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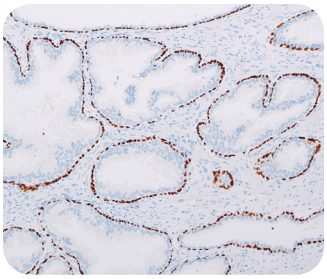
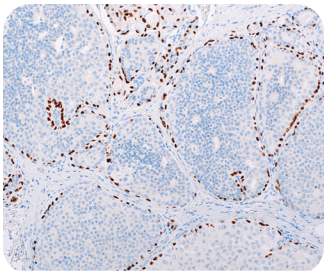
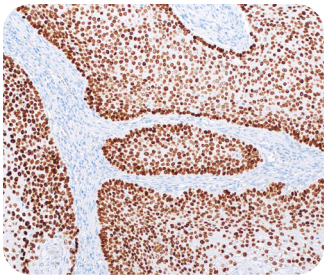
Cell Marque™ Tissue Diagnostics

p63 (EP174) and p40 (ZR8)







Images (top to bottom)

1. p63 on benign prostate glands
2. p63 on breast ductal carcinoma *in situ*
3. p40 on lung squamous cell carcinoma

p63 (also known as TAp63 or "full length" p63) is a transcription factor located at chromosome 3q27-29 and belongs to the p53 gene family.[1] Unlike p53, p63 is not a tumor suppressor gene but rather a tissue differentiation gene. p63 theoretically regulates epithelial organ development[2] as well as human keratinocyte proliferation.[3]

p40 (also known as deltaNp63) is a truncated, nontransactivating isoform of p63 that is highly specific for squamous epithelium.

p63 expression is generally isolated to squamous epithelium, basal cells of urothelium, basal cells of prostate epithelium, and myoepithelial cells in glandular tissue.[1] This nuclear expression makes p63 immunohistochemistry a valuable tool in various applications, including (but not limited to):

1. Invasive vs. *in situ* breast carcinoma or salivary gland carcinoma[4]
2. Confirmation of prostate adenocarcinoma[5]
3. Squamous cell carcinoma vs. adenocarcinoma[6]
4. Cutaneous adnexal tumors vs. metastatic adenocarcinomas to the skin[7]

p40 has a higher specificity for lung squamous cell carcinomas than p63, therefore nuclear expression of p40 is a valuable tool for subclassifying lung tumors into squamous vs. non-squamous carcinomas.[8,9]

Benefits of rabbit monoclonal p63 (EP174) and p40 (ZR8):

- For *in vitro* diagnostic use
- Labeling myoepithelial cells in breast (to determine invasive vs *in situ* carcinoma) and in prostate (to determine malignancy) by p63
- Differentiating lung squamous carcinoma from lung adenocarcinoma by p40
- Nuclear visualization
- Rabbit monoclonal technology for robust staining and minimal background
- Compatible with standard automation and detection used in diagnostic IHC

Intended Use

These products herein are intended for laboratory use in the detection of their respective proteins in formalin-fixed, paraffin-embedded tissue stained in qualitative immunohistochemistry (IHC) testing. These products are not a stand-alone diagnostic, and cannot be used for diagnosis, treatment, prevention, or mitigation of disease.

Ordering Information

Description	p63 (EP174) Cat. No.	p40 (ZR8) Cat. No.
0.1 mL concentrate	**482R-14**	**483R-14**
0.5 mL concentrate	**482R-15**	**483R-15**
1.0 mL concentrate	**482R-16**	**483R-16**
1.0 mL predilute	**482R-17**	**483R-17**
7.0 mL predilute	**482R-18**	**483R-18**
25 mL predilute	**482R-10**	**483R-10**

References

1. O Kaufmann, et al. Am J Clin Pathol. 2001;116(6):823-30.
2. L Guerrini, et al. J Biomed Biotechnol. 2011;2011:864904.
3. N Wu, et al. J Biol Chem. 2012;287(8):5627-38.
4. M Barbareschi, et al. Am J Surg Pathol. 2001;25(8):1054-60.
5. RB Shah, et al. Am J Surg Pathol. 2002;26(9):1161-8.
6. R Ocque, et al. Am J Clin Pathol. 2011;136(1):81-7.
7. M Rollins-Raval, et al. Arch Pathol Lab Med. 2011;135(8):975-83.
8. JA Bishop, et al. Mod Pathol. 2012;25(3):405-15.
9. D Nonaka. Am J Surg Pathol. 2012;36(6):895-9.

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USA
Toll Free: **800.665.7284**
Phone: **916.746.8900**
Fax: **916.746.8989**
Email: **service@cellmarque.com**
www.cellmarque.com

CANADA
Phone: **+1 916.746.8900**
Fax: **+1 916.746.8989**
Email: **international@milliporesigma.com**
www.cellmarque.com

MilliporeSigma
400 Summit Drive
Burlington, MA 01803

www.sigmaaldrich.com

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