

ABSTRACT

An objective of the present invention is to provide a population of cancer stem cells from which cells with no cancer-forming ability have been substantially removed, wherein the
5 population has a feature of reproducing the cancer-tissue hierarchical structure; and methods for producing and using the same. To achieve the above objective, the present inventors repeatedly grew human cancer tissues in NOG mice, and then isolated cancer cells for comparing various culture methods. As a result, the present invention is completed by successfully obtaining a homogeneous cancer stem cell composition in which cells having cancer-forming ability does
10 not substantially coexist and cells without cancer-forming ability by an adherent culture method using a serum-free stem cell medium, rather than by a routine floating culture method.