cosmetic composition, the polymeric micelle carrier composition comprising i) a block copolymer having a hydrophilic polymer chain segment and a hydrophobic polymer chain segment; ii) a charged surfactant; and iii) a fatty oil. In another aspect, the present invention also provides a polymeric micelle composition comprising the carrier composition, and a non-lipophilic drug loaded by the carrier composition.

[0007a] In one aspect, the present invention provides a polymeric micelle carrier composition comprising: i) block copolymers each having a hydrophilic polymer chain segment and a hydrophobic polymer chain segment; ii) a charged surfactant; and iii) a fatty oil, wherein the polymeric micelle carrier composition forms a polymeric micelle structure having a hydrophobic region in an inner shell portion caused by hydrophobic interactions between the polymers, and wherein the polymeric micelle carrier composition is for use as a carrier for loading a non-lipophilic drug having a charge opposite to the charge of the charged surfactant.

[0007b] In another aspect, the present invention provides a polymeric micelle composition comprising: the polymeric micelle carrier composition as described herein; and a non-lipophilic drug loaded by the polymeric micelle carrier composition, the non-lipophilic drug having a charge opposite to the charge of the charged surfactant.

Effects of the Invention

[0008] According to the present invention, the loadability of a non-lipophilic drug in a polymeric micelle composition can be improved.

MODES FOR CARRYING OUT THE INVENTION

[0009] The polymeric micelle carrier composition of the present invention contains a block copolymer, a charged surfactant, and a fatty oil. Although fatty oils have been considered to have, in principle, a poor affinity to non-lipophilic drugs, when a fatty oil is intentionally used as one of the components of the carrier composition in combination with the block copolymer and the charged surfactant, it contributes to a significant improvement of the loadability of the non-lipophilic drug by the carrier composition.

[0010] The fatty oil may be an oil composition selected from known vegetable, animal, and synthetic oils. More specifically, the fatty oil may be an oil composition that is