

Mouse Anti-p57 Kip2 antibody

SLM-34156M

Product Name	p57 Kip2
Chinese Name	周期蛋白依赖激酶抑制因子 1C 单克隆抗体
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.
Immunogen Species	Mouse
Clonality	Monoclonal
Clone NO.	4E8
React Species	Human,Mouse,Rat
Applications	IHC-P=1:100-500, IHC-F=1:100-500, IF=1:100-500 optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	35kDa
Cellular localization	The nucleus
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human p57 Kip2
Lsotype	IgG2b, Kappa
Purification	affinity purified by Protein A
Buffer Solution	PBS, pH7.2, 3% Porcolin 300, containing stabilizing protein
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
Product Detail	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.

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:

P49918

Gene ID:

1028

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。