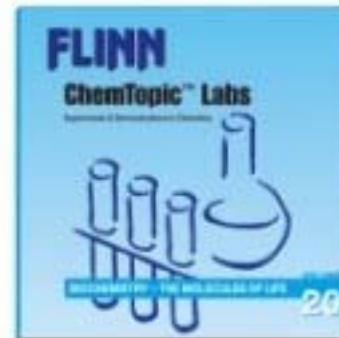


Biochemistry—The Molecules of Life— Master Materials Guide



Materials listed below are recommended
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Experiments and Demonstrations

Chemicals	Flinn Scientific Catalog No.	Introduction to Carbohydrates	Identifying Proteins and Amino Acids	Physical Properties of Proteins	Properties of Lipids	Membrane Diffusion	Glucose Fermentation	Lactose Intolerance	Amino Acid Fingerprints	pH and Protein Solubility
Albumin	A0258		2 g	8 g	8 g					
Ammonium sulfate	A0062			280 g						
α-Naphthol	N0067		0.05 g							
Arginine	A0308		1 g							
Barfoed's reagent	B0061	250 mL								
Benedict's solution	B0015	200 mL								
Biuret test solution	B0051		150 mL							
Bromine Water Kit	AP4502				1					
Bromthymol blue solution, 0.04%	B0173					2 mL				
Casein	C0043		2 g	1 g						2 g
Cholesterol	C0179				8 g					
Coconut oil	C0074				75 mL					
Corn oil	C0090				75 mL					
Cupric sulfate pentahydrate	C0102			2.5 g						
Cysteine	C0420		1 g							
Ethyl alcohol, 95%	E0009		50 mL		35 mL					
Fructose (Levulose)	L0020	1 g								
Galactose	G0041							5 g		
Gelatin	G0037		2 g	1 g						
Glucose (Dextrose)	D0005	1 g				7.5 g	5 g			
Hexane	H0054				500 mL					
Hydrochloric acid solution, 3 M	H0034	125 mL		100 mL						50 mL
Iodine	I0006	0.15 g								
Iodine–potassium iodide solution	I0038					1 mL				
Isopropyl alcohol	I0019			50 mL						
Lactose	L0002	1 g						10 g		
Lugol's iodine solution	I0036					1 mL				
Ninhydrin solution, 0.5%	N0039								100 mL	
Nitric acid, 3 M	N0049		150 mL							
Olive oil	Q0004				75 mL					
Potassium iodide	P0066	0.75 g								
Resazurin solution, 1%	R0013					1 mL*				
Resorcinol	R0015	0.13 g								
Silver nitrate	S0274			0.85 g						

*Dilute 1/10 to prepare 0.1% solution.

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Experiments and Demonstrations

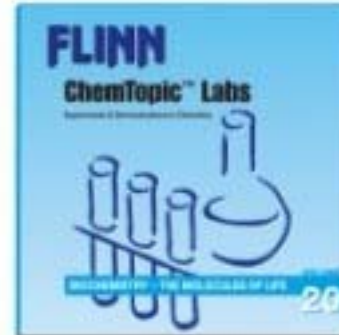
	Flinn Scientific Catalog No.	Introduction to Carbohydrates	Identifying Proteins and Amino Acids	Physical Properties of Proteins	Properties of Lipids	Membrane Diffusion	Glucose Fermentation	Lactose Intolerance	Amino Acid Fingerprints	pH and Protein Solubility
Chemicals, continued										
Silver nitrate solution, 0.1 M	S0305					1 mL				
Sodium chloride solution, 1 M	S0347					15 mL				
Sodium hydroxide pellets [§]	S0074		24 g	12 g						6 g
Sodium hydroxide solution, 1 M	S0148						1 mL			5 mL [†]
Sodium hypochlorite, 5%, bleach	S0080		500 mL							
Sodium nitroferricyanide dihydrate	S0319		2 g							
Sodium thiosulfate pentahydrate	S0114				125 g					
Starch, corn	S0124	1 g				5 g				
Sucrose	S0134	1 g								
Sudan III	S0152				0.25 g					
Tyrosine	T0091		1 g							
Universal indicator solution	U0009									optional
Yeast, active, dry	Y0008						1.5 g	12 g		
Glassware										
Beakers										
50-mL	GP1005			15						
150 mL	GP1015									
250-mL	GP1020	15		15		1				
400-mL	GP1025		15							
600-mL	GP1030		15							1
Erlenmeyer flasks, 125-mL	GP3040			15	30		1	4		
Glass tubing	GP9005						3–4 in.			
Graduated cylinders, 10-mL	GP2005					1				
Test tubes										
13 × 100 mm	GP6063	90	105	45	75	6				
16 × 125 mm	GP6065			15			1			
Stirring rods	GP5075			15						
Watch glass	GP8009						optional			

[†]Dilute 1/100 to prepare .01 M solution.

[§]Needed to prepare 3 M solutions.

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General Equipment and Miscellaneous										
Balance, centigram (0.01-g precision)	OB2059				3		1	1		
Balloons	AP1900							4		
Boiling stones	B0136	10 g								
Condenser	GP1070					optional				
Dialysis tubing	AP4352				6 in.					
Filter paper	AP3104			15	15				30	
Funnel	AP3200			15	15					
Gloves, nitrile, acid-resistant	AP3258								1	
Hot plate	AP4674	3	3	3			1		3	
Magnetic stirrer	AP6067									1
Mortar and pestle	AP6066				15			1		
pH meters (optional)	AP8673									1
Pipets, Beral-type, graduated	AP1721	150	180	135	105	2				2
Plastic tubing	AP8373						12 in.			
Spatula	AP1322									1
Spray bottle	AP5338								1	
Stirring bars	AP1090									1
String, thin	AP4823					8 in.				
Test tube clamp	AP8217	15	15	15						
Test tube rack	AP1319	15	15	15	15	1	1			
Thermometer, digital	AP6049			15						
Wash bottle	AP1668	15	15	15	15					
Water, distilled or deionized	W0007, W0001	✓	✓	✓	✓	✓	✓	✓		
Wax pencil	AP8291				15					
Weighing dishes	AP1278									1