

Instructions for Use ARA0081-IFU

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p57^{Kip2} (Mitotic Inhibitor/Suppressor Protein): Clone KIP2/880 (Concentrate)

Description:

Species:	Mouse
Immunogen:	Recombinant human p57 ^{Kip2} protein
Clone:	KIP2/880
lsotype:	IgG2b, kappa
Entrez Gene ID:	1028 (Human); 12577 (Mouse)
Hu Chromosome Loc.:	11p15.5
Synonyms:	Beckwith Wiedemann syndrome (WBS); BWCR; Cyclin dependent kinase inhibitor 1C (CDKN1C); Cyclin dependent kinase inhibitor p57; KIP2; p57; p57Kip2
Mol. Weight of Antigen:	57kDa
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:	Recognizes a protein of 57kDa, identified as p57 ^{Kip2} . It shows no cross-reaction with p27 ^{Kip1} .
Background:	p57 ^{Kip2} is a potent tight-binding inhibitor of several G1 cyclin complexes, and is a negative regulator of cell proliferation. Anti-p57 has been used as an aide in identification of complete hydatidiform mole (CHM) (no nuclear labeling of cytotrophoblasts and stromal cells) from partial hydatidiform mole (PHM) in which both cytotrophoblasts and stromal cells stain. The histological differentiation of complete mole, partial mole, and hydropic spontaneous abortion is problematic. Most complete hydatidiform moles are diploid, whereas most partial moles are triploid. Ploidy studies will identify partial moles, but will not differentiate complete moles from non-molar gestations. Complete moles carry a high risk of persistent disease and choriocarcinoma, while partial moles have a very low risk. In normal placenta, many cytotrophoblast nuclei and stromal cells are labeled with this antibody. Similar findings apply to PHM and hydropic abortus tissues. Intervillous trophoblastic islands (IVTIs) demonstrate nuclear labeling in all three entities and serve as an internal control.
Species Reactivity:	Human and Mouse. Others not known.
Positive Control:	LS174T, Raji, HT29, SK-BR3 cells. Colon carcinomas.
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: 0.5-1 µg/ml
	Western Blotting: 0.5-1 µg/ml
Misushists visal Otat	Immunoprecipitation: 0.5-1 µg/500µg protein lysate
Microbiological State:	This product is not sterile.



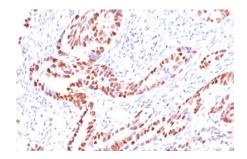
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Uses/Limitations:

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-paraffin human colon carcinoma stained with p57^{Kip2}; Clone KIP2/880.

- **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 <u>reportable concentration</u> according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive91/155/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. Lee, M.-H., et al. 1995. Cloning of p57, a cyclin-dependent kinase inhibitor with unique domain structure and tissue distribution. Genes Dev. 9: 639-649.