

S9 Cofactor Kit

Instructions for use

Art. No. PCO-0800
PCO-1800

Note 1

- Items are shipped at ambient temperature with cooling elements. Kit contents will be fully active **if shipment is received within 10 days from dispatch and stored immediately as indicated on the individual items and as described on page 4 of this manual.** If components are damaged, please contact Xenometrix by phone: +41-61-482-14-34 or by Email: info@xenometrix.ch within 3 days after receipt of product.
- This is a bioassay, and these Instructions for Use must be followed strictly. Xenometrix does not take any responsibility if the Instructions for Use are not followed in detail.

- For further information please do not hesitate to contact:

Xenometrix AG
Gwerbestrasse 25
CH-4123 Allschwil
Switzerland

T +41 61 482 14 34
info@xenometrix.ch
www.xenometrix.ch



Manufactured by Xenometrix AG
Country of Origin Switzerland

Document-No. REC-71-01-03_X	IFU S9 Cofactor Kit Record	Valid from Release Date 02.10.2023
Version-No. 8.0		Valid until Cancellation Date
S9 Cofactor Kit Instruction Manual V 8.0.docx		Page 1 of 4

Note 2

After registration on www.xenometrix.ch, all certificates of analysis, Instructions for Use and the excel calculation sheet can be downloaded from the protected area. The step-by-step procedure can be downloaded from the homepage www.xenometrix.ch directly.

If you are not registered to the protected area of the Xenometrix homepage, please contact info@xenometrix.ch.

Note 3

Please read carefully the entire manual before starting the experiments!
Xenometrix does not take any responsibility for handling errors.

Changelog

Date	Version	Description
02.10.2023	8.0	Overhaul of the document: - additional information of page 1 about sample number - adjusted the name and volume of the compounds of PCO-0800 - additional information about PCO-1800

1. Kit Components and Storage Conditions of Products Upon Arrival

Description	Article No.	Quantity	Storage at
S9 Buffer Salts - S9 Cofactor Kit	PCO-0810	25.0 mL	2 - 8°C
	PCO-1810	55.0 mL	
S9 G-6-P - S9 Cofactor Kit	PCO-0820	1.1 mL	-20 °C
	PCO-1820	2.6 mL	
S9 NADP - S9 Cofactor Kit	PCO-0830	4.1 mL	-20 °C
	PCO-1830	10.0 mL	
S9 Buffer M - S9 Cofactor Kit	PCO-0840	1.5 mL	2 - 8°C
	PCO-1840	3.3 mL	

Prepare fresh solution for each experiment.

2. Required Equipment and Consumables NOT Included in the Kit

- 20-µL, 200-µL, and 1000-µL adjustable pipettes and sterile tips
- Sterile tubes with regular caps

Note 4

All plasticware must be sterile. Xenometrix does not take any responsibility, if the assay is not run according to the recommendations.

3. Safety Precautions

- All kit components are not for use in humans and animals, for Research Use Only.
- Do not drink, eat, smoke, or apply cosmetics in designated work areas. Wear laboratory coats, gloves and other necessary safety equipment when handling specimens and kit reagents. Wash hands thoroughly afterwards. Do not pipette by mouth. Xenometrix AG does not take the responsibility for any accidents or adverse human health outcomes as a result of the usage of its products other than the intended use described in this Instructions for Use document.
- Handle specimens as if capable of transmitting infectious agents and work under a flow bench if possible. Thoroughly clean and disinfect all materials and surfaces that have been in contact with specimens. Discard all waste associated with specimens in a biohazard waste container. Although provided in small quantities, positive control chemicals are mutagens/carcinogens. Please refer to the corresponding MSDS'.

4. Assay Procedure

4.1 Ames II Assay, Ames MPF™ Assay

Preparation of 30% S9 Mix using the S9 Cofactor kit for a final S9 concentration of 4.5% calculated for 1 strain, 1 test item, 6 doses plus negative and positive control, in triplicate. If you change the number of strains or components, calculate the volume you need for your experiment accordingly.

Shortly before use, prepare a 30% S9 Mix by combining the volumes of reagents listed below in a sterile tube:

Solution	30% S9-Mix
S9-Buffer-Salts	543 µL
S9-G-6-P	25 µL
S9-NADP	100 µL
Buffer M	32 µL
S9 fraction	300 µL
Final Volume	1000 µL

Document-No. REC-71-01-0x_X	IFU S9 Cofactor Kit Record	Valid from Release Date 02.10.2023
Version-No. 8.0		Valid until Cancellation Date
S9 Cofactor Kit Instruction Manual V 8.0.docx		Page 3 of 4

Note 5

We provide a "S9 100/1537 Booster Solution" to help protecting strains TA100 and TA1537 from possible toxic S9 effects. This solution will be mixed with the Exposure Medium when using S9 in the Ames MPF™ assay. The booster solution can be used for all Salmonella strains to simplify Exposure Medium handling (adding the "Booster Solution" to batches of S9 that do not actually need it has no negative effects on the performance of S9 with any of the 4 Ames MPF™ Salmonella strains). The Booster Solution should not be used with E. coli strains which are tested in a different Exposure Medium.

Note 6

Procedure with Booster Solution for assays with S9:

Mix the S9 100/1537 Booster Solution with the Ames MPF™ Salmonella Exposure Medium at a ratio 1: 667 (e.g., 10 mL Exposure Medium + 15µL Booster Solution). Prepare the required volume of Exposure Medium / S9 100/1537 Booster Solution mixture.

4.2 MacroAmes1 Assay

Preparation of 10% S9 Mix using the S9 Cofactor kit for a final S9 concentration of 1.5% calculated for 1 strain, 1 test item, 5 doses plus negative and positive control, in triplicate). If you change the number of strains or components, calculate the volume you need for your experiment accordingly.

Shortly before use, prepare a 10% S9 Mix by combining the volumes of reagents listed below in a sterile tube:

Solution	10% S9-Mix
Sterile water	2400 µL
S9-Buffer-Salts	6516 µL
S9-G-6-P	300 µL
S9-NADP	1200 µL
Buffer M	384 µL
S9 fraction	1200 µL
Final Volume	12000 µL

4.3 MicroAmes6 Assay

Preparation of 10% S9 Mix using the S9 Cofactor kit for a final S9 concentration of 1.5% calculated for 1 strain, 1 test item, 6 doses plus negative and positive control, in triplicate). If you change the number of strains or components, calculate the volume you need for your experiment accordingly.

Shortly before use, prepare a 10% S9 Mix by combining the volumes of reagents listed below in a sterile tube:

Solution	10% S9-Mix
Sterile water	640 µL
S9-Buffer-Salts	1738 µL
S9-G-6-P	80 µL
S9-NADP	320 µL
Buffer M	102 µL
S9 fraction	320 µL
Final Volume	3200 µL

4.4 MicroAmes24 Assay

Preparation of 10% S9 Mix using the S9 Cofactor kit for a final S9 concentration of 1.5% calculated for 2 strains, 1 test item, 6 doses plus negative and positive control, in quadruplicate). If you change the number of strains or components, calculate the volume you need for your experiment accordingly.

Shortly before use, prepare a 10% S9 Mix by combining the volumes of reagents listed below in a sterile tube:

Solution	10% S9-Mix
Sterile water	700 µL
S9-Buffer-Salts	1900 µL
S9-G-6-P	88 µL
S9-NADP	350 µL
Buffer M	112 µL
S9 fraction	350 µL
Final Volume	3500 µL