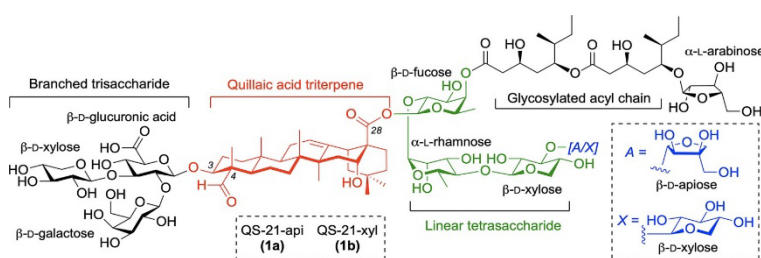


Synthetic Saponin

This patented technology leverages the unique physicochemical and bioactive properties of saponins to develop novel applications in health, food, and industrial sectors. The invention enables efficient extraction, formulation, and use of saponins as natural, multifunctional agents with both commercial and therapeutic potential.

Key Features & Technical Details

- **Source & Extraction:** Optimized process for obtaining high-purity saponins from plant or agricultural by-products.
- **Chemical Profile:** Glycosidic compounds with amphiphilic properties (hydrophilic sugar moiety + hydrophobic sapogenin).
- **Functional Properties:** Natural surfactant and foaming agent, Cholesterol-binding and bioactive effects, Antimicrobial and antifungal activity, Hemolytic potential managed through formulation
- **Stability:** Improved methods to enhance solubility and stability in various formulations.



Applications

- **Food & Nutraceuticals:** Natural cholesterol-lowering additives, functional beverages, and immune-boosting supplements.
- **Pharmaceuticals:** Vaccine adjuvants, anticancer, and anti-inflammatory agents.
- **Cosmetics & Personal Care:** Natural foaming agents in shampoos, soaps, and skincare products.
- **Industrial Uses:** Eco-friendly detergents, emulsifiers, and biocontrol agents in agriculture.

Advantages

- Natural and sustainable alternative to synthetic additives
- Multifunctional activity (health + industrial value)
- Market potential in multiple high-growth sectors

PATENT STATUS

- Patent EP23382369, 2021, extended US and Japan
- Patent EP21383098, 2021, extended US and Japan
- Patent EP21383096, 2023, extended US

STATE OF THE TECHNOLOGY R&D. in vivo Proof of concept generated

Collaboration Opportunities

We are seeking partnerships with:

- Pharma companies (pediatric oncology, RNA therapeutics)
- Clinical Research institutions (for preclinical & clinical validation)
- Investors (to accelerate translational development)

CONTACTS

Donatello Castellana, Tech Transfer Manager, dcastellana@cicbiogune.es