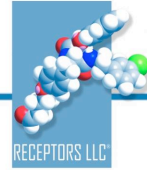


RECEPTORS LLC



SMART MATERIALS™
powered by
ACTIVEcapture™ TECHNOLOGY

Filling the Critical Gap:
Sampling and Sample Preparation

CONTENTS



I. RECEPTORS' Technology and Markets [Slides 2-7]

II. Sampling and Sample Preparation for Infectious Microbe Detection and Diagnostics [Slides 8-13]

III. Product Opportunities [Slides 14-16]

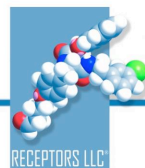
RECEPTORS LLC STRATEGIC FOUNDATION



- PLATFORM TECHNOLOGY
Combinatorial Artificial Receptor Array (CARA™)
- FLAGSHIP PATENT
USPTO Patent No. 7,504,364 17 march 2009
Methods of Making Arrays and Artificial Receptors
- PEER-REVIEWED PUBLICATION
Weller Roska et.al.
*Small Molecule Based Binding Environments:
Combinatorial Construction for Multiplexed Affinity
Screening*
J. Am. Chem. Soc., **2009**, 131 (46), pp 16660–16662

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RECEPTORS LLC TECHNOLOGY FOUNDATION



- CARA™ AFFINITY by DESIGN™ PLATFORM TECHNOLOGY
- **PROBLEM:** CREATE A PLATFORM SOLUTION FOR THE SELECTIVE MODIFICATION OF ANY SURFACE.
- **SOLUTION:** OUR SMART MATERIALS™ SURFACE MODIFICATION CHEMISTRY THAT CREATES SELECTIVE SURFACES FOR APPLICATION TO SIMPLE, SCALABLE AND STABLE PRODUCTS BASED ON ACTIVEcapture™ TECHNOLOGY.

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PATH: TECHNOLOGY to PRODUCTS



CARA™ AFFINITY by DESIGN™ TECHNOLOGY



SMART SURFACES™



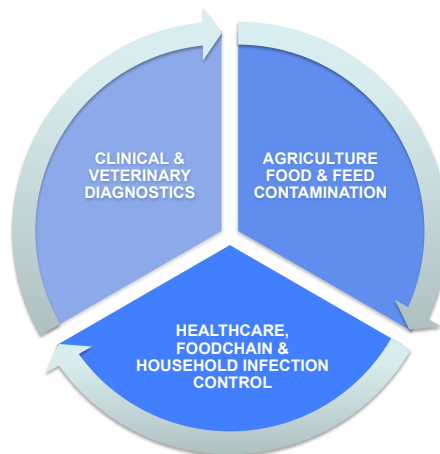
ACTIVEcapture™ MATERIALS



PRODUCTS & MARKETS

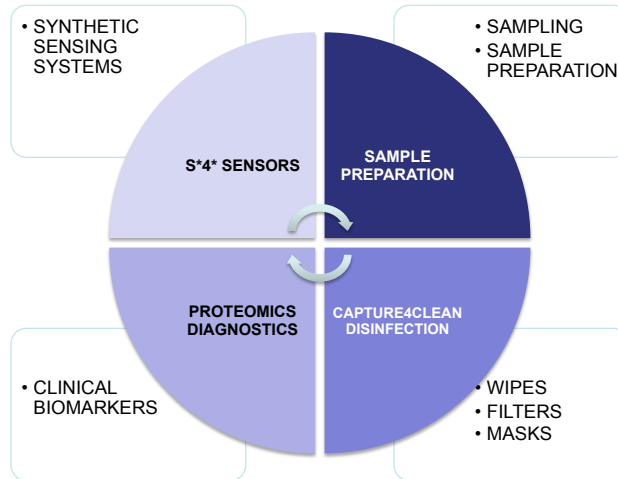
5

ACTIVEcapture™ MARKETS



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ACTIVEcapture™ Materials: Product Applications



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SAMPLE PREPARATION APPLICATION



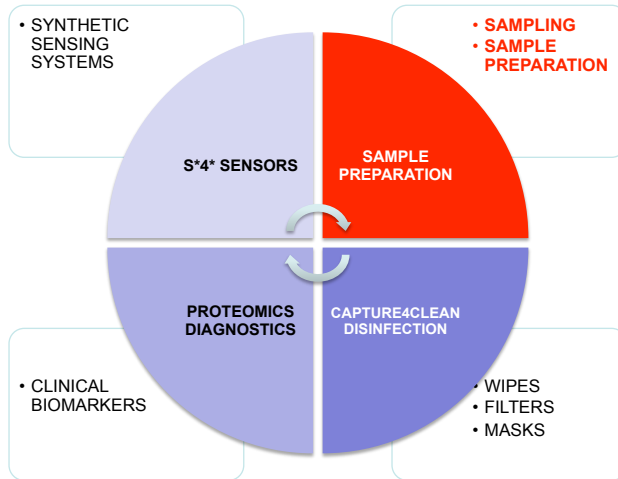
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SAMPLE PREPARATION APPLICATION



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ACTIVEcapture™ APPLICATIONS MICROBE CONTAMINATION and CONTROL



SMART MATERIALS™ powered by ACTIVEcapture™ TECHNOLOGY

Bacteria and viruses are a serious healthcare, agriculture and household problem. RECEPTORS' AFFINITY by DESIGN™ SMART MATERIALS™ address the three critical areas of microbe contamination and infection control: detection, disinfection and prevention. Our market focused products are:

- * [sampling and sample preparation for detection and diagnostics](#),
- * [capture and cleaning for disinfection](#), and
- * [antimicrobial surfaces for prevention](#).

RECEPTORS' SMART MATERIALS™ address the economic, environmental and health costs of bacterial and viral contamination through the application of our simple and cost effective CARA™ technology. Our ACTIVEcapture™ products bridge the critical cost versus efficiency market gap.

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FILLING the CRITICAL GAP



CRITICAL COMPONENTS OF A SUCCESSFUL DIAGNOSTIC SYSTEM



SAMPLE PREP IS THE "ACHILLES HEEL"

Sample preparation is commonly the "Achilles Heel" of many detection and diagnostic systems. Generic methods like reverse phase media are limited by poor specificity while the analyte specific, antibody based methods are limited by cost, stability and high specificity. RECEPTORS' SMART MATERIALS™ technology fills this simplicity versus specificity gap. Our CARA™ ACTIVEcapture™ products create the right balance of target concentration and purification using a scalable, cost effective technology.

THE CRITICAL GAP



BALANCING PURIFICATION AND CONCENTRATION

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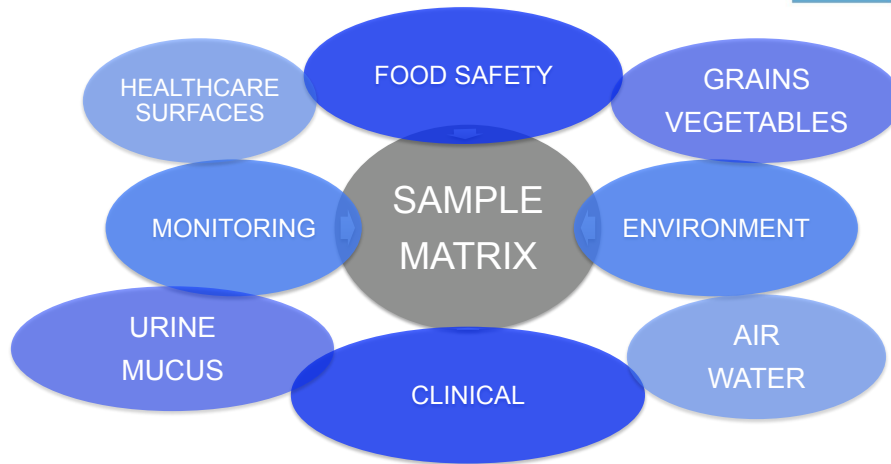
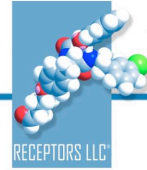
ACTIVEcapture™ SAMPLING and SAMPLE PREPARATION



- **Capture for Sampling:** filters, wipes, pads modified with ACTIVEcapture™ environments for microbial capture and sampling of food processing, clinical and home surfaces
- **Capture for Sample Preparation:** one-step capture and concentration of targets such as bacteria and viruses, providing a purified, concentrated sample for improved detection and diagnostics performance
- **Read-Out Agnostic:** suitable for use with PCR, EIA, microbiological culture, and other endpoints

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ACTIVEcapture™ Diverse SAMPLES and APPLICATIONS



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SAMPLE PREPARATION PRODUCTS



- I. RECEPTORS' Technology and Markets [Slides 2-7]
- II. Sampling and Sample Preparation for Infectious Microbe Detection and Diagnostics [Slides 8-13]
- III. Product Opportunities [Slides 14-16]**

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ACTIVEcapture™: Available Product Opportunities



ACTIVEcapture™ prototype/pilot products available for evaluation. Please contact us to arrange samples and/or to discuss development partnerships.

- MAGNETIC BEADS (A and B)
- FILTRATION MEDIA (A and B)
- SAMPLING WIPES (A and B) – coming soon

Format “A” designed for high capacity microbe binding with minimal release.
Format “B” designed for effective binding and efficient release.

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TECHNOLOGY WITH a STRATEGY



CORE COMPETENCE:
SURFACE FUNCTIONALIZATION FOR SELECTIVE BINDING

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“The cruel reality is that nobody cares about technology. People are interested in applications and products.”
Michael Knapp / Cambrios

Putting Frogs In Wheelbarrows: Technology Without A Strategy



WWW.RECEPTORSLLC.COM

Minnesota Technology Magazine

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