

Phenol Red Solution (0.5%)

Contains 5 g/L phenol red DPBS
Sterile-filtered
Endotoxin tested
Cell culture tested

Catalog Number **LS 008-01**
Storage Temperature 15~30°C

Product Description

Phenol red is used as a pH indicator. The sodium salt of phenol red is used widely in culture media to identify changes from neutral to acidic pH values. It is typically used in cell culture media at 11 mg/L. A solution of phenol red will have a yellow color at a pH of 6.4 or below and a red color at a pH of 8.2 and above. Phenol red in tissue culture media can act as a weak estrogen, especially with human breast cancer cells. Lipophilic impurities, not the phenol red dye itself, account for the estrogenic activity. 95~99% of these impurities can be removed from the sodium salt of phenol red with a reduction in estrogen-like activity.

LS 008-01 contains 5.0 g/L phenol red DPBS.

Storage/Stability

The concentrated Phenol red solution should be stored at 15~30°C. Deterioration of the solution may be recognized by (1) precipitate or particulate matter throughout the solution, (2) cloudy appearance, (3) color change, and/or (4) pH change. Product label bears expiration date.

Precautions

For *In Vitro* Use Only

Product Profile	
Appearance	Dark red solution
Endotoxin	≤ 1.0 EU/ml
Sterility	Sterilized by 0.2 μm filtration system. Sterility tests are performed in accordance with protocols described in USP.

References

The Merck Index, 12th ed., Entry# 7397.
Berthois, Y., et al., Phenol red in tissue culture media is a weak estrogen: implications concerning the study of estrogen-responsive cells in culture. *Proc. Natl. Acad. Sci. USA*, **83(8)**, 2496-2500 (1986).
Bindal, R. D., et al., Lipophilic impurities, not phenolsulfonphthalein, account for the estrogenic activity in commercial preparations of phenol red. *J. Steroid. Biochem.*, **31(3)**, 287-293 (1988).