



20 YEARS OF INDUSTRY USE

Now broadly available for the production of biologics used in human and animal health.

5

approved products

Teriparatide injection (Alvogen)
Rylaze® (Jazz)
VAXNEUVANCE® (Merck)
Pneumosil® (Serum Institute)
MenFive® (Serum Institute)

15+

years of international regulatory experience and success

180+

lead protein candidates expressed with over 60+ partnerships, including with 12 of 15 top pharmas

SPEED WITHOUT COMPROMISE

Flexible business model enables our development partners, from start-ups through large pharma, to advance their programs quickly.

Experienced scientific team with deep institutional knowledge in producing a broad range of protein-based therapeutics, including novel antibody formats, recombinant enzymes, and vaccines.

Rapid, high quality, high yield production and analysis of difficult-to-produce proteins.

SCREENING

Industry-leading in the design and screening of a broad array of expression strains

EVALUATION

Production and analysis of the expressed protein for function, titer, and quality

Ability to screen multiple proteins simultaneously

Down selection of 5-10 production strain candidates for fermentation

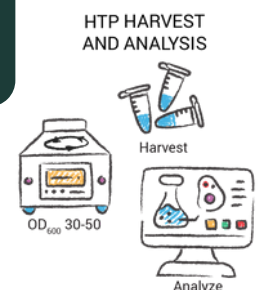
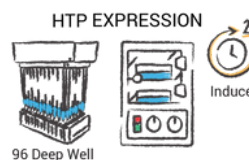
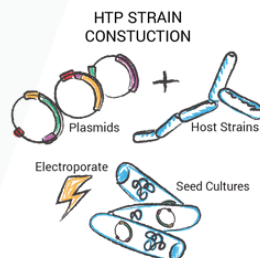
FERMENTATION

Four weeks to fermentation assessment of down selected strains and identification of optimal production strains

Fermentation development performed at 2L DOE scale

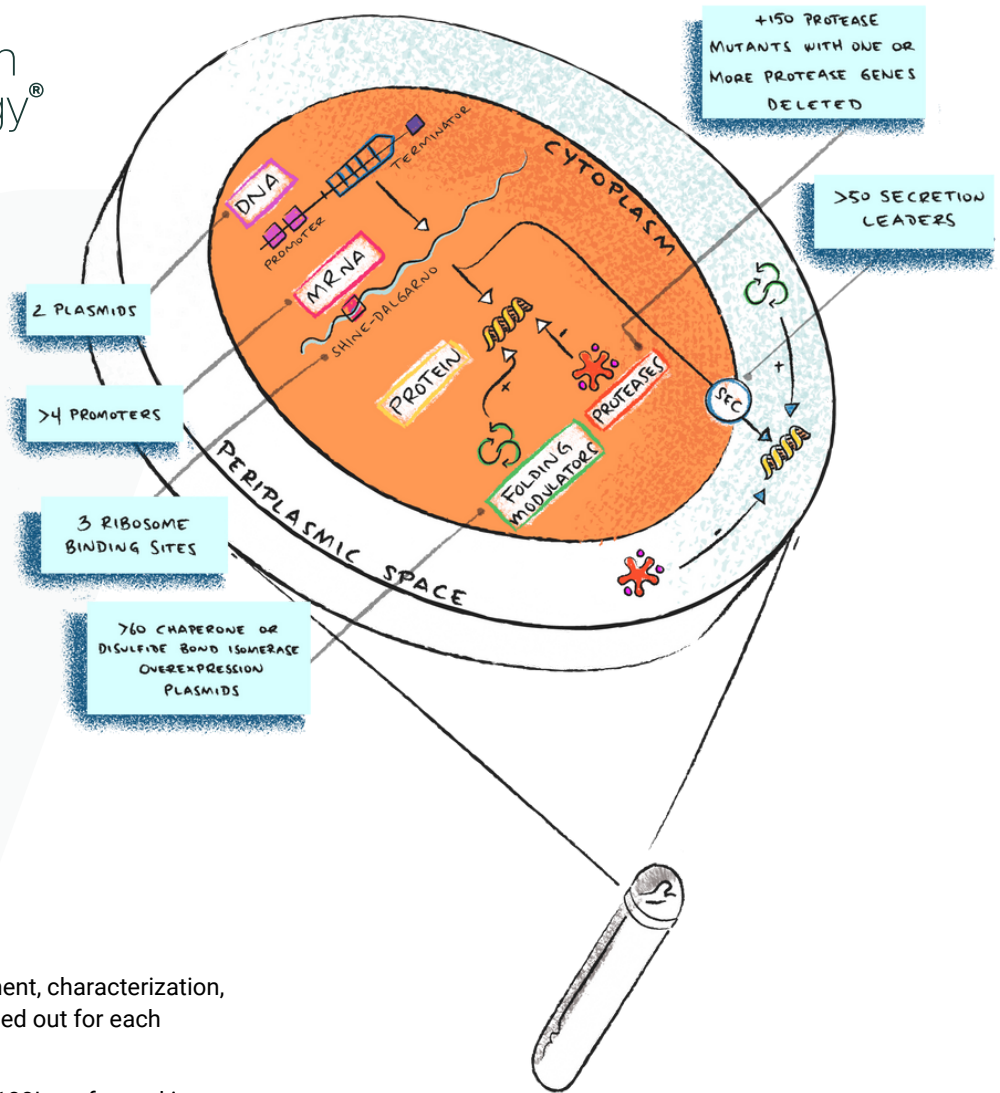
PURIFICATION

Automated downstream processing options evaluated in parallel 96-well format





Pfenex
Expression
Technology®
by
primrose bio



Additional Capabilities

- Commercial method development, characterization, and impurity analyses are carried out for each protein.
- Process scale-up from 30L to 100L performed in-house and ready for transfer to CGMP facilities.
- Scalable, CGMP ready purification processes are developed and implemented through skid scale chromatography.

Toolbox

- Thousands of expression plasmid and host cell phenotype combinations.
- Non-tagged, soluble protein expression to the periplasm.
- An animal origin and antibiotic resistance free process from the start.

Successes

- Five commercial products use the Pfenex Expression Technology® platform as a manufacturing substrate: from enzyme replacement therapies to conjugate vaccines.
- More than 25 issued U.S. patents.
- Over 25 GMP technology transfers to global manufacturers to date.



Contact

To learn more, please reach out to
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Visit primrosebio.com