

PROBLEM



- High cost of cell-free lysates limits research and innovation
- Limited accessibility to synthetic biology tools, especially for smaller labs and educational institutions
- Need for sustainable and scalable protein synthesis solutions in a growing industry
- Underutilization of biotech talent in our region
- Challenges in scaling up cell-free systems for commercial applications
- Expensive energy buffer components leading to high reaction costs

SOLUTION



- Produce cheap, standardized lysates at scale
- Develop accessible cell-free kits
- Optimize energy buffer for cost-effectiveness

KEY METRICS



- Lysate production volume
- Number of customers (academic vs. industry)
- Revenue from kit sales

UNIQUE VALUE PROPOSITION



- Accelerate SynBio through accessible and sustainable cell-free technology
- Low-cost, versatile lysates for various applications
- Bridging the gap between academic and industry research
- Customizable solutions for diverse research needs

UNFAIR ADVANTAGE



- Low costs of lysate production and transport
- Strategic location in Straubing's emergent biotech scene
- Flexible and versatile business structure

CHANNELS



- Automated online shopfront
- Conferences and trade shows
- Social network through publications
- Sponsorship of iGEM teams

CUSTOMER SEGMENTS



- Academic Labs: Universities, research institutions seeking cost-effective tools
- Small Industry Labs: Biotech startups, R&D departments in small to medium enterprises
- Pharmaceutical Researchers: Drug discovery and development teams
- Educational Institutions: High schools, colleges for STEM education
- Large Biotech Companies: For potential co-development projects
- Government Research Facilities: Focusing on biosecurity and environmental applications

COST STRUCTURE



- Lab space and equipment: Leasing costs at TGZ Biolab, Hafen Straubing-Sand
- Personnel: Skilled researchers, lab technicians, business development staff
- Reagents and chemicals: Bulk purchases from chemical supply partners
- Production costs: Energy, water, waste management
- R&D expenses: Ongoing research for product improvement and new applications
- Marketing and sales: Conferences, online presence, customer acquisition
- Regulatory compliance: Ensuring adherence to biotech industry standards
- Intellectual property management: Legal fees for potential future patents

REVENUE STREAM



- Cell-free lysate kit sales: Primary income from standardized and custom kits
- Codevelopment projects: Partnerships with industry for specialized applications
- Consulting services: Offering expertise in cell-free systems to other labs
- Potential future IP licensing: As proprietary technologies are developed
- Research grants: From government and private institutions
- Venture capital funding: For scaling and expansion
- Royalties from co-developed products: Long-term revenue from successful collaborations