Promega Corporation: Technology Areas of Interest





Mission Statement



Provide the most innovative biological reagents and integrated systems used in research and applied technology worldwide.



Highlights







Promega Headquarters, Madison, Wisconsin

Founded in 1978. Headquartered in Madison, Wisconsin

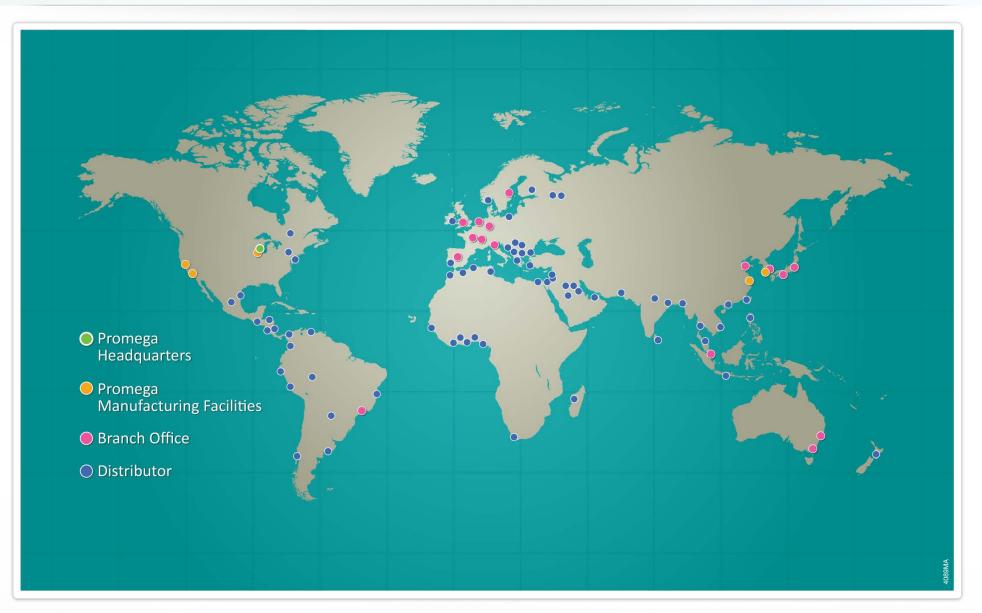
Calendar Year 2013 Revenues ~\$350M USD

~1,300 employees in 15 countries

Over 3,000 products for life science research and applied science distributed in >100 countries

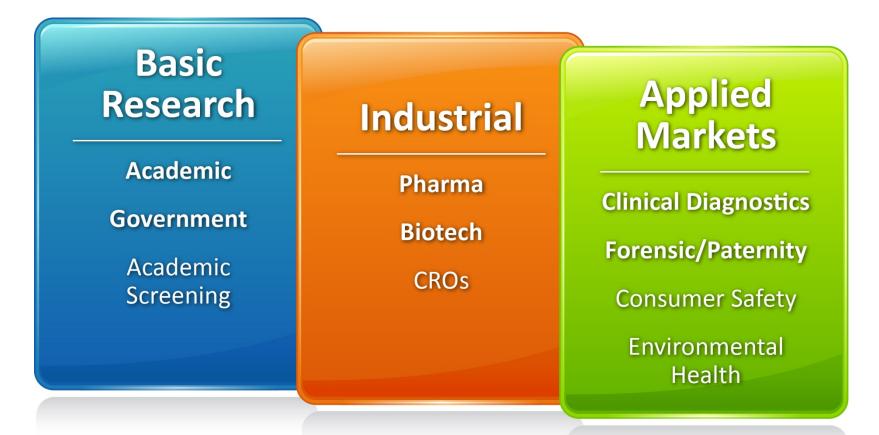
Commercial and Manufacturing Sites





Breadth of Market Segments

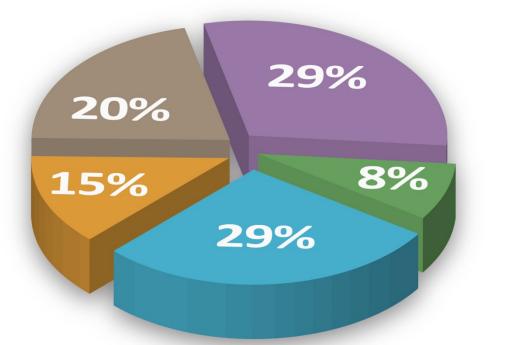




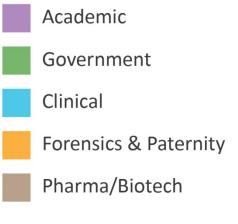
Segments in bold are primary markets for Promega.

Sales Mix by Primary Markets



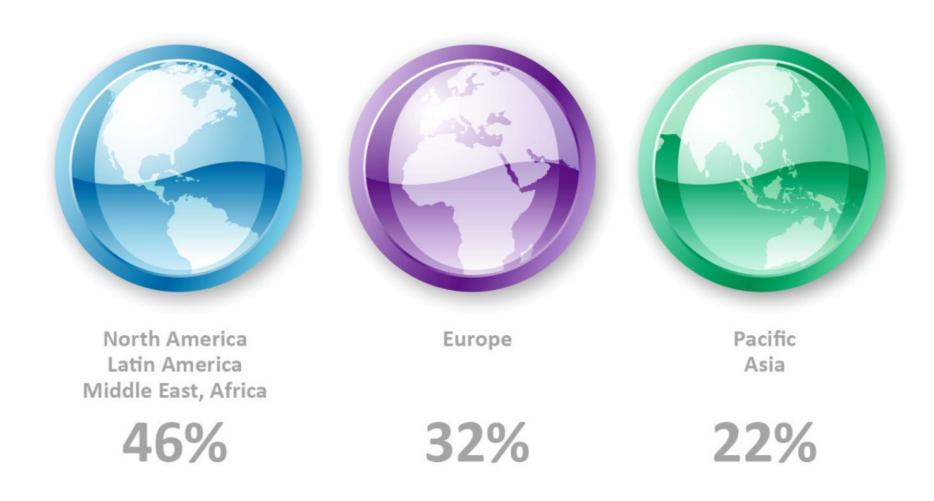






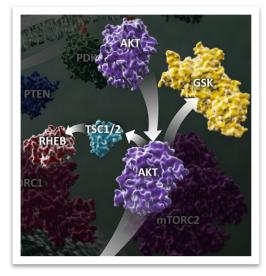
Sales by Region of the World





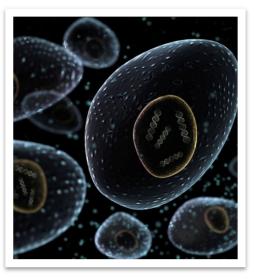
Technologies and Strengths





Cellular & Biochemical

- Assay Design (including custom design)
- Integrated Cellular Biology
- Macromolecular Design
- Protein Analysis
- Organic Chemistry



Nucleic Acid Technologies

- Purification
- Amplification
- Detection
- Human Genetic Identity



Integrated Automation

- Instrumentation
- Reagents
- Software
- Services

Capabilities and Strengths

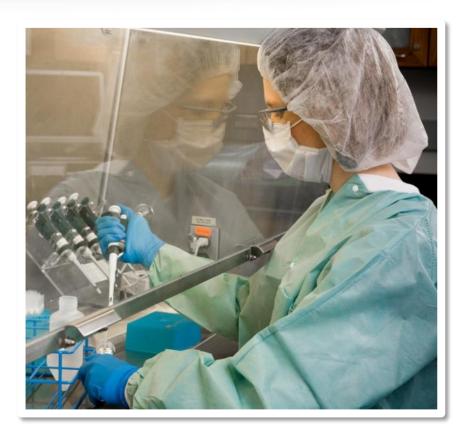


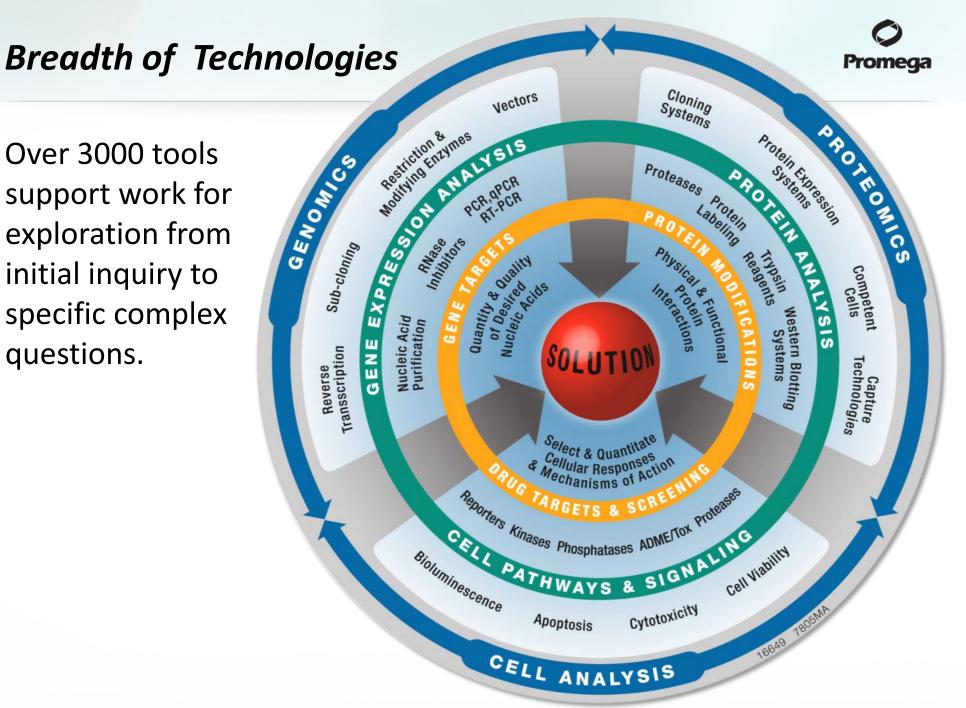
Strong Intellectual Property

- Cellular Analysis
- Genetic Identity
- Genomics
- Proteomics

Collaborative Partnerships

- Co-marketing
- Automated protocol development
- OEM and custom supply
- In and Out Licensing







Genetic Analysis:

- Novel, thermostable or high fidelity DNA polymerases
- Faster enzymes for integrated devices
- Gene Methylation and Epigenetics
- Automated RNA purification (for use on Maxwell)
- Field-compatible instrumentation for genetic analysis (DNA purification, rapid amplification, separation and analysis)





Genetic Analysis: *continued*

- Regulation of gene expression in mammalian cells
- Phenotypic and genotypic markers for human identity testing
- RNA and genomic DNA purification technologies
- Micro RNA purification and analysis
- Nucleic acid stabilization
- Differential tissue/cell extraction from samples
- Novel ways of high throughput DNA concentration



Instrumentation:

- Automated Nucleic Acid Purification
 - Additional capabilities for Maxwell system
 - Sample pre-processing
 - Plasmid purification
- Integrated Solutions
 - Maxwell application expansion
 - Instrumentation related to Promega's reagents





Cellular Analysis:

- Cell-based assays for discovery and development of drug leads, including assays of efficacy, specificity, and safety
- Bioassay technologies for development, evaluation, and production of biopharmaceuticals
- Technologies for manipulation, evaluation and analysis of stem cells, progenitor cells, and differentiated cells
- Novel transfection/infection methods for gene delivery into mammalian cells, especially stem cells
- Lentivirus vectors



Bioluminescent Technologies : (including optical imaging)

- Novel bioluminescent chemistries (e.g. luciferases, auxiliary enzymes, etc.)
- Novel mutant luciferases
- Novel bioluminescent substrate derivatives
- Novel assay designs

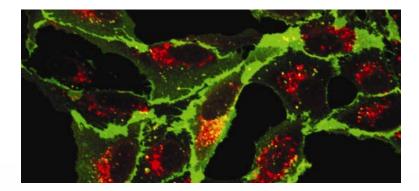






Proteomics:

- Methods for preparing and analyzing samples by mass spec, especially for quantitative analysis of sample composition and protein structure
- Methods for detection of post-translational modifications (e.g., phosphorylation, ubiquitinylation, acetylation, glycosylation, etc.) and enzymes involved in their creation
- Methods for analyzing protein function in cells, cell lysates, and immobilized on surfaces (e.g, interactions, enzyme activities, etc.)
- Methods for development and evaluation of biopharmaceuticals (e.g., antibodies or recombinant protein therapeutics)
- Eukaryotic systems for in vitro synthesis of large amounts of active, soluble proteins
- New functionalities for HaloTag, including novel surfaces for protein capture, analysis, and purification





Chemistry:

- Red ligands: >600nm emission, as bright as xanthene dyes in water
- Dyes that sense environmental changes (pH, ionic concentration, etc.)
- Novel intracellular bioluminescent or fluorescent probes
- Novel luminophores for cellular analysis
- Novel fluorescent dyes for labeling and detecting nucleic acid
- Chemically cleavable linkers
- Solid phase formulation additive for stability and solubility



Forensic/Paternity Applications:

- qPCR instruments
- Liquid handling instruments
- Automated punch instruments for sample processing



Areas of Little Interest

- Specific therapeutic agents or genes/proteins
- Manual plasmid DNA purification
- Site-directed mutagenesis
- DNA sequencing
- siRNA/RNAi
- Standard transfection technologies
- Antibodies
- Prokaryotic expression vectors



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Areas of Little Interest



- ESC or iPS cell lines or differentiated cell lines derived from them. (Promega will cooperate with entities producing such cell lines to enable them to use Promega's reporter genes, HaloTag[®], or other technologies in their cell lines including cooperation in licensing)
- Label-free technologies
- Ab based clinical diagnostics
- Infectious disease clinical diagnostics

Technology Acquisition Team



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Promega licensing portal



