

p27 (phospho Thr187) Polyclonal Antibody

Catalog No: YP0283

Reactivity: Human; Mouse; Rat

Applications: WB;IHC;IF;ELISA

Target: p27

Fields: >>Endocrine resistance;>>ErbB signaling pathway;>>HIF-1 signaling

pathway:>>FoxO signaling pathway:>>Cell cycle:>>PI3K-Akt signaling

pathway;>>AGE-RAGE signaling pathway in diabetic complications;>>Cushing syndrome;>>Measles;>>Human papillomavirus infection;>>Epstein-Barr virus infection;>>Pathways in cancer;>>Transcriptional misregulation in cancer;>>Viral carcinogenesis;>>MicroRNAs in cancer;>>Prostate cancer;>>Chronic myeloid

leukemia;>>Small cell lung cancer;>>Gastric cancer

Gene Name: CDKN1B

Protein Name: Cyclin-dependent kinase inhibitor 1B

P46527

P46414

Human Gene Id: 1027

Human Swiss Prot

No:

Mouse Gene Id: 12576

Mouse Swiss Prot

No:

Immunogen: The antiserum was produced against synthesized peptide derived from human

p27 Kip1 around the phosphorylation site of Thr187. AA range:149-198

Specificity: Phospho-p27 (T187) Polyclonal Antibody detects endogenous levels of p27

protein only when phosphorylated at T187.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200

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Dilutification: The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 22kD

Cell Pathway: ErbB_HER;Cell_Cycle_G1S;Cell_Cycle_G2M_DNA;Pathways in

cancer; Prostate cancer; Chronic myeloid leukemia; Small cell lung cancer;

Background: This gene encodes a cyclin-dependent kinase inhibitor, which shares a limited

similarity with CDK inhibitor CDKN1A/p21. The encoded protein binds to and prevents the activation of cyclin E-CDK2 or cyclin D-CDK4 complexes, and thus controls the cell cycle progression at G1. The degradation of this protein, which is triggered by its CDK dependent phosphorylation and subsequent ubiquitination by SCF complexes, is required for the cellular transition from quiescence to the proliferative state. Mutations in this gene are associated with multiple endocrine

neoplasia type IV (MEN4). [provided by RefSeq, Apr 2014],

Function: disease:Defects in CDKN1B are the cause of multiple endocrine neoplasia type

4 (MEN4) [MIM:610755]. Multiple endocrine neoplasia (MEN) syndromes are inherited cancer syndromes of the thyroid. MEN4 is a MEN-like syndrome with a phenotypic overlap of both MEN1 and MEN2.,domain:A peptide sequence containing only AA 28-79 retains substantial Kip1 cyclin A/CDK2 inhibitory activity.,function:Important regulator of cell cycle progression. Involved in G1 arrest. Potent inhibitor of cyclin E- and cyclin A-CDK2 complexes. Positive regulator of cyclin D-dependent kinases such as CDK4. Regulated by

phosphorylation and degradation events.,induction:Maximal levels in quiescence cells and early G(1). Levels decrease after mitogen stimulation as cells progress toward S-phase.,miscellaneous:Decreased levels of p27Kip1, mainly due to

proteosomal degradation, are found in various epithelial tumors originati

Subcellular Location:

Nucleus. Cytoplasm. Endosome . Nuclear and cytoplasmic in quiescent cells. AKT- or RSK-mediated phosphorylation on Thr-198, binds 14-3-3, translocates to

the cytoplasm and promotes cell cycle progression. Mitogen-activated UHMK1 phosphorylation on Ser-10 also results in translocation to the cytoplasm and cell

cycle progression. Phosphorylation on Ser-10 facilitates nuclear export.

Translocates to the nucleus on phosphorylation of Tyr-88 and Tyr-89. Colocalizes at the endosome with SNX6; this leads to lysosomal degradation (By similarity).

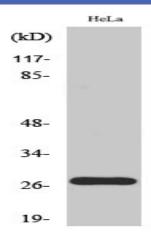
Expression: Expressed in kidney (at protein level) (PubMed:15509543). Expressed in all

tissues tested (PubMed:8033212). Highest levels in skeletal muscle, lowest in

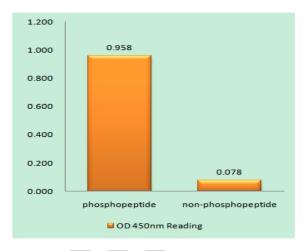
liver and kidney (PubMed:8033212).



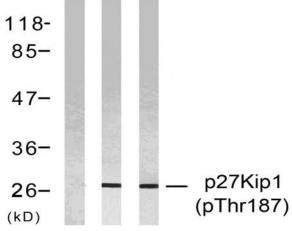
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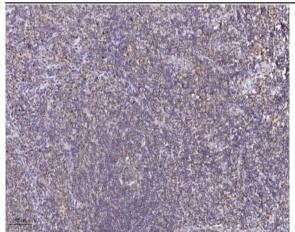
Western Blot analysis of various cells using Phospho-p27 (T187) Polyclonal Antibody



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using p27 Kip1 (Phospho-Thr187) Antibody



Western blot analysis of lysates from HeLa cells treated with EGF or IFN- α , using p27 Kip1 (Phospho-Thr187) Antibody. The lane on the left is blocked with the phospho peptide.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Tris-EDTA,pH9.0 was used for antigen retrieval. 2 Antibody was diluted at 1:200(4° overnight.3,Secondary antibody was diluted at 1:200(room temperature, 45min).