

# MACH

## Micro-polymer Detection



**Intense Spots**  
in the world of clinical detection



- ▶ Biotin-free micro-polymer technology
- ▶ Superior antigen access
- ▶ Unsurpassed specificity and sensitivity
- ▶ Greater primary antibody dilutions
- ▶ Minimal background staining

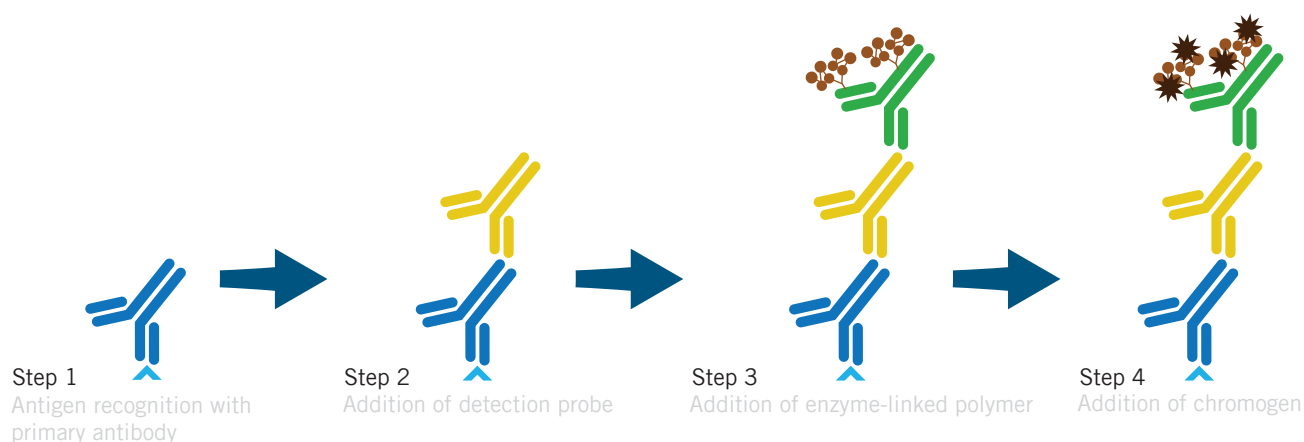
# MACH Micro-polymer Detection

Biocare's micro-polymer detection systems feature a compact molecular design; reducing steric hindrance and enabling crisp, intense staining patterns – even in nuclei and other sub-cellular structures for human tissues.

## MACH Micro-polymer Advantages

- ▶ The combination of improved polymer access with a signal enhancing probe enables the use of higher primary antibody titers, reducing laboratory costs with every slide.
- ▶ The MACH micro-polymer system has a simplified workflow, excellent specificity and enhanced sensitivity on mouse and rabbit antibodies.

In the MACH 3™, MACH 4™, and IntelliPATH™ detection systems, the use of a probe amplifies the signal from each antigen recognition event - increasing the sensitivity of your primary antibody.

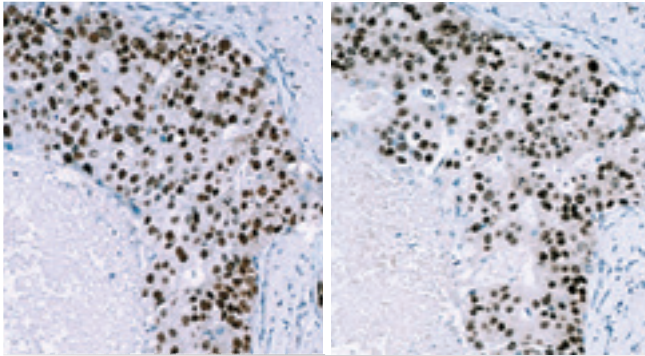


## Detection System Comparison

Detection	IntelliPATH™	MACH 4™	MACH 3™	MACH 2™
Primary Antibody	Universal for Mouse and Rabbit	Universal for Mouse and Rabbit	Mouse or Rabbit	Universal, Mouse or Rabbit
Technology	Two-step Micro-polymer	Two-step Micro-polymer	Two-step Micro-polymer	One-step Micro-polymer
Sensitivity	++++ (mouse) ++ (rabbit)	++++ (mouse) ++ (rabbit)	+++	++
Antibody Dilution	1:300-1:400 (mouse) 1:50-1:100 (rabbit)	1:300-1:400 (mouse) 1:50-1:100 (rabbit)	1:100-1:200	1:50-1:100

# Understanding MACH Detection

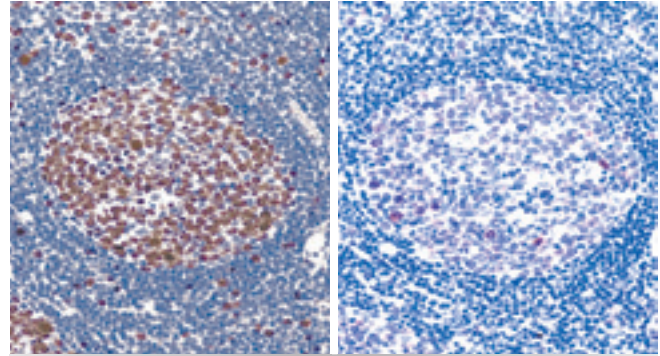
## MACH 4™ - Superior Antibody Dilutions



MACH 4, 1:1000 dilution ER(105)      Envision+ Polymer, 1:25 dilution ER(105)

MACH 4 is ideal for use with antibody solutions prepared from concentrates. Its increased sensitivity enables a significantly higher dilution of concentrated antibodies.

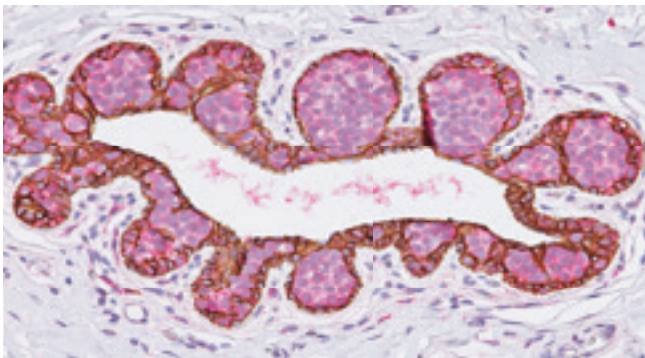
## MACH 3™ - High Sensitivity, Low Cost



MACH 3, 1:200 dilution Ki-67      Envision+, 1:200 dilution Ki-67

MACH 3 is a two-step, biotin-free detection which provides excellent specificity and sensitivity for staining.

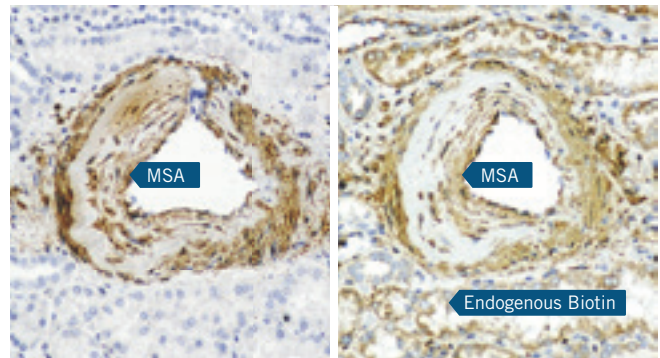
## MACH 2 Double Stain - Simultaneous Multiplex



Lobular carcinoma *in situ*

MACH 2 Double Stain is an innovative detection consisting of HRP and AP enzymes in a single solution. The simultaneous detection of mouse and rabbit antibodies allows double stains to be performed in about the same time as single stains.

## MACH 2™ - Simple, Clean & Efficient



MACH 2, MSA

ABC System, MSA

MACH 2 detection consists of an enzyme-linked polymer that is applied directly after the primary antibody. With no probe or Avidin/Biotin blocking required, MACH 2 eliminates endogenous biotin, shortens protocol time, and decreases reagent use.

## intelliPATH™ - Optimized for Automation



Designed and optimized for the intelliPATH automated staining instrument, intelliPATH detection reagents provide the strongest universal detection for mouse and rabbit primary antibodies. For multiplexed antibodies, simultaneous double stain detection is also available.

# MACH Micro-polymer Detection

## MACH 4™

Product Name	Antibody	Enzyme	Cat. No.
MACH 4™ Universal HRP-Polymer	Mouse or Rabbit	HRP	M4U534 G, H, L, MM
MACH 4™ Universal AP-Polymer	Mouse or Rabbit	AP	M4U536 G, H, L

## MACH 3™

Product Name	Antibody	Enzyme	Cat. No.
MACH 3™ Mouse HRP-Polymer	Mouse	HRP	M3M530 G, H, L
MACH 3™ Mouse AP-Polymer	Mouse	AP	M3M532 G, H, L
MACH 3™ Rabbit HRP-Polymer	Rabbit	HRP	M3R531 G, H, L
MACH 3™ Rabbit AP-Polymer	Rabbit	AP	M3R533 G, H, L

## MACH 2 Double Stain

Product Name	Antibody	Enzyme	Cat. No.
MACH 2 Double Stain 1	Mouse & Rabbit	AP (mouse) & HRP (rabbit)	MRCT523 G, H, L
MACH 2 Double Stain 2	Mouse & Rabbit	HRP (mouse) & AP (rabbit)	MRCT525 G, H, L

## MACH 2™

Product Name	Antibody	Enzyme	Cat. No.
MACH 2™ Universal HRP-Polymer	Mouse or Rabbit	HRP	M2U522 G, H, L
MACH 2™ Mouse HRP-Polymer	Mouse	HRP	MHRP520 G, H, L, MM
MACH 2™ Mouse AP-Polymer	Mouse	AP	MALP521 G, H, L
MACH 2™ Rabbit HRP-Polymer	Rabbit	HRP	RHRP520 G, H, L, MM
MACH 2™ Rabbit AP-Polymer	Rabbit	AP	RALP525 G, H, L

## intelliPATH™

Product Name	Antibody	Enzyme	Cat. No.
intelliPATH™ Universal HRP Detection	Mouse or Rabbit	HRP	IPK5011 G80
intelliPATH™ Multiplex Secondary Reagent 2	Mouse & Rabbit	HRP (mouse) & AP (rabbit)	IPSC5004 G20, G80

HRP = Horseradish Peroxidase    AP = Alkaline Phosphatase

**BIOCARE**  
M E D I C A L

800.799.9499  
4040 Pike Lane  
Concord CA 94520

[www.biocare.net](http://www.biocare.net)