[0004]

Patent Literature 1: JP H11-302973 A

Patent Literature 2: JP H11-199632 A

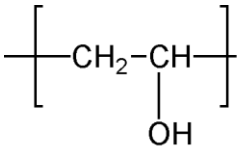
SUMMARY

[0004a]

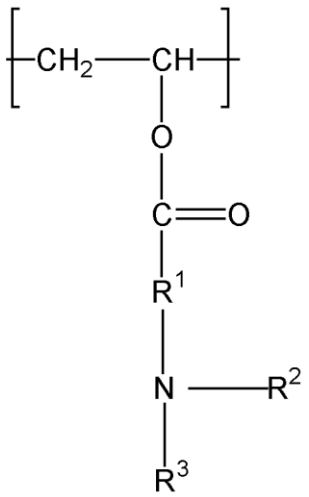
The present disclosure refers to a vinyl alcohol-amino acid ester copolymer comprising

a unit represented by the following formula (1) and a unit represented by the following formula (2):

[Chem. 1]



(1)



(2)

where, in the formula (2), R^1 represents a hydrocarbon group that may optionally have a substituent, R^2 and R^3 each independently represent a hydrogen atom or a hydrocarbon group, and R^1 and R^2, or R^2 and R^3, may optionally be bonded together to form a cyclic structure.

- Technical problem

[0005]

However, bonding the amino group by the methods disclosed in Patent Literatures 1 and 2 may result in insufficient performance because the obtained PVA does not have a copolymer structure with an amino acid ester. Such PVA is difficult to use in applications that require cell culture, such as in vivo regenerative medicine applications. Such PVA also has insufficient compatibility with biological tissue, thus requiring enhancement of biocompatibility.

In addition, such PVA has not produced satisfactory results in terms of solubility in organic solvents.

[0006]

The present invention aims to provide a vinyl alcohol-amino acid ester copolymer that is excellent in properties such as cell culture properties, biocompatibility, antibacterial properties, and solubility in organic solvents, and is applicable to the medical field, the biomaterial field, and the agricultural field (medical and life science fields).

- Solution to problem

[0007]

The present invention relates to a vinyl alcohol-amino acid ester copolymer including a unit represented by the following formula (1) and a unit represented by the following formula (2).

The present invention is described in detail below.

[Chem. 1]