

## 支原体预防试剂（原装进口）

说明书修订日期：2019.01.04

Cat number: KGY013

Store at : -20℃ for 12 months

For Research Use Only（科研专用）

<b>Catalog Number:</b>	KGY013								
<b>Content:</b>	Prophylactic is supplied as a cell culture tested, sterile filtered yellow solution in 10 x 1 ml tubes at a concentration of 2.5 mg/ml. One 1 ml vial is sufficient for 500 ml of culture.								
<b>Storage Condition:</b>	Store at -20℃								
<b>Shelf Life:</b>	Stable for up to 12 months at -20℃ ; 1 months at 4℃ . Before storing at -20℃ , prepare aliquots to avoid repeated freeze-thaw cycles. Product is stable for 2 weeks at room temperature.								
<b>Note:</b>	Presence of crystals does not alter properties of the product. Vortex the tube until the crystals disappear.								
<b>Method:</b>	<p>Prophylactic is used to prevent mycoplasma and related cell wall-less bacteria contamination of cell cultures that have been previously tested to be contamination-free. It can be used in combination with penicillin and streptomycin (Pen-Strep).</p> <p>1. Use Prophylactic at a concentration of 5 µg/ml, that represents a 1:500 dilution of the 2.5 mg/ml stock solution in culture medium. Refer to the table below to determine the volume needed.</p> <table border="1"><thead><tr><th>Reagent</th><th>T25 with 5 ml medium</th><th>T75 with 15 ml medium</th><th>500 ml bottle</th></tr></thead><tbody><tr><td>Prophylactic</td><td>10 µl</td><td>30 µl</td><td>1 ml</td></tr></tbody></table> <p>2. Remove and replace with fresh Plasmocin™ Prophylactic-containing medium every 3-4 days.</p> <p>3. Frequently test for the presence of mycoplasma in your cell cultures. Mycoplasma can be detected using Plasmotest™, a simple and reliable cell-based assay for the detection of mycoplasma contamination .</p> <p>Note: If you detect mycoplasmas in your cells, we recommend the use of Treatment that eliminates mycoplasmas from infected cultures.</p>	Reagent	T25 with 5 ml medium	T75 with 15 ml medium	500 ml bottle	Prophylactic	10 µl	30 µl	1 ml
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## **BACKGROUND**

Mycoplasma contamination is a significant problem for mammalian cell culture. Reports estimate mycoplasma contamination in up to 35% of all cell cultures. Unlike bacterial or fungal contaminations, mycoplasma cannot be detected by visual inspection and may not noticeably affect cell culture growth rates. However, mycoplasma infection has been shown to alter DNA, RNA and protein synthesis, introduce chromosomal aberrations and cause alterations or modifications of host cell plasma membrane antigens.

## **QUALITY CONTROL**

Each lot is thoroughly tested to ensure the absence of lot-to-lot variation:

- Endotoxin level: < 10 EU/mg
- Physicochemical characterization (pH, appearance)
- Cell culture tested: potency validated on bacterial reference strains

## **COMPOSITION**

Prophylactic contains two bactericidal components. The first component acts on the protein synthesis machinery by interfering with ribosome translation, and the other acts on DNA replication. These specific targets are absent in eukaryotic cells ensuring low cytotoxicity.

## **DEVELOPMENT OF Prophylactic -RESISTANCE**

In repeated experiments aimed to determine the mutation rate of *Mycoplasma hominis*, *Mycoplasma bovis* and *Acholeplasma vituli* to Prophylactic, no resistance in liquid cultures has ever been identified, indicating a possible mutation rate lower than  $10^{-9}$ . Therefore, development of resistance in these reference mycoplasma strains is highly unlikely.

## **DESCRIPTION**

Prophylactic is a highly cited broad-spectrum anti mycoplasma reagent. It can be used as a "routine addition" in liquid media to prevent mycoplasma and related cell wall-less bacteria contamination in mammalian cell cultures. It is active against numerous mycoplasmas, such as *M. arginini*, *M. fermentans*, *M. laidlawii*, and *M. hyorhinitis*. In contrast to other anti-mycoplasma compounds, Prophylactic is active on both extracellular mycoplasmas and intracellular forms. This advantage is conferred by one component of Prophylactic that is actively transported into mammalian cells. Prophylactic is active at low concentrations on a broad range of Gram-positive bacteria, such as *Staphylococcus* species, and Gram-negative bacteria, such as *E. coli*, *Enterobacter*, *Pseudomonas*, and *Alcaligenes*. Prophylactic (5 µg/ml) exhibits no toxicity in eukaryotic cells. Its activity is unaffected by the presence of up to 20% serum in cell culture medium.

凯基相关产品（详见凯基网站 <http://www.keygentec.com.cn>）

#### 细胞株、细胞提取物及细胞培养产品

- 人类肿瘤细胞株 动物肿瘤细胞株 正常细胞株 肿瘤耐药细胞株
- 细胞提取物（RNA/DNA/蛋白）
- 细胞培养相关产品

#### 细胞凋亡

##### 一、细胞凋亡研究试剂盒

- Annexin V-FITC/ EGFP/PE 细胞凋亡检测试剂盒
- TUNEL 凋亡原位检测系列试剂盒
- Caspase(2、3、6、8、9)系列细胞凋亡检测试剂盒
- 线粒体膜电位检测试剂盒（JC-1）
- TRAP-PCR 端粒酶活性检测试剂盒
- DNA Ladder 检测试剂盒

##### 二、细胞凋亡相关抗体

##### 三、凋亡诱导剂、抑制剂

##### 四、氧化应激损伤检测试剂盒

##### 五、细胞凋亡研究辅助试剂

#### 细胞增殖/毒性/活力与细胞周期

- 凯基细胞周期检测试剂盒
- MTT、XTT、WST-1、CCK-8 等系列细胞增殖及细胞毒性检测试剂盒

#### 细胞染色产品

- 活细胞/凋亡细胞/坏死细胞鉴别试剂盒（AO/EB 法, 荧光显微镜）
- 凯基细胞凋亡形态学检测试剂盒
- 罗丹明 123、DAPI、PI、7-AAD、Hoechst 33258、EB、吖啶橙染色试剂盒

#### 亚细胞组分制备

- 细胞核、线粒体制备试剂盒
- 细胞悬液制备试剂盒（组织消化试剂盒）