

# RHUSCORIN™

A NOVEL BOTANICAL INGREDIENT FROM SUMAC LEAVES  
 A DATA-DRIVEN APPROACH TO METABOLIC HEALTH



## Botanical origin

Rhuscorin™ is derived from the leaves of **Rhus coriaria**, a plant traditionally used in the Mediterranean diet, ensuring a strong safety and regulatory positioning.

- **Mediterranean**-origin biomass
- Long **history** of food use
- Not classified as novel food

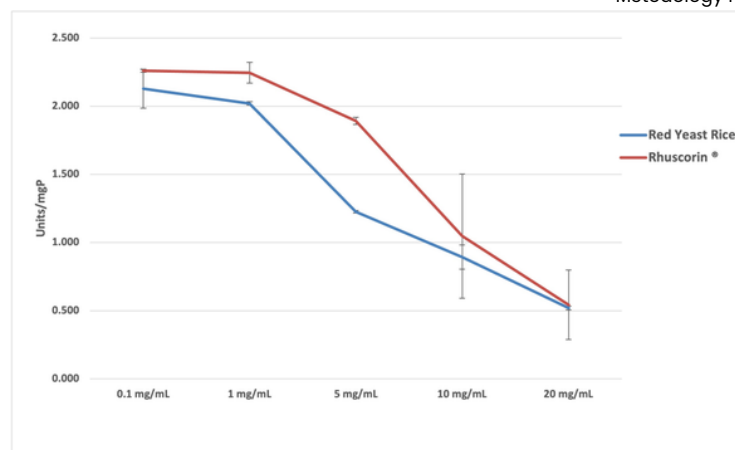
## Development Approach

The development of Rhuscorin™ integrates advanced analytics and AI-based tools to transform botanical complexity into a targeted ingredient.

- **Brightseed**: full phytochemical fingerprinting of sumac leaves
- Identification of 20 novel **bioactive compounds** (patent pending)
- Response surface methodology and artificial neural network: optimization of extraction conditions

## Preliminary evidence of comparable HMG-CoA Reductase inhibition

Methodology reference Rigillo *et al.*, 2025



# Technology & Intellectual Property

Rhuscorin™ is produced through a controlled extraction process designed for scalability and reproducibility.

- Proprietary extraction process
- Patent applications covering process and bioactives

## Scientific Network

The project is supported by a collaborative scientific network combining academic and technological expertise.

- Università della Basilicata
- Brightseed

## Next Steps

Ongoing activities aim to strengthen the scientific evidence and define the final positioning.

- *In vivo* studies (Q3-Q4 2026)
- Clinical validation (2027)

# Phytochemical Complexity

The ingredient is characterized by a highly complex phytochemical profile, supporting its biological potential.

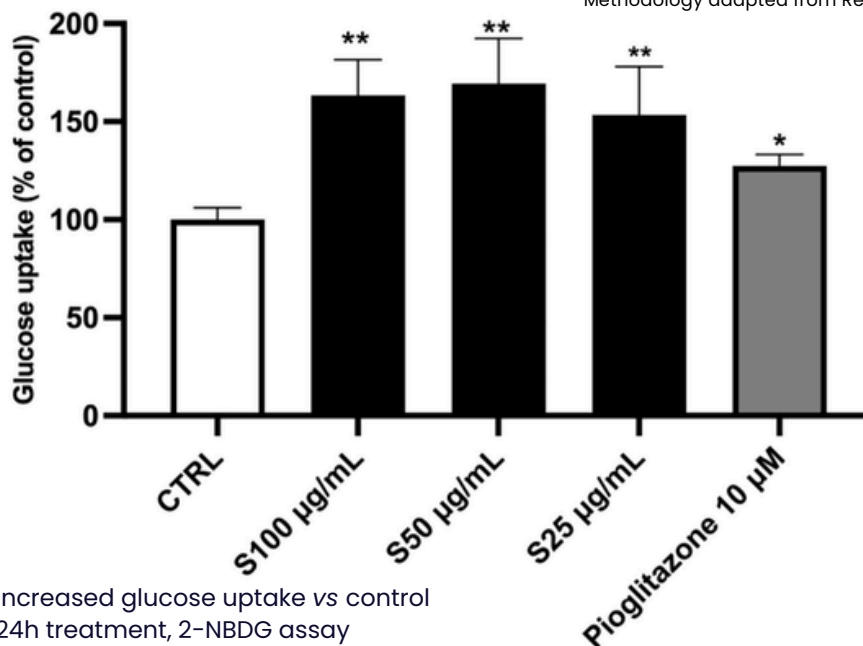
- ~ 2600 estimated active compounds
- ~ 419 identified high confidence compounds

## Preliminary Scientific Insights

- Preliminary *in vitro* results suggest a potential metabolic application, although further validation is required.
- Increased glucose uptake in hepatic cells
- HMG-CoA Reductase inhibition comparable to red yeast rice titred in monacolin K
- Potential dual effect on glucose (pre-diabetes) and lipid metabolism

## Glucose Uptake in HepG2 Cells

Methodology adapted from Ren *et al.*, 2025; Kim *et al.*, 2018



## Final Take Home

Rhuscorin® combines botanical origin, advanced analytics, and preliminary metabolic evidence, positioning it as a promising next-generation ingredient under validation.