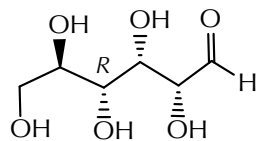


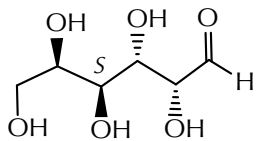
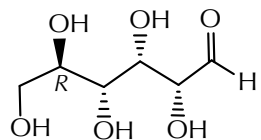
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Figure 1626

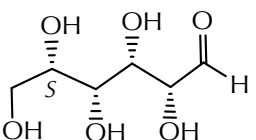
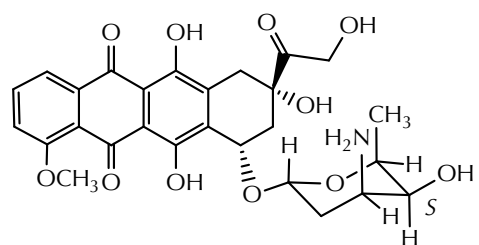
Epimers.

D-(+)-glucose
(2*R*,3*S*,4*R*,5*R*)-2,3,4,5,6-pentahydroxyhexanal

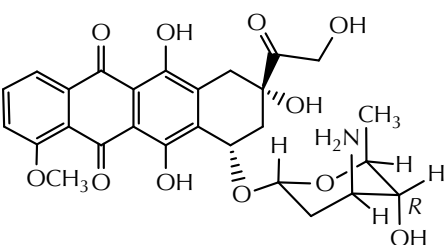
and

D-(+)-galactose
(2*R*,3*S*,4*S*,5*R*)-2,3,4,5,6-pentahydroxyhexanalD-(+)-glucose
(2*R*,3*S*,4*R*,5*R*)-2,3,4,5,6-pentahydroxyhexanal

and

L-(-)-idose
(2*R*,3*S*,4*R*,5*S*)-2,3,4,5,6-pentahydroxyhexanaldoxorubicin - chemotherapeutic agent
used in treating various cancers,
including breast, bladder, and lymph;
approved since 1974

and

epidoxorubicin (epirubicin) -
chemotherapeutic agent used with
advanced breast, ovarian, and lung
cancers; approved since 1999

compound. When the addition reaction is intramolecular, however, the equilibrium constants favor the cyclic hemiacetal or cyclic hemiketal (10–250 to 1), particularly when a five- or six-membered ring is formed (Figure 1627).

Figure 1627

Cyclic hemiacetals and cyclic hemiketals (general).

