

Lead sulphate test
or
cysteine test

Dr saima shaheen
Biochemistry department

Principle

- Proteins or aminoacids when heated with sodium hydroxide, sulphur splits out as sodium sulphide, which on reaction with lead acetate, forms greyish brown to black precipitate of lead sulphide (PbS).

Apparatus

- Pipette
- Test tube
- Test tube holder
- Burner

Reagents

- Original solution or protein solution
- 20% sodium hydroxide
- 2% lead acetate

Procedure

- To 1ml of O.S in a test tube add 1ml of 20% NaOH and 0.5ml of 2% lead acetate. A white precipitate is obtained due to denaturation of proteins. Now boil the mixture, the white ppt turns greyish brown or black indicating the presence of sulphur.

Interpretation

- A positive reaction is due to the presence of a sulphur containing amino acids in the protein.
- This can be Cysteine or Methionine

A wooden sign with the words "Thank you!" written in a cursive font. The sign is placed on a surface of reddish-brown mulch. The background is filled with vibrant autumn leaves in shades of yellow, orange, and light green, some of which are in sharp focus while others are blurred.

Thank
you!