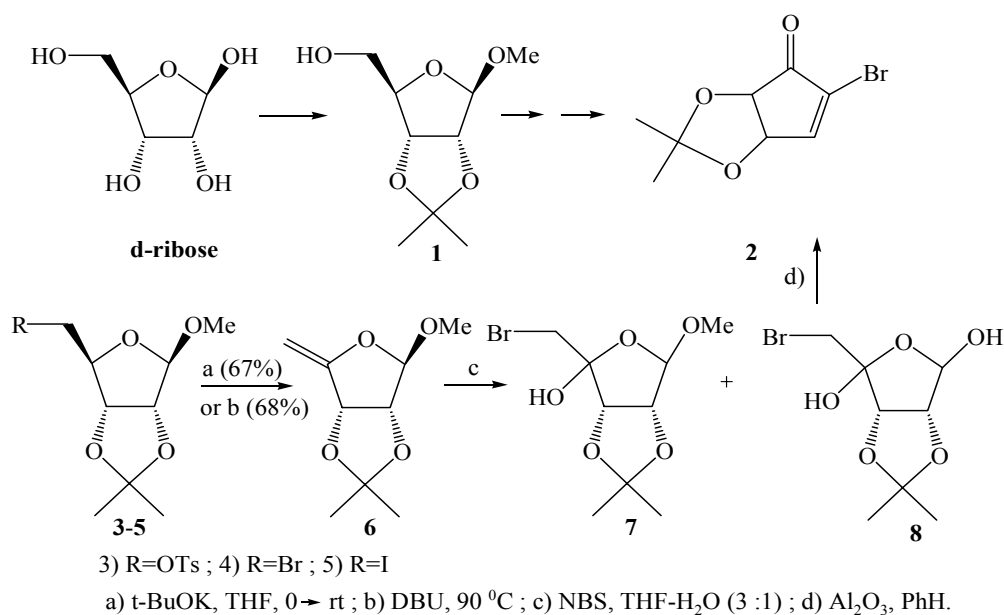


Transformations of Methyl-4-methylidene-2,3-O-isopropylidene- β -D-ribofuranoside in NBS-THF-H₂O

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A selective hydrolysis of methylacetal groups for carbohydrate syntons similar to **1**, simultaneously keeping in its structure 2,3-O-isopropylidene and methylacetal protective groups is usually failed. Under the acidic catalysis conditions the total hydrolysis of both protective groups is usually observed. The reaction of acetal **6** with NBS (THF-H₂O, 10-15 min) leads to the selective hydrolysis of the methoxy function in the course of the synthesis of new chiral cyclopentenone **2**. At keeping of a reaction mass on an overnight a full conversion of **7** to **8** was observed.



Obviously the transition **7** \rightarrow **8** is connected with the presence of ring-chain tautomerism in bromohydrin **7**, resulted in the acyclic form **9**, that makes it possible an easy generation of aldehyde **10**, the hydrate of which gives bromohydrin **8**.

