

Code No. 016-17431 (100 mL)
018-17435 (500 mL)

Antifoam SI

消泡剤 SI

[Introduction]

Defoaming Agent SI, a silicone defoaming agent, is very effective in breaking and suppressing foam and has a defoaming effect at a low concentration. In addition, it has an advantage of low turbidity when added to media.

[Added amount]

Defoaming Agent SI is to be diluted 2,000 ~ 4,000 fold (0.25 mL to 0.5 mL in 1 L of medium) for use in cell culture media, but validation is recommended in each system prior to use.

[Reference data]

1. Determination of defoaming effect and turbidity

Procedure : 5 mL of medium is distributed to small test tubes, which are then stirred vigorously. The defoaming agent is added in various dilutions. The height of foam is measured at 10 seconds, 5 minutes and 15 minutes after adding, and the turbidity is also observed at the same times.

1) BHIB (Brain Heart Infusion Broth) + 0.04% Tween 20

Height of foam after adding the defoaming agent Unit (mm)

Defoaming agent	Dilution Time after addition	1×10 ³	1×10 ³	2×10 ³	4×10 ³	8×10 ³	1×10 ⁴	1×10 ⁵	Control
		1×10 ³	1×10 ³	2×10 ³	4×10 ³	8×10 ³	1×10 ⁴	1×10 ⁵	Control
SI	10 sec.	0	0	3	5	8	14	19	24
	5 min.	0	0	0	0	0	0	3	20
	15 min.	0	0	0	0	0	0	2	13
	Turbidity	Absent	Absent	Absent	Absent	Absent	Absent	Absent	Absent
Product of S Inc.	10 sec	0	2	8	11	13	17	18	22
	5 min.	0	0	0	1	8	9	13	16
	15 min.	0	0	0	0	8	9	13	13
	Turbidity	Present	Present	Present	Present	Present	Absent	Absent	Absent

2) MEM (Minimum Essential Medium) + 10% FCS (Fetal Calf Serum)

Height of foam after adding the deforming agent Unit (mm)

Deforming agent	Dilution Time after addition	1×10 ³	1×10 ³	2×10 ³	4×10 ³	8×10 ³	1×10 ⁴	1×10 ⁵	Control
SI	10 sec.	0	0	0	2	6	10	31	40
	5 min.	0	0	0	0	0	0	0	34
	15 min.	0	0	0	0	0	0	0	63
	Turbidity	Present	Absent	Absent	Absent	Absent	Absent	Absent	Absent
Product of S Inc.	10 sec.	0	1	2	4	6	11	19	40
	5 min.	0	0	0	0	2	3	19	31
	15 min.	0	0	0	0	1	2	17	24
	Turbidity	Present	Present	Present	Present	Present	Present	Absent	Absent

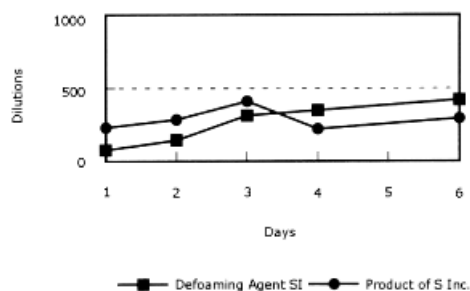
2. Cytotoxicity test

The cytotoxicity of Defoaming Agent SI is very low and can be used for cell culture, but it is recommended to confirm in each system before use.

Cells : Subclone of Vero cells (O78 strain)

Evaluation of the viability : Alamar Blue 1)

Procedure : Alamar Blue is added to determine LD₅₀ value. The following graph shows the relationship between dilutions and days after addition when LD₅₀ value is obtained. The cytotoxicity goes higher as the dilution gets higher.



[Storage] Store at < 25 °C under protection from light

[Reference]

- 1) Pagé B., Paggé M. and Noel, C. : *Intern. J. Oncol.*, **3**, 473 (1993)

FUJIFILM Wako Pure Chemical Corporation

1-2, Doshomachi 3-Chome, Chuo-Ku, Osaka 540-8605, Japan
 Telephone : + 81-6-6203-3741
 Facsimile : + 81-6-6201-5964
<http://ffwk.fujifilm.co.jp>

FUJIFILM Wako Chemicals U.S.A. Corporation

1600 Bellwood Road
 Richmond, VA 23237
 U.S.A.
 Telephone : + 1-804-271-7677
 Facsimile : + 1-804-271-7791
<http://www.wakousa.com>

FUJIFILM Wako Chemicals Europe GmbH

Fuggerstrasse 12
 D-41468 Neuss
 Germany
 Telephone : + 49-2131-311-0
 Facsimile : + 49-2131-311100
<http://www.wako-chemicals.de>

2304KA2