

# CK5/14 + p63 + CK7/18

Prediluted Multiplex Antibody Reagent  
902-360-091021

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

Available Product Formats				
Format	Catalog Number	Description	Dilution	Diluent
UltraLine – For BenchMark	AVR 360DSK G, G25	6.0, 25mL	Ready-to-use	N/A

## Intended Use:

For Research Use Only. Not for use in diagnostic procedures.

## Summary and Explanation:

CK5/14 + p63 + CK7/18 is comprised of mouse monoclonal anti-CK5, anti-CK14, and anti-p63 antibodies and rabbit monoclonal anti-CK7 and anti-CK18 antibodies. CK5 and CK14 are high molecular weight keratins expressed in the cytoplasm of basal cells and myoepithelium of breast tissue (1-4). p63 is a transcription factor present in the nuclei of myoepithelial cells (2,4). In contrast, CK7 and CK18 are low molecular weight cytokeratins primarily expressed in luminal cells of the breast (1-3).

## Principle of Procedure:

This product is a primary antibody cocktail of mouse and rabbit antibodies, which may be used in a Multiplex IHC staining procedure to produce a two-color stain. Following application of the primary antibody cocktail to the tissue sample, detection is performed by separate secondary antibodies specific for each species (i.e. mouse or rabbit) of the primary antibody cocktail, which are conjugated to horseradish peroxidase (HRP) or alkaline phosphatase (AP) enzymes. Visualization is accomplished by the application of chromogenic substrates (DAB and Red), which are enzymatically activated (by HRP or AP, respectively) to produce a colored reaction product at the antigen site. The specimen may be counterstained and coverslipped. Results are interpreted using a light microscope.

## Reagent Provided:

CK5/14 + p63 + CK7/18 is provided as follows:

1. Prediluted antibody cocktail of anti-CK5, anti-CK14 and anti-p63 antibodies (AVR401), in buffer with carrier protein and preservative.

Antibody	anti-CK5	anti-CK14	anti-p63
Clone	XM26	LL002	4A4
Source	Mouse monoclonal	Mouse monoclonal	Mouse monoclonal
Isotype	IgG1/kappa	IgG3	IgG2a/kappa
Epitope/ Antigen	CK5	CK14	p63
Cellular Localization	Cytoplasmic	Cytoplasmic	Nuclear
Staining	Brown (DAB)	Brown (DAB)	Brown (DAB)

2. Prediluted antibody cocktail of anti-CK7, anti-CK18 antibodies (AVR402), in buffer with carrier protein and preservative.

Antibody	anti-CK7	anti-CK18
Clone	BC1	EP30*
Source	Rabbit monoclonal	Rabbit monoclonal
Isotype	IgG	IgG
Epitope/ Antigen	CK7	CK18
Cellular Localization	Cytoplasmic	Cytoplasmic
Staining	Red	Red

\*Previously known as E431-1

## Storage and Stability:

Store at 2°C to 8°C. The product is stable to the expiration date printed on the label, when stored under these conditions. Do not use after expiration date.



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## Known Applications:

Immunohistochemistry (formalin-fixed paraffin-embedded tissues)

**Species Reactivity:** Human

**Positive Tissue Control:** Breast carcinoma

## Staining Protocol Recommendations (Ventana BenchMark ULTRA):

Refer to the User Manual for specific instructions for use.

Recommended protocol parameters are as follows:

**Template:** U IHC DS uDAB-uRed Template

**Pretreatment Protocol:** ULTRA CC1 Standard (64 min) at 95°C

**Primary Antibody (AVR401):** Incubate for 32 minutes at 37°C

**Denaturation:** Default Template setting (4 minutes at 90°C)

**Primary Antibody (AVR402):** Incubate for 32 minutes at 37°C

**ultraBlock (V-Blocker BRI4001):** Incubate for 4 minutes (with appropriate Option # registered by user). V-Blocker is highly recommended to be applied prior to any detection system.

**Detection:** ultraView DAB and AP Detections

## Limitations:

This product is provided for Research Use Only (RUO) and is not for use in diagnostic procedures. Suitability for specific applications may vary and it is the responsibility of the end user to determine the appropriate application for its use.

## Precautions:

1. This antibody contains less than 0.1% sodium azide. Concentrations less than 0.1% are not reportable hazardous materials according to U.S. 29 CFR 1910.1200, OSHA Hazard communication and EC Directive 91/155/EC. Sodium azide (NaN<sub>3</sub>) used as a preservative is toxic if ingested. Sodium azide may react with lead and copper plumbing to form highly explosive metal azides. Upon disposal, flush with large volumes of water to prevent azide build-up in plumbing. (Center for Disease Control, 1976, National Institute of Occupational Safety and Health, 1976). (15)

2. Specimens, before and after fixation, and all materials exposed to them should be handled as if capable of transmitting infection and disposed of with proper precautions. Never pipette reagents by mouth and avoid contacting the skin and mucous membranes with reagents and specimens. If reagents or specimens come into contact with sensitive areas, wash with copious amounts of water. (16)

3. Microbial contamination of reagents may result in an increase in nonspecific staining.

4. Incubation times or temperatures other than those specified may give erroneous results. The user must validate any such change.

5. Do not use reagent after the expiration date printed on the vial.

6. The SDS is available upon request and is located at <http://biocare.net>.

## Technical Support:

Contact Biocare's Technical Support at 1-800-542-2002 for questions regarding this product.

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### References:

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