



Proteins

Ammonium Molbdate test

- ▶ This test is specific for inorganic phosphate

Ammonium Molbdate test

Principle

- ▶ Casein is rich in phosphate
- ▶ Upon heating in strong acid phosphate will be released to react with ammonium molbdate forming ammonium phosphomolbdate as a **single orange mass**

Ammonium Molbdate

test

Procedure

1. Add 1 ml of each protein in a test tube
2. Add 5 drops of ammonium molbdate
3. Add 10 drops of HNO_3
4. Mix
5. Heat in water bath for 2 – 3 minutes
6. A **single orange mass** ppt. is formed with casein



Heat Coagulation

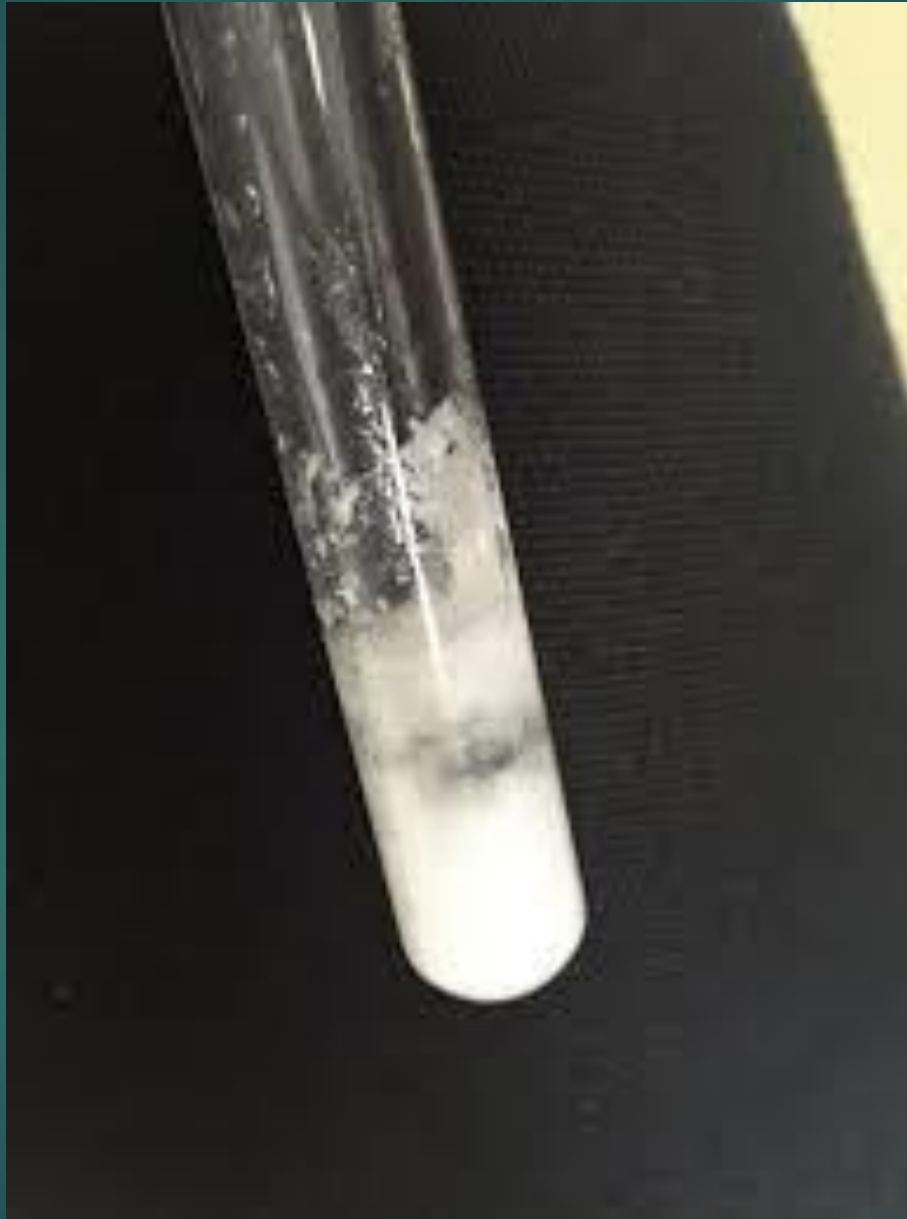


- ▶ Heat disrupts hydrogen bonds of secondary and tertiary protein structure
- ▶ Denaturation and coagulation occurs
- ▶ Albumin (and globulin) are the only heat coagulable proteins .

Heat Coagulation

▶ Procedure

- ▶ Put 4 ml of albumin and other protein(casein) in 2 test tubes.
- ▶ Incline and heat directly on burner
- ▶ Coagulation occurs in albumin test tube



Report

Test	A	P	C	G	Conclusion
Ammonium Molbidade	—				
Heat Coagulation					

Report

Test	A	P	C	G	Conclusion
Ammonium Molbidade	—	—			
Heat Coagulation					

Report

Test	A	P	C	G	Conclusion
Ammonium Molbidade	—	—	+		
Heat Coagulation					

Report



Test	A	P	C	G	Conclusion
Ammonium Molbidade	—	—	+	—	
Heat Coagulation					

Report

Test	A	P	C	G	Conclusion
Ammonium Molbodate	-	-	+	-	
Heat Coagulation	+				

Report



Test	A	P	C	G	Conclusion
Ammonium Molbidade	-	-	+	-	
Heat Coagulation	+	-	-	-	



THANKS
Start