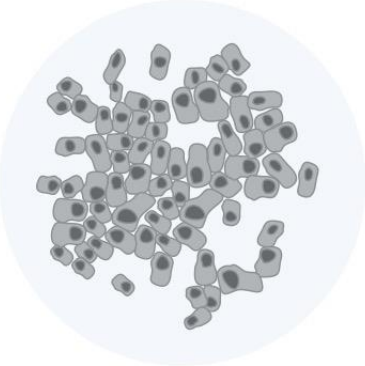

SEA SENTINEL SYSTEM (SSS)

Living cell system of marine mammals for cell biology studies, toxicological tests and large-scale research applications

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Protection	IT102020000003248 PCT/EP/2021/054068

What we are looking for

We are looking for a suitable partner to enter into license deal/co-development partnership

What it is needed for?

Sea Sentinels System (S.S.S.) offers a kit consisting of 5 cell lines, obtained from tissues (muscle and skin) belonging to 3 species of marine mammals (Tursiops truncatus, Ziphius cavirostris and Grampus griseus); kept viable by cryopreservation and easily rearing in normal cell culture plates.
The technology of S.S.S. consists in its being an "Integrated System", it allows to perform studies in multiple combinations between the 5 cell lines of the kit, giving the possibility to obtain species-specific biological responses (Tursiops vs Grampus vs Ziphius) or family-specific (Delphinidae vs Ziphiidae) or tissue-specific (skin vs muscle).
S.S.S. is a multifunctional system for physiology, biochemistry, genetics and eco-toxicology studies, replacing the use of live animals.

Advantages

- 3 muscle cell lines: comparison of the Delphinidae family (Tursiops and Grampus) vs Ziphiidae family (Ziphius).
- 2 skin cell lines: comparison between species of the Delphinidae family (Tursiops vs Grampus).
- Comparison of tissues, skin cultures vs muscle cultures in the same species.
- Analysis on individual cell lines belonging to the order of Cetaceans.

Applications

- Studies of physiology, biochemistry, genetics and ecotoxicology,
- Study of the effect of compounds on cellular processes;
- Toxicological and pharmacological research
- Study of the consequences of changes in environmental conditions

TRL scale

1 2 3 4 5 6 7 8 9

Health and biomedical - Medical Devices

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