P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 – Tel. (435) 755-9848 - Fax (435) 755-0015 - www.ScyTek.com

p40 (ΔNp63); Polyclonal

Catalog Number	Format	Volume
A00112-0002	(Ready-To-Use)	2 ml
A00112-0007	(Ready-To-Use)	7 ml
A00112-0025	(Ready-To-Use)	25 ml
A00112-C	(Concentrate)	1 ml

Intended Use

For In-Vitro Diagnostic Use. This antibody is intended for the qualitative visualization of the anatomical elements listed in the Specificity section. It is intended to be used within an Immunohistochemistry (IHC) procedure on formalin-fixed paraffin-embedded (FFPE) human tissue followed by visualization by light microscopy.

Description

Titer/Working Dilution: Ready-to-Use: No further dilution required.
Concentrate: Suggested dilution is 1:50-100

Species: Rabbit

Immunogen: Amino acids 5-17 (ENNAQTQFSEPQY) of human p40 (p63 delta) were used as immunogen for this antibody.

Clone: Polyclonal

Isotype: Rabbit IgG

Format: Ready-To-Use antibody has been pre-titered and quality controlled to work on formalin-fixed paraffin-embedded as well as acetone fixed cryostat tissue sections. No further titration is required.
Concentrate antibody is provided in a phosphate buffered saline containing 1% BSA.

Specificity: The new marker p40 (p63 delta) is highly specific for squamous basal cells.

Background: The new marker p40 (p63 delta) is a marker recently determined to be highly specific for squamous basal cells in the all important immunohistochemistry (IHC) application (1). The current more routinely recommended marker, p63, appears to have less specificity compared to p40 (p63 delta), especially on squamous cell tumors. The ability to differentiate between lung adenocarcinoma vs squamous cell carcinoma is difficult and has bearing on the different therapeutic avenues for each subtype treatment (1-3). p63 antibody's ability to distinguish between the tumor types appears to be inferior when compared to p40 (p63 delta). The ability to utilize an antibody probe for p40 (p63 delta)as a squamous cell marker bolsters its use for future subclassification of lung cancers, especially by immunohistochemical techniques.

Species Reactivity: Human. Others not known.

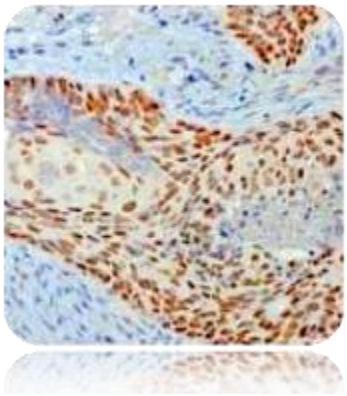
Positive Control: Lung squamous cell carcinoma.

Cellular Localization: Nuclear.

Microbiological State: Nonsterile

Materials and Reagents Required but not Provided

1. Control tissue and reagents
2. Xylene, graded alcohols, and deionized/distilled water
3. Antibody Diluent.
4. IHC detection system. Suggested: ScyTek Cat# ABZ125 "CRF Anti-Polyvalent HRP Polymer" and ScyTek Cat# ACV500 "DAB Chromogen/Substrate Kit (High Contrast)".
5. Wash buffer for rinses (ScyTek Cat# TBT500)
6. HIER Retrieval Solution
7. Hematoxylin counterstain and bluing reagent (ScyTek Cat# HMM500 and BRT500)



8. Mounting medium and coverslips

Note: ScyTek Laboratories has a wide range of IHC reagents and ancillaries that can be found at scytek.com.

Procedure

1. **Tissue Section Pretreatment (Highly Recommended):** Staining of formalin fixed paraffin embedded tissue sections is significantly enhanced by pretreatment with Tis-EDTA HIER Solution (10x) pH 9.0 (ScyTek catalog# TES500) or Citrate Plus (10x) HIER Solution (ScyTek catalog# CPL500)

2. **Primary Antibody Incubation Time:** We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.

3. **Visualization:** For maximum staining intensity we recommend the "UltraTek HRP Anti-Polyvalent Lab Pack" (ScyTek catalog# UHP125, see IFU for instructions) combined with the "DAB Chromogen/Substrate Bulk Pack (High Contrast)" (ScyTek catalog# ACV500, see IFU for instructions).

Storage and Stability

Do not Freeze. Store at 2-8°C. Return to 2-8° immediately after use. Do not use after expiration date printed on label. Verify visually that antibody has not been contaminated before use. Do not use if reagent becomes cloudy or precipitates.

Limitations

Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining can cause inconsistent results. Variations in fixation and embedding or the inherent nature of the tissue specimen may cause variations in results. Endogenous peroxidase activity or pseudoperoxidase activity in erythrocytes and endogenous biotin may cause non-specific staining depending on detection system used. This data sheet's recommendations and procedures were validated using ScyTek IHC reagents and may not be suitable for other detection systems.

Precautions

1. Contains Sodium Azide as a preservative (0.09% w/v), do not ingest. 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. This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.
2. Do not pipette by mouth.

Storage: 2° C 8° C

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3. Avoid contact of reagents and specimens with skin and mucous membranes.
4. Avoid microbial contamination of reagents or increased nonspecific staining may occur.
5. The user must validate any procedures and recommendations that differ from this data sheet.
6. The SDS may be found at scytek.com

References

1. Bishop, JA, J Teruya-Feldstein, WH Westra1, G Pelosi, WD Travis and N Rekhtman 2012 p40 (ΔNp63) is superior to p63 for the diagnosis of pulmonary squamous cellcarcinoma. Modern Pathology 25 : 405–415
2. Scagliotti G, T Brodowicz , FA Shepherd et al 2011 Treatment-by-histology interaction analyses in three phase III trials show superiority of pemetrexed in nonsquamous non-smallcell lung cancer. J Thorac Oncol 6:64–70.
3. Kargi A, D Gurel , B Tuna 2007 The diagnostic value of TTF-1, CK 5/6, and p63 immunostaining in classification of lung carcinomas. Appl Immunohistochem Mol Morphol 15:415–420.
4. Chilosi M, A Zamo, A Brighenti A, et al Constitutive expression of DeltaN-p63alpha isoform in human thymus and thymic epithelial tumours. Virchows Arch 2003;443:175–183.

Warranty

No products or "Instructions For Use (IFU)" are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our IFU or website. Our warranty is limited to the actual price paid for the product. ScyTek Laboratories, Inc. is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

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