Rioux Test for Catecholates

Dr. Steven Wilhelm

Abstract

Please contact Dr. Steven Wilhelm (wilhelm@utk.edu) for additional information regarding this protocol.

Modified from Rioux, C., Jordan, D., & Rattray, J. B. (1983). Colorimetric determination of catechol siderophores in microbial cultures. *Analytical Biochemistry*, 133(1), 163-169. doi:10.1016/0003-2697(83)90238-5

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Protocol

Step 1.

Add 0.2 mL 20% sulfuric acid to 2.3 mL H₂O and mix

Step 2.

Add 1 mL sample (or H₂O for blank, DHBA for standard curve)

AMOUNT

1 ml Additional info:

Step 3.

Add 0.1 mL 1% ferric ammonium citrate (in 0.09 N H₂SO₄) and mix

■ AMOUNT

100 µl Additional info:

Step 4.

Add 0.4 mL 2 M ammonium fluoride and mix

■ AMOUNT

400 µl Additional info:

Step 5.

Add 0.4 mL 1% 1,10-penanthroline and mix

■ AMOUNT

400 μl Additional info:

NOTES

Alyssa Alsante 07 Jun 2017

Add 0.4 mL water for turbidity blank.

Step 6.

Add 0.6 mL 3 M hexamethyl tetramine

■ AMOUNT

600 μl Additional info:

Step 7.

Heat to 60°C for 1 hr

O DURATION

01:00:00

Step 8.

Cool to room temperature and read in spectrophotometer at 510 nm