

Premi® Test

Art. No. R3900

- **Fast**
Determination of antibiotic residues
in less than 4 hours
- **Easy**
Simple handling and no extraordinary
cost intensive equipment needed
- **Sensitive**
Detects antibiotic residues in line with
EU Maximum Residue Limits (MRL's)
- **Reliable**
AOAC and AFNOR certified



Premi[®]Test

screening test for the detection of antibiotic residues in animal products in less than 4 hours



fast

easy

sensitive

● Premi®Test offers easy and fast screening detection of antibiotic residues in animal food products.

When medication is given to farm animals by injection or through their feed it can leave residues in the muscle, kidney or liver tissue.

The Premi®Test antibiotic residue screening test detects a broad spectrum of most relevant anti microbiological compounds in meat (beef, pork, poultry), fish, shrimps, eggs, feed and urine. The easy to implement and easy to use test enables on-site screening by farmers, slaughterhouses, meat-processors, fisheries etc. In contrast to conventional methods, reliable results are

available in less than four hours and may be objectively determined using the Premi®Scan system. Major applications are the analysis of:



Additional application protocols available for: liver, kidney, honey, serum/plasma, cattle/pork urine and poultry/pork feed.

(For serum/plasma and urine Premi®Test Urine is required for pre-treatment)

● Validations



Usage in surveillance programs e.g. France (in legislation). German (conform directive 2002/657/EC), Russia (no.14.6/01921), Belgium, Slovak Republic, Czech, Serbia, Hong Kong, Taiwan, Albania and South Africa. Selected in China as the national standard test by the Shanghai enter-exit Inspection and Quarantine Bureau.









● Kits and equipment

Premi®Test is available as:



- Premi®Test 100 (R3900): 100 Test-Ampoules or
- Premi®Test 25 (R3925): 25 Test-Ampoules
- Premi®Test Starter Kit (ZPT2000): meatpress, incubator, timer, scissors and briefcase.
- Multipress (ZPT2012): Allows to squeeze 12 samples at once.
- Premi®Scan (ZPT2010): Software to “read” the colour of the ampoules after incubation. The PremiScan is delivered with a Kodak® Colour chart, 2 templates and a black cloth.
- Premi®Test Urine (R3920): Ampoules for pre-treatment of urine and blood samples.

● **How to use Premi®Test for the detection of antibiotic residues in meat**

Test procedure

	<p>1 Cut of the required number of ampoules with a pair of scissors; be careful not to damage the foil of remaining ampoules.</p>		<p>5 Flush the meat juice away by washing the test twice with demineralised water and carefully removing the water from the test.</p>
	<p>2 Take approximately 2 cm³ of lean meat and use a meat press to extract about 250 µl of meat juice.</p>		<p>6 Close the test ampoule with foil.</p>
	<p>3 Pipette 100 µl of meat juice slowly onto the agar in the ampoule. Do not distort the agar.</p>		<p>7 Preheat the heating block incubator at the required temperature of 64.0 °C / 147 °F. Put the ampoule in the Incubator for approximately 3 hours.</p>
	<p>4 Allow to stand at room temperature for 20 minutes for a prediffusion.</p>		<p>8 Withdraw the ampoule from the block heater after the negative control changed color.</p>

Determination of results

	<p>Colour change into yellow</p> <p>↓</p> <p>Bacterial growth</p> <p>↓</p> <p>Sample is negative for antibiotic residues</p>		<p>No colour change - purple</p> <p>↓</p> <p>No bacterial growth</p> <p>↓</p> <p>Sample is positive for antibiotic residues</p>
---	--	--	---

● Premi®Test detection limits in different animal food products

Substance	Chicken	Pork	Beef	Egg	Shrimp	Honey (with extraction)
β-lactams						
Amoxicillin	5	5	5	5	15	<12.5
Ampicillin	5	5	5	5		25
Penicillin-G	2,5	2,5	2,5	2,5	5	<12.5
Cloxacillin		>100		100		100
Oxacillin		100				75
Dicloxacillin						<75
Cephalosporins						
Cefquinome	75	100	100			
Ceftiofur	100	200	100	400		
Macrolides						
Tylosin	50	25 - 50	50	50		
Erythromycin	100	100	100	50	100	
Lincomycin	100	100	100			
Tilmicosin	50	50	50			
Spiramycin	1000	1000	1000			
Tetracyclines						
Chlortetracycline	100	100	100	600	1000	80
Oxytetracycline	100	100	100	400	100	75
Doxycycline	100	100	100	200		50
Tetracycline		50		200		50
Demeclocycline		50				
Sulphonamides						
Sulphamethazine	75	50-100	100	25		75
Sulphadiazine	75	50-75	75	25	50	75
Sulphamethizole		50-100				75
Sulphaguanidine	<200	150	<200			75
Sulphadimethoxine		25 - 50	<100		50	75
Sulphapyridine	<50	50	<100			75
Sulphamethoxy-pyridine	<100	25				75
Sulphisoxazole	<100	25				50-75
Sulphathiazole	<100	25				<50
Sulphachloropyridazine	<100	25				<50
Sulphamerazine	<100	25	<100			75
Sulphanilamide	<100	150				75
Sulphaquinoxaline	<100	50	<50			75
Sulphametiozole	<100		<50			
Sulfamethoxazole				25		

Substance	Chicken	Pork	Beef	Egg	Shrimp	Honey (with extraction)
Aminoglycosides						
Gentamicin	100	100	100	100		
Streptomycin	1500	1500	3000	1000		
Neomycine	300	300	300	300	200	
Dihydrostreptomycin						
Quinolones						
Oxolinic acid						>10000
Enrofloxacin	>600	>600	>600			
Flumequine	>100	>100	>100			
Polypeptides						
Virginiamycin	500	500	500			
Bacitracin	500	500	500			
Zn-bacitracin	1250					
Colistin	>1000					
Ionophores						
Salinomycin	1000					
Monensin	1250					
Oligosaccharides						
Avilamycin	>5000					
Others						
Florphenicol	100	100	100			5000
Chloramphenicol	2500	2500	2500	2500		
Trimethoprim	50					
Narasin	1250					
Amprolium	>2000					
Phosphomycine	>1500					
Ronidazole						>5000
Furazolidone	>1500					

Premi[®]Test: Kits and Equipment

Antibiotics

Product	Description	No. of Tests	Code No.
Ampoules			
Premi [®] Test 4x25	Microbial screening test for the detection of antibiotic residues in various animal food products.	100 ampoules	R3900
Premi [®] Test 25		25 ampoules	R3925
Premi [®] Test Urine	Pre-treatment ampoules for the detection of antibiotic residues in cattle/pork urine and serum/plasma.	20 ampoules	R3920

Equipment / Software / Accessories

Product	Description	No. of Tests	Code No.
Equipment			
Starter kit	Accessories for the performance of Premi [®] Test: meat press, incubator, timer and pair of scissors.	1	ZPT-2000
Multipress	Allows to squeeze 12 samples at once.	1	ZPT-2012
Premi [®] Scan	Software to read the colour of Premi [®] Test ampoules.	1	ZPT-2010

Premi[®]Test is manufactured by DSM PremiTest B.V. The Netherlands

R-Biopharm AG
 An der neuen Bergstraße 17
 64297 Darmstadt, Germany
 Phone: +49 (0) 61 51 - 81 02-0
 Fax: +49 (0) 61 51 - 81 02-40
 E-mail: info@r-biopharm.de



Premi[®]Test: Detection limits

Substance	Chicken	Pork	Beef	Egg	Eel	Salmon	Trout	Shrimp	Feed (Pigs)	Feed (Poultry)	Urine	Pork kidney (extraction)	Honey (extraction)
β-lactams													
Amoxicillin	5	5	5	5	5	5	5	15			5	5	<12.5
Ampicillin	5	5	5	5	5	5	5				5	2.5 - 5	25
Penicillin-G	2.5	2.5	2.5	2.5	5	5	5	5	10	10	5	2.5	<12.5
Cloxacillin		>100		100							50		100
Oxacillin		100										<50	75
Dicloxacillin													<75
Cephalosporins													
Cefquinome	75	100	100		200	200	200						
Ceftiofur	100	200	100	400	200	200	200				100	<250	
Cephapirin											100		
Macrolides													
Tylosin	50	25 - 50	50	50	75	100	75		400	200	50		
Erythromycin	100	100	100	50	200	200	200	100			100		
Lincomycin	100	100	100		200	300	200				100	<300	
Tilmicosin	50	50	50								50		
Spiramycin	1000	1000	1000		750	1000	750						
Tulathromycin											18000		
Tetracyclines													
Chlortetracycline	100	100	100	600	200	200	200	1000			50	400	80
Oxytetracycline	100	100	100	400	200	200	200	100	2000	800	50	400	75
Doxycycline	100	100	100	200	150	150	150					<200	50
Tetracycline		50		200								<200	50
Demeclocycline		50										200	
Sulphonamides													
Sulphamethazine	75	50-100	100	25	75	75	75				100	75	75
Sulphadiazine	75	50-75	75	25	75	75	75	50	>4000	4000		<75	75
Sulphamethizole		50-100										<100	75
Sulphaquandine	<200	150	<200									<150	75
Sulphadimethoxine		25 - 50	<100					50			100	<25	75
Sulphapyridine	<50	50	<100									<75	75
Sulphamethoxyipyridine	<100	25										<50	75
Sulphisoxazole	<100	25										75	50-75
Sulphathiazole	<100	25										<75	<50
Sulphachloropyridazine	<100	25									100	<50	<50
Sulphamerazine	<100	25	<100									<75	75
Sulphanilamide	<100	150										100 - 200	75
Sulphaquinoxaline	<100	50	<50									50	75
Sulphamethiozole	<100		<50										
Sulfamethoxazole				25									
Aminoglycosides													
Gentamicin	100	100	100	100	200	200	300				100	>500	
Streptomycin	1500	1500	3000	1000	1500	3000	3000		16000	8000		>500	
Neomycine	300	300	300	300	300	300	300	200			300	2500	
Dihydrostreptomycin											3000		
Quinolones													
Oxolinic acid					>4000	>4000	4000	>10000					
Sarafloxacin					1500	1500	1200						
Enrofloxacin	>600	>600	>600								600		
Flumequine	>100	>100	>100										
Danofloxacin											600		
Polypeptides													
Virginiamycin	500	500	500										
Bacitracin	500	500	500						20000	10000			
Zn-bacitracin	1250												
Colistin	>1000												
Ionophores													
Salinomycin	1000								20000	8000			
Monensin	1250								>8000	6000			
Oligosaccharides													
Avilamycin	>5000								>20000	>20000			
Others													
Florphenicol	100	100	100		200	400	400	5000			100		
Chloramphenicol	2500	2500	2500	2500	2500	2500	3000						
Trimethoprim	50				12.5/2.5	12.5/2.5	12.5/2.5						
Thiamphenicol					>1500	1500	1500						
Narasin	1250												
Amprolium	>2000												
Phosphomycine	>1500												
Ronidazole								>5000					
Furazolidone	>1500												

All detection limits are given in µg/kg = ppb.

Premi[®]Test is manufactured by DSM PremiTest B.V. The Netherlands

R-Biopharm AG
 An der neuen Bergstraße 17
 64297 Darmstadt, Germany
 Phone: +49 (0) 61 51 - 81 02-0
 Fax: +49 (0) 61 51 - 81 02-40
 E-mail: info@r-biopharm.de

