

CLAIMS

1. Active phospholipidic membrane (200) comprising:

- a double phospholipidic layer;

5 - at least a support (201) for supporting the double phospholipidic layer thus improving the resistance of the active phospholipidic membrane (200);

- a plurality of monoclonal antibodies (202) bonded to the support (201);

10 - a plurality of predetermined molecules (203) bound to the monoclonal antibodies (202) at a transmembrane level;

Characterized that said at least a support (201) comprises a first substrate comprising the monoclonal antibodies (202) and a second substrate comprising the double phospholipidic layer.

2. Active phospholipidic membrane (200) according to claim 1, characterized in that said support (201) is made in PVC, cellulose nitrate or polycarbonate and the membrane (200) is inserted into a support matrix comprising a gelling agent.

3. Active phospholipidic membrane (200) according to claim 1, characterized in that said support (201) is made in PVC, cellulose nitrate or polycarbonate.

4. Process (100) for the production of an active phospholipidic membrane according to one of the preceding claims, comprising the steps of:

- providing a double phospholipidic layer;
- 5 - providing at least a support for supporting the double phospholipidic layer;
- selecting and synthesizing molecules to be inserted at transmembrane level, using recombinant DNA technique;
- (101) of selecting a plurality of predetermined
10 monoclonal antibodies for the molecules to be inserted into the double phospholipid layer;
- (102) of binding the selected monoclonal antibodies to the support;

Characterized in that:

- 15 - the step of providing the support for supporting the double phospholipidic layer comprises forming a first substrate and a second substrate;
- comprises a step (103) of promoting a binding between the monoclonal antibodies and the first substrate
20 and between the double phospholipidic layer and the second substrate;
- comprises a step (104) of inserting in the system obtained in the previous steps and constituted by a monoclonal-antigen substrate-antigen a predetermined
25 quantity of polar liquid able to allow, in a subsequent

step (105), the assembly of phospholipids in a double layer which includes the molecules bound by antibodies;

5 - comprises a step (105) of adding phospholipids to be assembled in a membrane at the level of molecules bound by antibodies, by means of the polar liquid inserted in step (104);

10 - comprises a step of immersing an active phospholipid membrane (200) in a liquid containing agar able to gel and provide mechanical support to the structure of the active phospholipid membrane (200).