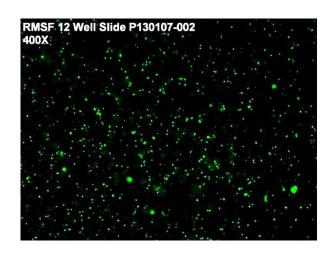


CERTIFICATE OF ANALYSIS

Rocky Mountain Spotted Fever (RMSF)

FA Substrate Slide

Catalog No.:	SLD-IFA-RMSF
Size:	12 Well
Well Capacity:	10 μΙ
Lot:	P130107-002
Expiration:	25 January 2017
Agent:	Rickettsia rickettsii
Strain:	Sheila Smith
Cell Culture Substrate:	N/A



Description:

Slides contain formalin-inactivated *R. rickettsii* with ovine red blood cell background to facilitate focusing with negative sera. They are unstained and sealed in moisture-free foil pouches.

Quality Control Method:

IFA using VMRD, Inc. Rocky Mountain Spotted Fever (RMSF) Positive Control (catalog no. PC-IFA-RMSF), RMSF Negative Control (catalog no. NC-IFA-RMSF), and Anti-Canine IgG FITC Conjugate (catalog no. CJ-F-CANG-1ML or 10ML).

Specific Reaction: 3-4+ specific reaction with Positive Control at neat, no background. Negative Control is negative

with no background. Organisms are too numerous to count per high powered field.

Other Comments: NA

Pattern Of Fluorescence:

Fluorescent coccobacilli-like structures among ovine red blood cells. Some clumped.

Interpretation Of Results:

Titers of 1/64 (IgG) and greater are considered positive. Positive control sera, with stated endpoints, are available on request (catalog no. PC-IFA-RMSF).

Intended Use:

Generally used for Indirect FA to detect antibody to *R. rickettsii* but may also be used as a positive and negative control substrate slide for Direct FA conjugates when applicable.

Storage:

Store sealed in foil pouch at -20°C. Avoid self-defrosting freezers.

References: NA

Recommended Staining Procedure for Indirect FA:

- 1. Warm slide to room temperature before removing from foil pouch.
- 2. Place diluted serum on the designated wells. Dilute serum in serum diluting buffer, pH 7.2 (catalog no. FASDB-100ML) however if high background due to anti-bovine IgG activity is present it may be advisable to use SSDB-100ML.
- 3. Incubate slide in humid chamber at 37°C for 30 minutes.
- 4. Using a wash bottle, gently rinse slide briefly in FA rinse buffer, pH 9.0 (catalog no. FARB-4X) and then soak for 10 minutes in FA rinse buffer, pH 9.0.
- 5. Drain slide and dry around wells by pressing blotter (included in pouch) to front surface. Place labeled anti-IgG or IgM on the wells.
- 6. Incubate as in step 3.
- 7. Rinse as in step 4.
- 8. Drain slide and dry back and edges with a paper towel. Do not allow stained surface to dry. Do not rinse with water.
- 9. Mount with mounting fluid [glycerol/FA rinse buffer, pH 9.0, (50/50)] (catalog no. FAMF-10ML) and view with good quality fluorescence microscope at 100X-250X. Confirmation may be made at 400X.

Recommended Staining Procedure for Direct FA:

- 1. Warm slide to room temperature before removing from foil pouch.
- 2. Place direct FA conjugate on the designated wells.
- 3. Incubate slide in humid chamber at 37°C for 30 minutes.
- 4. Using a wash bottle, gently rinse slide briefly in FA rinse buffer, pH 9.0 (catalog no. FARB-4X) and then soak for 10 minutes in FA rinse buffer, pH 9.0.
- 5. Drain slide and dry back and edges with a paper towel. Do not allow stained surface to dry. Do not rinse with water.
- 6. Mount with mounting fluid [glycerol/FA rinse buffer, pH 9.0, (50/50)] (catalog no. FAMF-10ML) and view with good quality fluorescence microscope at 100X-250X. Confirmation may be at 400X.

Serum Diluting Buffer (pH 7.2):*

-	Na ₂ HPO ₄	1.19 gm
-	NaH ₂ PO ₄	0.22 gm
-	NaCl	8.55 gm
-	BSA	10.0 gm
-	DI/dH ₂ O	Q.S. to 1 liter

^{*}This recipe makes 1 liter. If you need less, adjust recipe accordingly. Store at 2-7 C. Add 0.09% NaN₃ if diluted serum is not going to be used within one week.

4X FA Rinse Buffer (pH 9.0):

-	Na ₂ CO ₃	11.4 gm
-	NaHCO ₃	33.6 gm
-	NaCl	8.5 gm
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Final pH should be 9.0-9.5. This is a 4X concentrate and should be diluted 1/4 with DI/distilled water for use as a working buffer. Keep in a tightly stoppered container at room temperature. MOUNTING FLUID is made by mixing glycerol and FA rinse buffer, pH 9.0, in equal proportions.