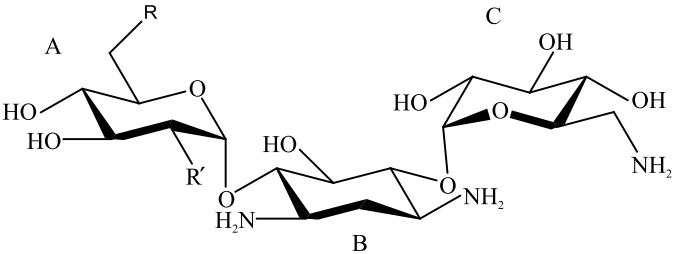
a



R	R′	
NH_2	OH	Kanamycin A
NH_2	NH_2	Kanamycin B
OH	NH_2	Kanamycin C

b

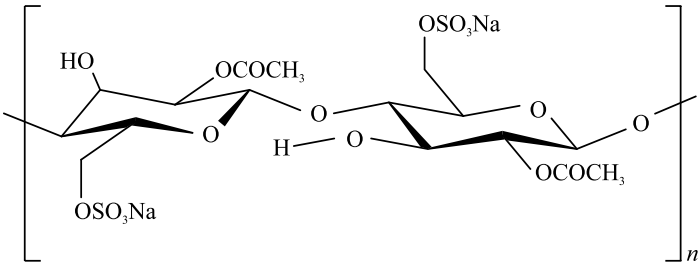


Fig. 1. Structural formulas of KAN (*a*) and Na-CAS repeated unit (*b*)