

# p27 (phospho Thr157) Polyclonal Antibody

Catalog # AP67922

### **Product Information**

Application IHC-P
Primary Accession P46527
Reactivity Human
Host Rabbit
Clonality Polyclonal
Calculated MW 22073

#### **Additional Information**

**Gene ID** 1027

Other Names CDKN1B; KIP1; Cyclin-dependent kinase inhibitor 1B; Cyclin-dependent kinase

inhibitor p27; p27Kip1

**Dilution** IHC-P~Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested

in other applications.

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium

azide.

Storage Conditions -20°C

#### **Protein Information**

Name CDKN1B {ECO:0000303 | PubMed:20824794}

**Function** Important regulator of cell cycle progression. Inhibits the kinase activity of

CDK2 bound to cyclin A, but has little inhibitory activity on CDK2 bound to SPDYA (PubMed: 28666995). Involved in G1 arrest. Potent inhibitor of cyclin E-and cyclin A-CDK2 complexes. Forms a complex with cyclin type D-CDK4 complexes and is involved in the assembly, stability, and modulation of CCND1-CDK4 complex activation. Acts either as an inhibitor or an activator of cyclin type D-CDK4 complexes depending on its phosphorylation state and/or

stoichometry.

**Cellular Location** Nucleus. Cytoplasm. Endosome. Note=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

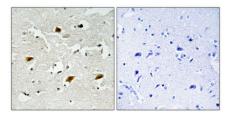
SNX6; this leads to lysosomal degradation (By similarity)

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).

# **Background**

Important regulator of cell cycle progression. Inhibits the kinase activity of CDK2 bound to cyclin A, but has little inhibitory activity on CDK2 bound to SPDYA (PubMed: 28666995). Involved in G1 arrest. Potent inhibitor of cyclin E- and cyclin A- CDK2 complexes. Forms a complex with cyclin type D-CDK4 complexes and is involved in the assembly, stability, and modulation of CCND1-CDK4 complex activation. Acts either as an inhibitor or an activator of cyclin type D-CDK4 complexes depending on its phosphorylation state and/or stoichometry.

## **Images**



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4°,overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.

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