

CDKN2A / p16INK4a / p14ARF; Clone CDKN2A/4499 (Concentrate)

Availability/Contents:

<u>Item #</u>	<u>Volume</u>
RA1093-C.1	0.1 ml
RA1093-C.5	0.5 ml
RA1093-C1	1 ml

Description:

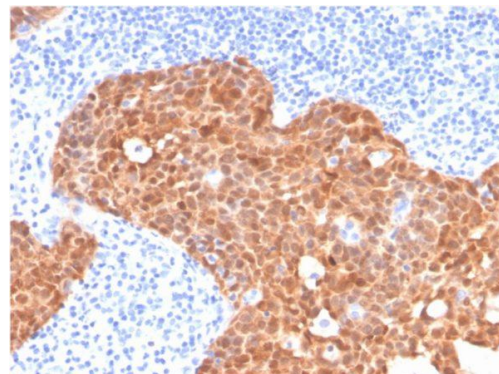
Species:	Mouse
Immunogen:	Purified recombinant prokaryotic full-length human p16INK4a protein
Clone:	CDKN2A/4499
Isotype:	IgG2a / Kappa
Entrez Gene ID:	1029
Hu Chromosome Loc.:	9p21.3
Synonyms:	Cyclin-dependent kinase inhibitor 2A, Cyclin-dependent kinase 4 inhibitor A, Multiple tumor suppressor 1, p16-INK4a, CDK4 inhibitor p16 INK4; CDK4I; CDKN2A; Cell cycle negative regulator beta; CMM2; Cyclin dependent kinase 4 inhibitor A; Melanoma p16 inhibits CDK4; MLM; MTS1; Multiple tumor suppressor 1; p14; p16; p19; P19ARF; TP16
Weight of Antigen:	14kDa
Format:	200ug/ml of antibody purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
Specificity:	Recognizes a protein of 14kDa, identified as p16INK4a.
Background:	p16INK4a is a tumor suppressor protein. It is a specificinhibitor of cdk4/cdk6, and a tumorsuppressor involved inthe pathogenesis of a variety of malignancies. Recentanalyses of the p16INK4a gene revealed homozygousdeletions, nonsense, missense, or frameshift mutations inseveral human cancers. Although the frequency of p16INK4a abnormalities is higher in tumor derived cell lines than inunselected primary tumors, significant subsets of clinicalcases with aberrant p16INK4a gene have been reportedamong melanomas, gliomas, esophageal, pancreatic, lung, and urinary bladder carcinomas, and some types of leukemia. Expression of p16INK4a (p16 positive) is highly correlatedwith human papilloma virus (HPV) infection in head and necksquamous cell carcinomas (HNSCC). p16 status is animportant prognostic indicator in HNSCC and the p16positive/HPV16 negative group is likely a distinct subgrouplacking any HPV genotype.
Species Reactivity:	Human
Positive Control:	Cervical squamous cell carcinoma.
Cellular Localization:	Cytoplasm, Nucleus
Titer/ Working Dilution:	Immunohistochemistry (Frozen and Formalin-fixed): 1-2µg/ml
Microbiological State:	This product is not sterile.

Storage: 2° C  8° C

 ScyTek Laboratories, Inc.
 205 South 600 West
 Logan, UT 84321
 U.S.A.

Uses/Limitations:

- Not to be taken internally.
- For Research Use Only.
- This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.
- Do not use if reagent becomes cloudy.
- Do not use past expiration date.
- Non-Sterile.



Formalin-fixed, paraffin-embedded human cervix stained with P16INK4a Mouse Monoclonal Antibody (CDKN2A/4499).

Ordering Information and Current Pricing at www.scytek.com

Procedure

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

Precautions:

- Contains Sodium Azide as a preservative (0.09% w/v).
- Do not pipette by mouth.
- Avoid contact of reagents and specimens with skin and mucous membranes.
- Avoid microbial contamination of reagents or increased nonspecific staining may occur.
- 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.

References:

- Mahajan A. HumPathol. 2016; 51: 64-74.
- Hunter, T. 1993. Braking the cycle. Cell 75: 839-841.

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. 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.

Storage: 2° C  8° C



ScyTek Laboratories, Inc.
205 South 600 West
Logan, UT 84321
U.S.A.