CLAIMS

[Claim 1]

A permselective membrane comprising a support membrane having selective permeability and a lipid membrane containing a channel substance, the lipid membrane being formed on a surface of the support membrane,

wherein the support membrane has a permeation flux of 20 L/(m^2.h) or more and a desalination capacity of 1% to 20% at a pressure of 0.1 MPa,

wherein the support membrane has a porous body and a charged polymer layer coating the porous body,

wherein the charged polymer layer includes a cationic polymer layer and an anionic polymer layer that are formed alternately,

wherein the total number of the alternately-formed layers is 2 to 4, and

wherein the porous body is an MF membrane or a UF membrane.

[Claim 2]

The permselective membrane according to claim 1 having a permeation flux of 1 L/(m^2.h) or more and a desalination capacity of 90% or more at a pressure of 0.1 MPa.

[Claim 3]

The permselective membrane according to any one of claim 1 or 2, wherein the channel substance is at least one selected from a group consisting of gramicidin, amphotericin B and a derivative thereof.

[Claim 4]

A method for producing the permselective membrane according to any one of claims 1 to 3, comprising forming the lipid membrane on the support membrane and removing excess lipids with an acid or an alkali.

[Claim 5]

A method for treating water using the permselective membrane according to any one of claims 1 to 3, comprising subjecting water to be treated to a membrane separation treatment.