

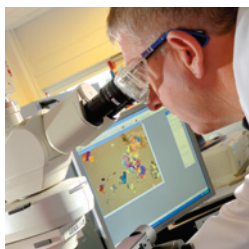
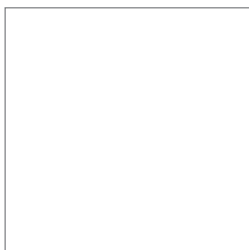
ProClin® Preservative for Diagnostic Reagents

Packaging Information



ProClin preservatives are an excellent choice for replacing thimerosal, sodium azide and gentamicin preservatives. In addition they are highly effective, broad-spectrum biocides for controlling microorganisms in reagents and products intended for *in vitro* diagnostics use. At low use levels, these preservatives eradicate bacteria, fungi and yeast for extended periods of time.

For further information or to obtain a preservative efficacy study performed by an independent laboratory contact your SAFC representative.



Key Features of ProClin Preservatives

- Compatibility with key enzymes and assay indicators
- Will not inhibit antibody binding
- Easy-to-use water-soluble liquid, effective at very low concentrations
- Excellent stability over a wide pH range
- Level of active ingredients assayable by HPLC (Inquire for a HPLC standard)
- At recommended usage levels, ProClin presents no health hazards, toxicological problems or disposal issues

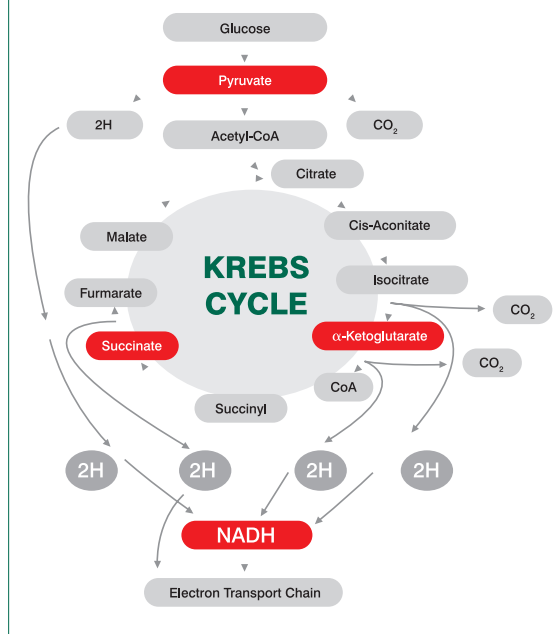


Mechanism of Action

The active components of ProClin are isothiazolones. Within minutes of contacting a microorganism, these isothiazolones penetrate the cell wall and inhibit specific enzymes (at the points noted in red in the Krebs Cycle). Growth, macromolecule synthesis and respiration are inhibited, ultimately leading to cell death.

ProClin 150, 200 & 300 each contain two active ingredients, 5-Chloro-2-methyl-4-isothiazolin-3-one (CMIT) and 2-Methyl-4-isothiazolin-3-one (MIT). ProClin 950 incorporates only the MIT (see table for more features distinguishing these biocides).

Figure A. Krebs Cycle Chart



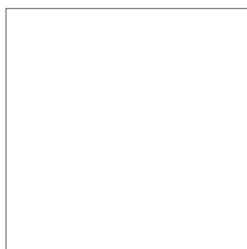
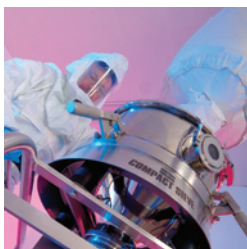
ProClin® Preservative for Diagnostic Reagents

Packaging Information



Features of ProClin Preservatives

Features	ProClin 150	ProClin 200	ProClin 300	ProClin 950
Active (A.I.)	CMIT/MIT	CMIT/MIT	CMIT/MIT	MIT
% total A.I.	1.5	1.5	3	9.5
Stabilizer	23 - 25% Mg salts	3% Mg and Cu salts	Alkyl Carboxylate	none
Matrix	Water	Water	Propylene glycol	Water
Working pH Range	2.5 - 8.5	2.5 - 8.5	2.5 - 8.5	2 - 12
Typical Dosage Levels (w/w)	0.05 - 0.10%	0.05 - 0.10%	0.03 - 0.05%	0.05 - 0.10%
Specific Gravity	1.20	1.02	1.03	1.02
Shelf Life	4 years	18 months	3 years	3 years



Ordering Information

Description	Cat. No.
ProClin 150 Preservative	
50 mL bottle	49376-U
400 mL bottle	49377-U
3.6 L bottle	49378-U
15 L pail	49379-U
110 kg drum (91.7 L)	49380-U
ProClin 200 Preservative	
50 mL bottle	48171-U
400 mL bottle	500380
3.6 L bottle	500399
15 L pail	500402
ProClin 300 Preservative	
1 x 5 mL vial	48934-U
50 mL bottle	48912-U
400 mL bottle	48914-U
2.0 L bottle	48915-U
3.6 L bottle	48917-U
18 L pail	48918-U
110 kg drum (107.8 L)	48919-U
ProClin 950 Preservative	
5 mL ampule	46885-U
50 mL bottle	46878-U
400 mL bottle	46879-U
3.6 L bottle	46883-U
17 L pail	46884-U

ProClin Evaluation Kits	Cat. No.
ProClin Reference Standard 1 mL ampule (1.5% A.I. solution)	33360-U
ProClin 150 — 3 x 5 mL (3 lot numbers)	48121
ProClin 150 — 3 x 400 mL (3 lot numbers)	49381-U
ProClin 300 — 3 x 5 mL (3 lot numbers)	48911-U
ProClin Variety Kit — 5 mL each of ProClin 150, 200, 300 and 950 as an aid to select the appropriate ProClin product for a specific application	48119-U

ProClin Evaluation Kits are available for determining the suitability of ProClin products in new product development. Each evaluation kit contains three different manufactured lots of ProClin for testing performance consistency from lot to lot.

To determine the appropriate ProClin product for a specific application, the ProClin variety kit is also available. This kit contains 5 mL each of ProClin 150, 200, 300 and 950.

SAFC Supply Solutions

3050 Spruce St., Saint Louis, MO 63103
800-244-1173 (US Toll Free)
+1-314-534-4900 (International)
Global Email: safcglobal@sial.com

SAFC Supply Solutions™
Inspiring Science

SAFC®, SAFC Supply Solutions® and Sigma-Aldrich® are registered trademarks of Sigma-Aldrich Biotechnology L.P. and Sigma-Aldrich Co. ProClin® is a registered trademark of Rohm and Haas Company.

© 2009 SAFC All rights reserved.