

26. The molecule [^{18}F]-2-fluoro-2-deoxyglucose is:

- a. an intermediate in glycolysis
- b. a positive regulator of glycolysis
- c. potent anti-cancer agent
- d. an antibiotic
- e. an imaging agent to detect tumors

27. In an anaerobic muscle preparation, lactate formed from glucose labeled C-2 would be labeled in:

- a. all three carbons
- b. the alcohol carbon
- c. the carboxyl carbon
- d. carbonyl carbon
- e. methyl carbon

28. Glycerol is considered a nonfermentable sugar because:

- a. it can't be fermented by biological enzymes
- b. it produces too much NADH to be efficient
- c. it does not generate any ATP
- d. it cannot be oxidized
- e. it can only be converted into substrates of the citric acid cycle

29. While most reactions of glycolysis are easily reversible, reactions _____ are irreversible, and drive the pathway forward.

- a. 2 and 4
- b. 1, 3, and 10
- c. 7, 8, and 9
- d. 1, 5, and 7
- e. 3, 8, and 10

30. Phosphoglucose isomerase (=phosphohexoisomerase) catalyzes the second reaction in glycolysis. Diagram the reaction in the Glycolytic pathway. Be sure to show all atoms of substrate(s) and product(s).
