CLAIMS

1. An antitumor agent comprising β-cyclodextrin or its derivative, and 2-deoxyglucose, wherein the derivative of β-cyclodextrin is selected from methyl-β-cyclodextrin (MBCD), (2-hydroxypropyl)-β-cyclodextrin (HPBCD), carboxymethyl-β-cyclodextrin, carboxymethyl-ethyl-β-cyclodextrin, diethyl-β-cyclodextrin, dimethyl-β-cyclodextrin, glucosyl-β-cyclodextrin, hydroxybutenyl-β-cyclodextrin, hydroxyethyl-β-cyclodextrin, maltosyl-β-cyclodextrin, random methyl-β-cyclodextrin, sulfobutylether-β-cyclodextrin, 2-selenium-bridged β-cyclodextrin, and 2-tellurium-bridged β-cyclodextrin.

2. The antitumor agent of claim 1, further comprising one or more other antitumor agents.

3. The antitumor agent of claim 2, wherein the other antitumor agents comprise an antitumor agent having apoptosis-inducing activity.

4. The antitumor agent of any one of claims 1 to 3, wherein the β-cyclodextrin or its derivative is administered at the same time as, prior to, or after administering 2-deoxyglucose.

5. The antitumor agent of any one of claims 1 to 3, wherein the β-cyclodextrin or its derivative is administered 1 to 2 hours after administering 2-deoxyglucose.

6. The antitumor agent of any one of claims 2 to 5, wherein the β-cyclodextrin or its derivative is

administered at the same time as, prior to, or after administering the other antitumor agents.

7. The antitumor agent of any one of claims 3 to 6, wherein the antitumor agent having apoptosis-inducing activity is selected from an agent that can release Bak from Mcl-1 or Bcl-xL which is anti-apoptosis proteins, and a TNF-related apoptosis-inducing ligand (TRAIL).