

Rabbit Anti-Cdkn1c antibody

SL0538R

Product Name Cdkn1c

Chinese Name 周期蛋白依赖激酶抑制因子 1C 抗体

Alias Beckwith Wiedemann syndrome; BWCR; BWS; CDKI; CDKN 1C; CDKN1C; Cyclin dependent kinase inhibitor 1C; Cyclin dependent kinase inhibitor p57; KIP 2; KIP2; p57; p57 Kip2; p57 Kip 2; p57Kip2; WBS; IMAGE; CDN1C_HUMAN.

Research Area Tumour Cell biology Cyclin

Immunogen Species Rabbit

Clonality Polyclonal

React Species Human, Mouse, Rat, (predicted: Cow, Sheep,)
WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=0.2ug/test
(Paraffin sections need antigen repair)

Applications not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 35kDa

Cellular localization The nucleus

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from rat Cdkn1c: 291-343/343

Lsotype IgG

Purification affinity purified by Protein A

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

PubMed [PubMed](#)

This gene is imprinted, with preferential expression of the maternal allele. The encoded protein is a tight-binding, strong inhibitor of several G1 cyclin/Cdk complexes and a negative regulator of cell proliferation. Mutations in this gene are implicated in sporadic cancers and Beckwith-Wiedemann syndrome, suggesting that this gene is a tumor suppressor candidate. Three transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Oct 2010].

Function:

Potent tight-binding inhibitor of several G1 cyclin/CDK complexes (cyclin E-CDK2, cyclin D2-CDK4, and cyclin A-CDK2) and, to lesser extent, of the mitotic cyclin B-CDC2. Negative regulator of cell proliferation. May play a role in maintenance of the non-proliferative state throughout life.

Subunit:

Interacts with PCNA.

Subcellular Location:

Nucleus.

Tissue Specificity:

Expressed in the heart, brain, lung, skeletal muscle, kidney, pancreas and testis. Expressed in the eye. High levels are seen in the placenta while low levels are seen in the liver.

**Product
Detail**

DISEASE:

Defects in CDKN1C are a cause of Beckwith-Wiedemann syndrome (BWS) [MIM:130650]. BWS is a genetically heterogeneous disorder characterized by anterior abdominal wall defects including exomphalos (omphalocele), pre- and postnatal overgrowth, and macroglossia. Additional less frequent complications include specific developmental defects and a predisposition to embryonal tumors.

Defects in CDKN1C are the cause of intrauterine growth retardation, metaphyseal dysplasia, adrenal hypoplasia congenita, and genital anomalies (IMAGE) [MIM:614732]. A rare condition characterized by intrauterine growth restriction, metaphyseal dysplasia, congenital adrenal hypoplasia, and genital anomalies. Patients with this condition may present shortly after birth with severe adrenal insufficiency, which can be life-threatening if not recognized early and commenced on steroid replacement therapy. Other reported features in this condition include, hypercalciuria and/or hypercalcemia, craniosynostosis, cleft palate, and scoliosis.

Note=Defects in CDKN1C are involved in tumor formation.

Similarity:

Belongs to the CDI family.

SWISS:

E9PTV7

Gene ID:
246060

Database links:

[Entrez Gene: 1028](#) Human

[Entrez Gene: 12577](#) Mouse

[Entrez Gene: 246060](#) Rat

[Omim: 600856](#) Human

[SwissProt: P49918](#) Human

[SwissProt: P49919](#) Mouse

[SwissProt: E9PTV7](#) Rat

[SwissProt: Q69DC0](#) Rat

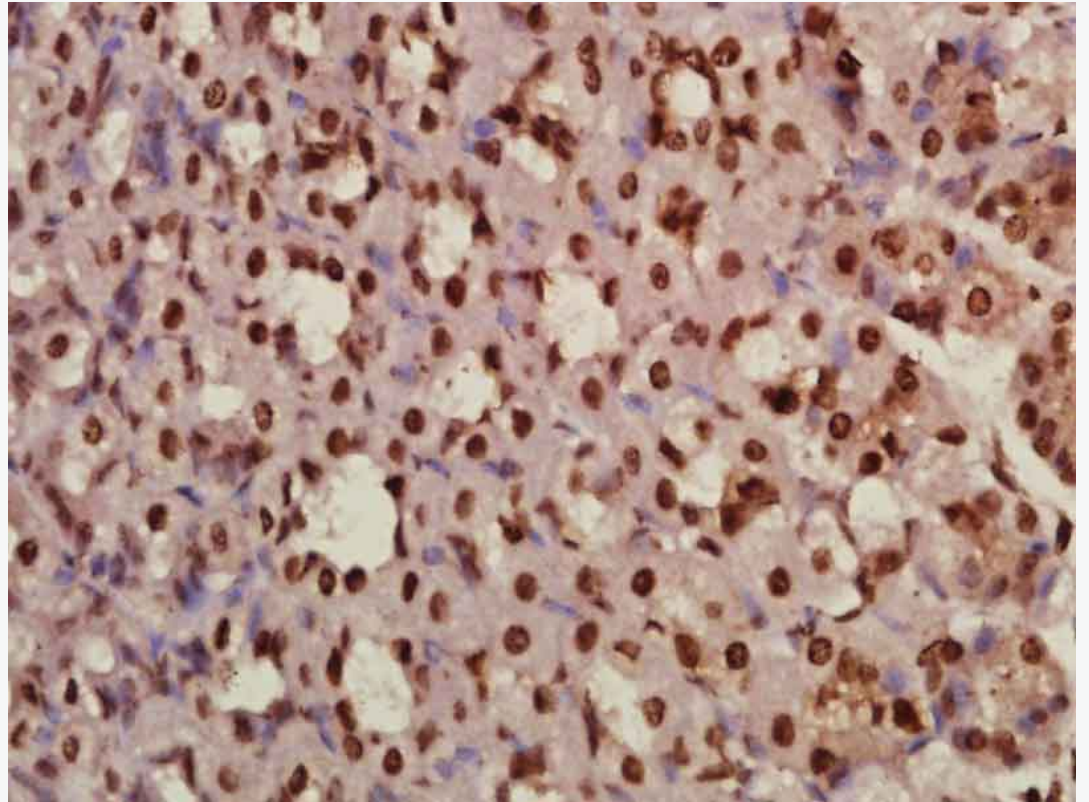
[Unigene: 106070](#) Human

[Unigene: 168789](#) Mouse

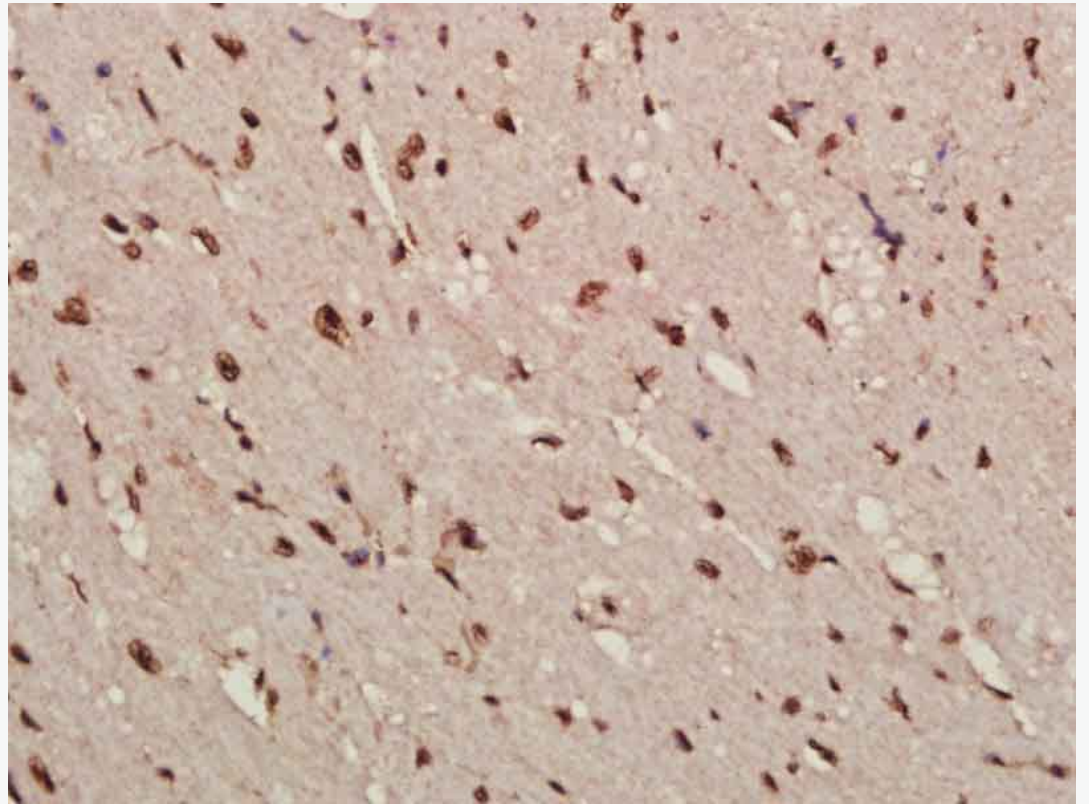
[Unigene: 162507](#) Rat

p57 Kip-2 调控周期蛋白依赖蛋白激酶、G1 期, 是 Cyclin 依赖性激酶(CDK)的抑制蛋白。它通过调控细胞周期进程, 参与 Tumour 细胞的增殖、分化与凋亡。在多种 Tumour 中均发现 p57,kip2 表达异常, 在某些 Tumour 中是一种独立的预后因素, 与 Tumour 的发生、发展及预后有着密切关系。

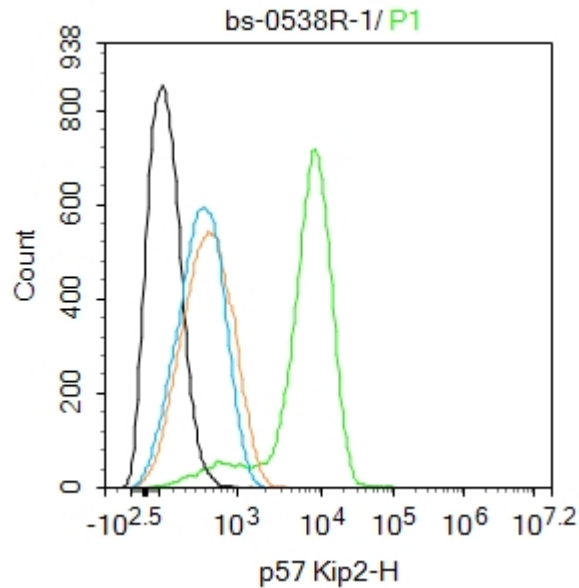
**Product
Picture**



Paraformaldehyde-fixed, paraffin embedded (Mouse stomach); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (p57 Kip2) Polyclonal Antibody, Unconjugated (SL0538R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat heart); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (p57 Kip2) Polyclonal Antibody, Unconjugated (SL0538R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Blank control: SH-SY5Y.

Primary Antibody (green line): Rabbit Anti-p57 Kip2/Cdkn1c antibody (SL0538R)

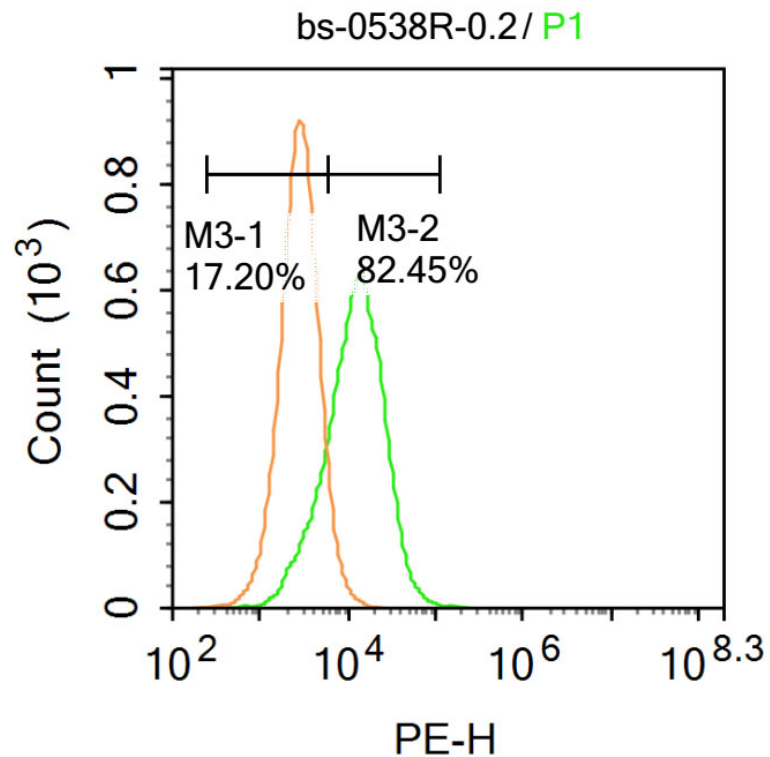
Dilution: 1ug/Test;

Secondary Antibody : Goat anti-rabbit IgG-FITC

Dilution: 0.5ug/Test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20°C.The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.



Blank control: HeLa.

Primary Antibody (green line): Rabbit Anti-p57 Kip2/Cdkn1c antibody (SL0538R)

Dilution: $1\mu\text{g}/10^6$ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-PE

Dilution: $1\mu\text{g}/\text{test}$.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at -20°C . The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at at room



temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.