sito web: http://www.fardiag.com e-mail: fardiag@fardiag.com

BACTERIAL SEROLOGY
Micro-method

Semiquantitative Determination
on Microplate of Salmonellosis,
Brucellosis and Rickettsiosis Infections
in Serum by
Stained Bacterial Suspensions

Available kits:

Salmonella typhi H		**REF 6200**
Salmonella typhi O		**REF 6201**
Salmonella paratyphi A TOTAL		**REF 6205**
Salmonella paratyphi B TOTAL		**REF 6208**
Salmonella paratyphi C TOTAL		**REF 6211**
Brucella total / abortus		**REF 6215**
Brucella melitensis		**REF 6213**
Proteus OX 19		**REF 6216**
Proteus OX 2		**REF 6217**
Proteus OX K		**REF 6218**
Multiple 7 micro H, O, AH, AO, BH, BO, BRU		**REF 6219**
Multiple 3 micro OX 19, OX 2, OX K		**REF 6220**
Multiple 5 micro H, O, A, B, BRU		**REF 6225**

PRINCIPLE

The bacterial suspensions are prepared specifically for the detection, identification and semi-quantitation of serum agglutinins developed during infection diseases such as brucellosis, salmonellosis and certain rickettsiosis.
The assay is performed by testing the stained antigens against unknown samples. The presence or absence of a visible agglutination is usually related with presence or absence of the corresponding homologous antibody.
The bacterial suspensions have been stained (somatic blue and flagellar red) to facilitate reading and interpretation of the results.

REAGENTS

Kit components:	from 6200 to 6218	6219	6220	6225
REAGENT 1 (liquid, white cap) Stained bacterial suspension, ready to use.	**3x10 ml**	**7x10 ml**	**3x10 ml**	**5x10 ml**
REAGENT 2 Positive control, to dilute 1:10 with saline solution 0.9 %.	**1x0,5 ml**	**2x0,5 ml**	**2x0,5 ml**	**2x0,5 ml**
REAGENT 3 Negative control, to dilute 1:10 with saline solution 0.9 %.	**1x1 ml**	**2 x1 ml**	**2x1 ml**	**2x1 ml**
MICRO PLATE "U", 96 wells				

The reagent contain sodium azide (< 0.1%) as preservative. Do not swallow. Avoid contact with skin and mucous membranes.

STABILITY: the reagents are stable up to the stated expiry date when stored at 2-8°C.

SAMPLE

Serum: dilute 1:10 with saline solution (ex: 100 µl serum + 900 µl saline solution).
Stable 6 days at 2-8°C, 4 weeks at -20°C.

MANUAL ASSAY PROCEDURE

Bring the test reagents and sample at room temperature.
Resuspend the Reagent 1 vial gently.

Distribute into micro plate well diluted sample and control as per the following table:

Well number	Saline Sol. (µl)	Serum (µl)	Negative Control (µl)	Positive Control (µl)	Titer
1	--	100	--	--	1:20
2	100	100	--	--	1:40
3	100	100 from well *2*	--	--	1:80
4	100	100 from well *3*	--	--	1:160
5	100	100 from well *4*	--	--	1:320
6	100	100 from well *5*	--	--	1:640
7	100	100 from well *6*	--	--	1:1280
8	100	100 from well *7*	--	--	1:2560
9	100	100 from well *8*, discard 100	--	--	1:5120
10	100	--	--	--	Suspension Control
11	--	--	100	--	Negative Control
12	--	--	--	100	Positive Control

Add 100 µl of the suspension to each well.
Mix gently for 30 seconds.
Incubate at 37°C for 16-18 hours.
Avoid any vibration.

READING AND RESULTS

NEGATIVE: homogenous suspension without any evident presence of aggregates with eventual presence of a round shaped precipitate, with very defined edges, on the well bottom.
POSITIVE: partial or complete agglutination. A partial or complete agglutination with variable degree of clearing of the supernatant is considered positive.
The serum titer is defined by the highest dilution shown in a positive result.

REFERENCE VALUES

Salmonellas: titers ≥1:80 (O antibodies) and 1/160 (H antibodies) show recent infection.
Brucellas: titer ≥1:80 shows infection.
Proteus: titers OX19 ≥1:80, OX2 ≥1:20 and OXK≥1:80 show infection.
The level of "normal" agglutination to these organisms varies in each country and community.
Each laboratory should define its own reference values.

NOTES

1. (*) Dangerous reagents are marked by an asterisk. Refer to MSDS.
2. Always cvompare the results with the controls.
3. "U" or "V" bottomed microplates can be used.
4. Bilirubin (20 mg/dl), hemoglobin (10 g/L), lipids (10 g/L) and rheumatoid factor (300 Ul/ml) do not interfere.
5. Somatic agglutination (O) is thin, granular slow forming and hardly separable. The flagellate agglutination (H) is fast forming and easily separable.

REFERENCES

Widal F., Bull. Mem. Soc. Hop de Paris 6,26 (1896)
Weil E. and Felix A., Wein. Klin. Woch 29,974 (1916)

IVD CE 02 - Mar 2015 MS

Manufactured by: **FAR** srl
Via Fermi, 12 - 37026 Pescantina - VERONA - ITALY
Phone +39 045 6700870 – Fax +39 045 7157763
website: http://www.fardiag.com e-mail: fardiag@fardiag.com