

1. Materials

Catechol, Guaiacol, DPPH solution, UV/Vis spectrophotometer

2. Methods

- (1) DPPH를 0.1 mM의 농도로 ethanol에 녹여 100 mL 제조한다. (MW: 394.32 g/mol)
- (2) Catechol과 guaiacol을 농도에 따라 ethanol에 용해시켜 제조한다.
- (3) 농도에 따른 각 시료 1 mL에 0.1 mM DPPH 1 mL을 혼합한다. (1:1 부피비)
- (4) 혼합된 용액은 호일로 싸서 상온에서 30분 동안 반응시킨다.
- (5) UV/vis spectrophotometer로 519 nm에서 흡광도를 측정하여 다음과 같이 radical 소거능을 계산한다.

$$\text{DPPH radical scavenging activity (\%)} = (1 - \text{Abs}_{\text{sample}} / \text{Abs}_{\text{control}}) \times 100$$

§ Report

- ※ Report should be written by MS words (10 points, line spacing 1) or Hancorn office (10 points, line spacing 120)
- ※ Report must be taken in the following order (in Korean or English): 1. Introduction, 2. Materials and Methods, 3. Results and Discussion, 4. Conclusions, 5. References
- ※ Please describe how catechol can scavenge the DPPH radical and maintain structure thereof.
- ※ Please compare the results with respect to the chemical structure.
- ※ Assignment should be appended to report. (If you copy and paste it, you can not get a grade)
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