

IMPORTANT POLYMERS

POLYMER	COMMON EXAMPLES	FUNCTION	MONOMER: Name	NO. OF DIFF. KINDS	BOND BETWEEN MONOMERS
Protein	Hemoglobin	O ₂ carrier	amino acids	20	peptide
	RNase	enzyme	amino acids	20	peptide
	wool, collagen	structural	amino acids	20	peptide
Nucleic acid	DNA	information storage	deoxyribo-nucleotides	4	phospho-diester
	RNA	information transfer	ribonucleotides	4	phospho-diester
Polysaccharide	glycogen	energy storage	glucose	1	glycosidic
	cellulose	structural	glucose	1	glycosidic
	blood group substances	recognition	several different sugars	~6	glycosidic
Lipid	triglyceride	energy storage	fatty acids and glycerol	several different fatty acids	ester
	lecithin	membrane structure	fatty acids + glycerol + phosphate + choline	several different fatty acids	ester and phosphodiester

Cells

Macromolecules (No. of monomer types):

polysaccharides (~6)

proteins (20)

lipids (~8)

nucleic acids(5)

Small molecules:

monomers (~40 different molecules)

intermediates (~400)

vitamins (~20)