P15

CONTACT INFORMATION: Monoclonal Antibodies Unit. Centro Nacional de Investigaciones Oncológicas

STATUS: Validated

TYPE: rat anti mouse

CLONE NAME: PAT56B

PROTEIN: Mouse cyclin-dependent kinase inhibitor 2B (p15, inhibits CDK4) (Cdkn2b)

ANTIGEN USED: HIS-GST-mp15 recombinant protein FUSION PARTNER: myeloma p3-NS1/Ag4-1 (NS1) cells

ISOTYPE: IgG2a SPECIES REACTIVITY: mouse

PREPARATION AND STORAGE: Aliquot and store at 4C. Do not freeze

DESCRIPTION

This gene lies adjacent to the tumor suppressor gene CDKN2A in a region that is frequently mutated and deleted in a wide variety of tumors. This gene encodes a cyclin-dependent kinase inhibitor, also known as p15Ink4b protein, which forms a complex with CDK4 or CDK6, and prevents the activation of the CDK kinases by cyclin D, thus the encoded protein functions as a cell growth regulator that inhibits cell cycle G1 progression.

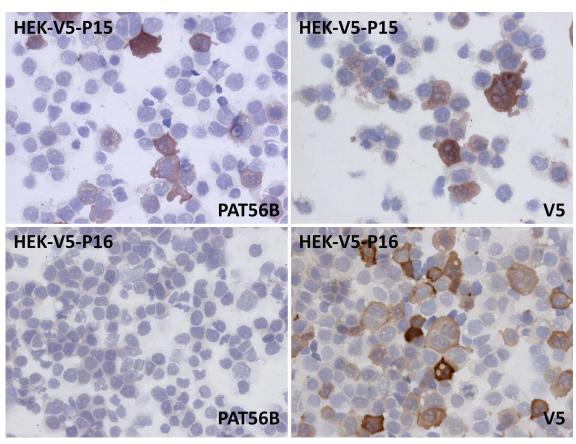
REFERENCES

Muñoz-Espín D, Cañamero M, Maraver A, Gómez-López G, Contreras J, Murillo-Cuesta S, Rodríguez-Baeza A, Varela-Nieto I, Ruberte J, Collado M, Serrano M. Programmed cell senescence during mammalian embryonic development. Cell. 2013 Nov 21;155(5):1104-18.

APPLICATIONS

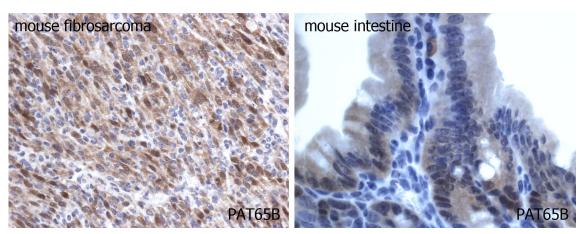
| IHC Techniques | Clone | Dilution | Antibody concentration | Antigen retrieval method | Visualization kit | Positive control | Negative control | Protein localization | Positivity in other species |
|-----------------------------|-------|----------|------------------------|--------------------------|-------------------|------------------|------------------|----------------------|-----------------------------|
| Frozen tissue and cytospins | | | | | | | | | |
| Paraffin tissue | | | | | | | | | |

| Recommended | PAT56 | 1:2 | supernatant | | | mouse | | nuclear | |
|--------------------|-------|-----|-------------|--|--|--------------|--|---------|--|
| | В | | | | | fibrosarcoma | | | |
| Immunofluorescence | | | | | | | | | |



mp15 antibody (PAT56B) in transfected cells

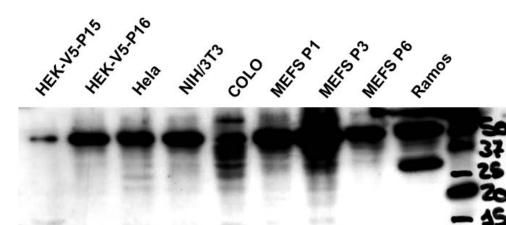
Nuclear and cytoplasmic staining of PAT56B mAb in transfected HEK293-V5-mp15 cells. No reactivity with mp16 was found. Anti-V5 was used as a positive control.



PAT56B antibody in mouse paraffin tissues.

| WB Techniques | Clone | Dilution | Antibody concentration | Positive control | Negative control | Expected MW | Observed Mw | Positivity in other species | |
|---------------------|--------|-------------|------------------------|------------------|------------------|-------------|-------------|-----------------------------|--|
| Western Blotting | | | | | | | | | |
| Recommended | PAT56B | Neat | supernatant | | | 14kDa | 14kDa | | |
| | | supernatant | | | | | | | |
| Immunoprecipitation | | | | | | | | | |

Tubulin



PAT 56B

Western Blott of PAT56B antibody in mouse and human extracts

Lane 1 Hek-V5-p15 (30?g) (+)

Lane 2 Hek-v5-p16 (30?g) (-)

Lane 3 Hela cell line (30?g) (-)

Lane 4 NIH/3T3 cell line (100?g) (-)

Lane 5 COLO cell line (100?g) (-)

Lane 6 Mefs (100?g) (+)

Lane 7 Mefs (100?g) (+)

Lane 8 Mefs (100?g) (-)

Lane 9 Ramos cell line (100?g) (-)

Anti-Tubulin was used as loading control.