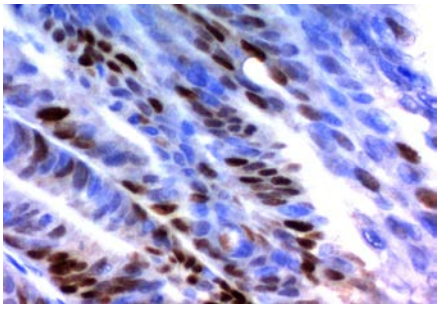
p21^{WAF1} (Tumor Suppressor Protein): Clone WA-1 (HJ21) (Concentrate)

Description:

Species:	Mouse
Immunogen:	Human recombinant p21 protein
Clone:	WA-1 (HJ21)
Isotype:	IgG1, kappa
Entrez Gene ID:	1026 (Human); 114851 (Mouse)
Hu Chromosome Loc.:	6p21.31
Synonyms:	Activating Fragment 1, CAP20, CDK-interacting protein 1, CDKI, CDKN1, CDKN1A, CIP1, Cyclin-dependent kinase inhibitor 1A (p21, Cip1), DNA Synthesis Inhibitor, MDA6, Melanoma Differentiation Associated Protein 6, p21Cip1/Waf1, PIC1, SDI1, SLC12A9, Wild type p53 activated fragment 1 (WAF1)
Mol. Weight of Antigen:	21kDa
Format:	200µg/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide.
Specificity:	This antibody recognizes a 21kDa protein, identified as the p21^{WAF1} tumor suppressor protein. It is highly specific to p21 and shows no cross-reaction with other closely related mitotic inhibitors.
Background:	p21^{WAF1} is a specific inhibitor of cdk's and a tumor suppressor involved in the pathogenesis of a variety of malignancies. The expression of this gene acts as an inhibitor of the cell cycle during G1 phase and is tightly controlled by the tumor suppressor protein p53. Its expression is induced by the wild type, but not mutant, p53 suppressor protein. Normal cells generally display a rather intense nuclear p21 expression. Loss of p21 expression has been reported in many carcinomas (gastric carcinoma, non-small cell lung carcinoma, thyroid carcinoma).
Species Reactivity:	Human, Monkey, Mouse and Rat. Others not known.
Positive Control:	HeLa Cells. Skin, colon, or breast carcinoma.
Cellular Localization:	Nuclear
Titer/ Working Dilution:	Immunohistochemistry (Frozen and Formalin-fixed): 0.5-1 µg/ml Flow Cytometry: 0.5-1 µg/million cells Immunofluorescence: 1-2 µg/ml Western Blotting: 0.5-1 µg/ml Immunoprecipitation: 1-2 µg/500µg protein lysate
Microbiological State:	This product is not sterile.

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 colon cancer tissue stained with $p21^{WAF1}$; WA-1.

Procedure: Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by pretreatment with sodium citrate-based antigen retrieval. We suggest an antibody incubation period of 30-60 minutes at room temperature or overnight at 2-8 C. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user. For maximum staining intensity, we recommend using AviBond Ultra for detection and DAB Clarity Ultra products for visualization.

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.

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. Teomics 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.

References:

1. Krzywicka-Racka A & Sluder G J Cell Biol 194:199-207 (2011).
2. Folini M et al. Biochem Pharmacol 79:1781-90 (2010).