

## Abstract

The present invention addresses the problem of providing: a compound that is a 4-aminopiperidine lipid; lipid nanoparticles containing the lipid; and a pharmaceutical composition useful for nucleic acid medicines and the like. The present inventors have discovered a compound that is a 4-aminopiperidine lipid or a salt thereof, examined lipid nanoparticles that have the potential of being formed into various pharmaceutical compositions, and revealed that the lipid that is the compound according to the present invention or a salt thereof can form lipid nanoparticles, and moreover, lipid nanoparticles in which nucleic acid is encapsulated (i.e., nucleic acid lipid nanoparticles). In addition, the nucleic acid lipid nanoparticles containing the lipid according to the present invention are expected to serve as a component of pharmaceutical compositions useful for prevention and/or treatment of astrocyte-related diseases.