriers. These patients typically show high and persistent IgA titers against Yersinia antigens.

recomWell Yersinia tests are quantitative in vitro tests for the detection and safe identification of antibodies against plasmid-coded virulence proteins. The antigens (YOPs - Yersinia outer membrane proteins) used in these tests are expressed only by strains of Yersinia that are pathogenic for human beings.

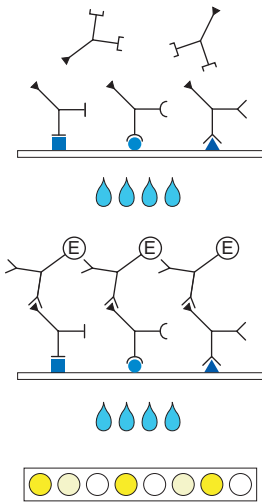
The use of recombinant antigens guarantees optimum representation of the immunodominant YOPs in the absence of cross-reacting proteins. As a second major advantage, the clarification of Yersinia induced reactive arthritis is supported by separate detection of antibody classes IgG, IgA and IgM.



### Product Advantages

- Recombinant antigens, therefore
  - Highest sensitivity and specificity
  - No cross reactions
  - Excellent discrimination between negative and positive results
  - **Use of recombinant YOPs: All infections with Yersinia pathogenic for man are detected**
- Separate detection of IgG, IgA and IgM antibodies possible
- Identical procedure for IgG, IgA and IgM determination
- No RF absorbance necessary in the case of IgM determination
- Easy to quantify
- Easy test procedure; automation possible
- Test procedure and reagents identical in all MIKROGEN ELISA - reagents exchangeable
- Break-a-parts: single simple examination possible
- CE label: The recomWell Yersinia tests meet the high standard of the EC directive 98/79/EC on in vitro diagnostic medical devices.

## Test Principle and Procedure



Indirect sandwich test.

Recombinant antigens are bound to the solid phase.

**1<sup>st</sup> Incubation** Add patient samples diluted 1:101 (sample 10 µl of serum or plasma), incubate for **1 h at 37 °C**.

wash 4 times

**2<sup>nd</sup> Incubation** Add peroxidase conjugated anti-human IgG, IgA or IgM antibodies, incubate **30 min at 37 °C**.

wash 4 times

**Color reaction** Add ready-to-use TMB solution and incubate **30 min** at room temperature. **Stop the substrate solution with H<sub>3</sub>PO<sub>4</sub>** and measure the extinction at 450 nm.

## Evaluation

### Distribution of reactivity

	Number	Findings	IgG	IgA	IgM
Yersinia sera with positive pre-findings (suspect of Yersinia induced reactive arthritis)	29	positive	100 %	72 %	21 %
		equivocal	0 %	7 %	7 %
		negative	0 %	21 %	72 %
Blood donor sera	217	positive	32 %	9 %	1 %
		equivocal	3 %	2 %	1 %
		negative	65 %	89 %	98 %
		<b>prevalence</b>	<b>35 %</b>	<b>11 %</b>	<b>2 %</b>

### Article-No.

4604	<b>recomWell Yersinia IgG</b> Reagents for 96 determinations
4606	<b>recomWell Yersinia IgA</b> Reagents for 96 determinations
4605	<b>recomWell Yersinia IgM</b> Reagents for 96 determinations

### Storage and Shelf life

At +2°C - +8°C  
18 months from the date of production