

Datasheet for ABIN967843
anti-SLC12A9 antibody (AA 1-150)[2 Images](#)[5 Publications](#)[Go to Product page](#)

Overview

Quantity:	50 µg
Target:	SLC12A9
Binding Specificity:	AA 1-150
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This SLC12A9 antibody is un-conjugated
Application:	Immunofluorescence (IF), Immunoprecipitation (IP), Immunohistochemistry (IHC), Western Blotting (WB)

Product Details

Immunogen:	Human Cip1 aa. 1-150
Clone:	70-Cip1-WAF1
Isotype:	IgG2a
Characteristics:	<ol style="list-style-type: none">1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.2. Please refer to us for technical protocols.3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity

Product Details

chromatography.

Target Details

Target:	SLC12A9
Alternative Name:	Cip1 (SLC12A9 Products)
Background:	<p>Cip1 (p21) was identified as an inhibitor of cdk activity in a quaternary complex that also included Cyclin D, Cdk4, and PCNA. It has subsequently been shown that Cip1 can directly bind to and inhibit each member of the cdk family, though the affinities vary for each enzyme. Several studies indicate that Cip1 expression is regulated by the p53 tumor suppressor protein. For example, following DNA damage, Cip1 becomes transcriptionally induced in a p53-dependent manner. Thus, Cip1 protein may have a prominent role in mediating cell cycle arrest. Cip1 is also a component of active cyclin/cdk kinases. It has been suggested that Cip1-containing enzymes may transition between active and inactive states through changes in Cip1 stoichiometry. Active complexes appear to contain a single Cip1 molecule, while the inactive complexes have multiple Cip1 subunits. When multiple subunits are complexed with a cdk, cyclin, and PCNA, these Cip1 molecules can block the access of cdk-activating kinase (CAK) to cdk, thus preventing its phosphorylation and activation. However, inhibition of cdk activity by Cip1 does not appear to be dependent upon this mechanism. Other studies on DNA replication indicate that Cip1 can inhibit this process in vitro by directly binding to PCNA, a DNA polymerase-delta processivity factor.</p> <p>Synonyms: WAF1</p>
Molecular Weight:	21 kDa

Application Details

Comment:	Related Products: ABIN968553, ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide

Handling

Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
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Storage:	-20 °C
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Storage Comment:	Store undiluted at -20°C.
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Publications

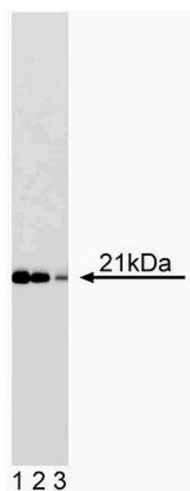
Product cited in:	Carrano, Pagano: "Role of the F-box protein Skp2 in adhesion-dependent cell cycle progression." in: The Journal of cell biology , Vol. 153, Issue 7, pp. 1381-90, (2001) (PubMed).
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Fima, Shtutman, Libros, Missel, Shahaf, Kahana, Livneh: "PKCeta enhances cell cycle progression, the expression of G1 cyclins and p21 in MCF-7 cells." in: **Oncogene**, Vol. 20, Issue 46, pp. 6794-804, (2001) ([PubMed](#)).

Yan, Deng, Friedman: "Oncogenic Ki-ras confers a more aggressive colon cancer phenotype through modification of transforming growth factor-beta receptor III." in: **The Journal of biological chemistry**, Vol. 276, Issue 2, pp. 1555-63, (2001) ([PubMed](#)).

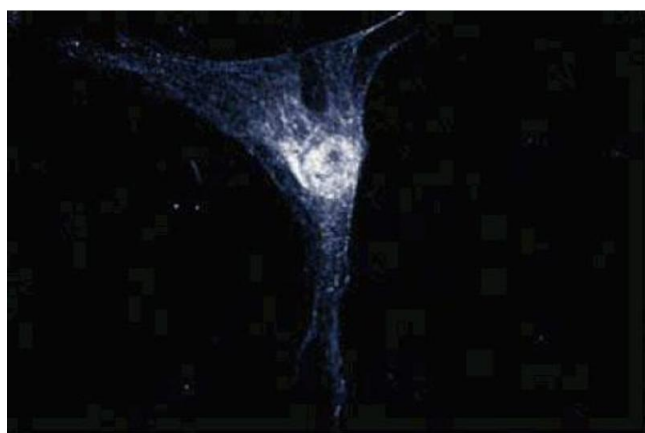
Cheng, Lloyd, Weaver, Pisansky, Cheville, Ramnani, Leibovich, Blute, Zincke, Bostwick: "The cell cycle inhibitors p21WAF1 and p27KIP1 are associated with survival in patients treated by salvage prostatectomy after radiation therapy." in: **Clinical cancer research : an official journal of the American Association for Cancer Research**, Vol. 6, Issue 5, pp. 1896-9, (2000) ([PubMed](#)).

Dulić, Stein, Far, Reed: "Nuclear accumulation of p21Cip1 at the onset of mitosis: a role at the G2/M-phase transition." in: **Molecular and cellular biology**, Vol. 18, Issue 1, pp. 546-57, (1998) ([PubMed](#)).



Western Blotting

Image 1. Western blot analysis of Cip1 on a WI-38 cell lysate (Human lung fibroblasts, ATCC CCL-75). Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the mouse anti-human Cip1 antibody.



Immunofluorescence

Image 2. Immunofluorescence staining of human fibroblasts.