

**VetMIC Aquatic**

**A broth microdilution panel for antimicrobial susceptibility testing of bacteria isolated from aquatic animals**

---

Charlotte Axén



**SVA**



- Choice of treatment
- Monitoring of resistance



**SVA**

**Table 6.28. Distribution of MICs for *Aeromonas salmonicida* subsp. *achromogenes* (n=50), *Flavobacterium columnare* (n=26) and *Flavobacterium psychrophilum* (n=103) from farmed fish 2009-2012.**

Bacterial species	Antimicrobial	Distribution (%) of MICs (mg/L)									
		0.25	0.5	1	2	4	8	16	32	64	>64
<i>Aeromonas salmonicida</i> subsp. <i>achromogenes</i>	Florfenicol			98.0	2.0		2.0		2.0	6.0	10.0
	Nalidixic acid		80.0	2.0							
	Tetracycline	78.0	14.0	4.0		2.0		2.0			
<i>Flavobacterium columnare</i>	Florfenicol			100							
	Nalidixic acid	76.9	15.4	3.8	3.8						
	Tetracycline	76.9	23.1								
<i>Flavobacterium psychrophilum</i>	Florfenicol			99.0	1.0						
	Nalidixic acid			16.5	19.4	2.9	1.0	3.9	6.8	49.5	
	Tetracycline	33.0	9.7	30.1	5.8	18.4	2.9				

**SVA**

**CLSI**  
**Clinical and Laboratory Standards Institute**

- Working Group on Aquaculture
- VET03A VET04-A VET03/VET04-S1
- Disk diffusion
- Broth dilution



**SVA**

## VetMIC Aquatic - broth microdilution

Oxytetracycline  
Trimethoprim/Sulfamethoxazole  
Oxolinic acid  
Ampicillin  
Florfenicol  
Erythromycin

*Aeromonas* spp.  
*Flavobacterium* spp.  
*Vibrio* spp.

	1	2	3	4	5	6	7	8	9	10	11	12
	Otc 4	T/S 4/76	Oso 1	Am 8	FF 8	Em 2	Otc 4	T/S 4/76	Oso 1	Am 8	FF 8	Em 2
<b>A</b>												
<b>B</b>	2	2/38	0.5	4	4	1	2	2/38	0.5	4	4	1
<b>C</b>	1	1/19	0.25	2	2	0.5	1	1/19	0.25	2	2	0.5
<b>D</b>	0.5	0.5/9.5	0.12	1	1	0.25	0.5	0.5/9.5	0.12	1	1	0.25
<b>E</b>	0.25	0.25/4.8	0.06	0.5	0.5	0.12	0.25	0.25/4.8	0.06	0.5	0.5	0.12
<b>F</b>	0.12	0.12/2.4	0.03	0.25	0.25	0.06	0.12	0.12/2.4	0.03	0.25	0.25	0.06
<b>G</b>	0.08	0.06/1.2	0.016	0.12	0.12	0.03	0.08	0.06/1.2	0.016	0.12	0.12	0.03
<b>H</b>	0.03	0.03/0.6	0.008	0.06	dc	0.03	0.03/0.6	0.008	0.06	bc	dc	

bc, buffer control; dc, control well with distilled water.



## Production

- QC according to CLSI
- dried in microtitre plates
- stored in room temperature
- shelf life 3 years

### Price:

- 5 plates 65 € (13 €/each)
- 30 plates 343 € (11.4 €/each)
- 300 plates 3219 € (10.7 €/each)



## Contact – ordering of panels

- [veticmic@sva.se](mailto:veticmic@sva.se)
- [www.sva.se/en/Service-and-products/VetMIC/](http://www.sva.se/en/Service-and-products/VetMIC/)



## Acknowledgements



**Märit Pringle, DVM, PhD**  
Department of Animal Health  
and Antimicrobial Strategies  
National Veterinary Institute  
Uppsala, Sweden

[marit.pringle@sva.se](mailto:marit.pringle@sva.se)



**Professor Peter R Smith BA, PhD**  
Department of Microbiology  
National University of Ireland  
Galway, Ireland

