p19arf

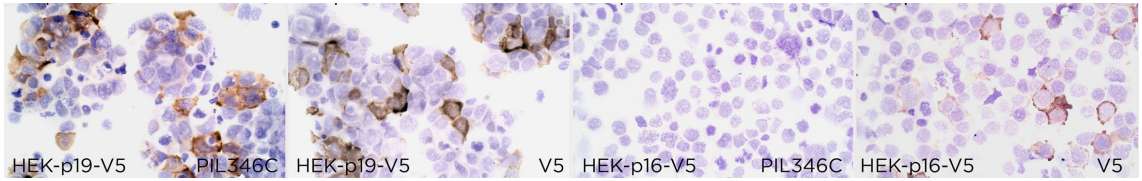
CONTACT INFORMATION:	Monoclonal Antibodies Unit. Centro Nacional de Investigaciones Oncológicas
STATUS:	Validated
TYPE:	Rat monoclonal
CLONE NAME:	PIL346C
PROTEIN:	Cdkn2a
PROTEIN WEB:	https://www.uniprot.org/uniprot/Q64364
ANTIGEN USED:	His-MBP-mp19arf
FUSION PARTNER:	NS1/Ag4-1 (NS1) cells
ISOTYPE:	IgG2b
SPECIES REACTIVITY:	mouse
PREPARATION AND STORAGE:	Aliquot and store at 4C. Do not freeze

DESCRIPTION

Capable of inducing cell cycle arrest in G1 and G2 phases. Acts as a tumor suppressor. Binds to MDM2 and blocks its nucleocytoplasmic shuttling by sequestering it in the nucleolus. This inhibits the oncogenic action of MDM2 by blocking MDM2-induced degradation of p53 and enhancing p53-dependent transactivation and apoptosis. Also induces G2 arrest and apoptosis in a p53-independent manner by preventing the activation of cyclin B1/CDC2 complexes. Binds to BCL6 and down-regulates BCL6-induced transcriptional repression. Binds to E2F1 and MYC and blocks their transcriptional activator activity but has no effect on MYC transcriptional repression. Binds to TOP1/TOPOI and stimulates its activity. This complex binds to rRNA gene promoters and may play a role in rRNA transcription and/or maturation. Interacts with NPM1/B23 and promotes its polyubiquitination and degradation, thus inhibiting rRNA processing. Interacts with COMMD1 and promotes its 'Lys63'-linked polyubiquitination (By similarity). Interacts with UBE2I/UBC9 and enhances sumoylation of a number of its binding partners including MDM2 and E2F1. Binds to HUWE1 and represses its ubiquitin ligase activity. May play a role in controlling cell proliferation and apoptosis during mammary gland development. Isoform smARF may be involved in regulation of autophagy and caspase-independent cell death; the short-lived mitochondrial isoform is stabilized by C1QBP.

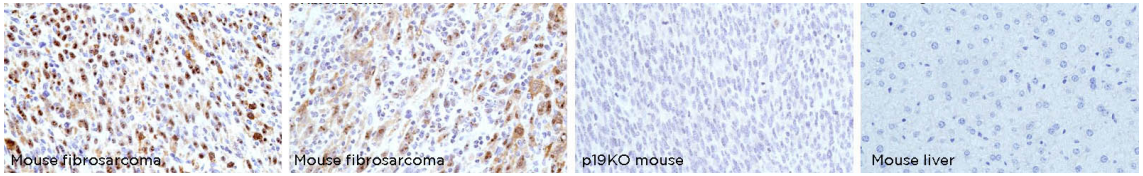
APPLICATIONS

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									
Recommended	PIL346C	Neat	supernatant						
Paraffin tissue									
Recommended	PIL346C	1:10	supernatant			Fibrosarcoma	Liver	nuclear	
Immunofluorescence									



PIL346C mAb is able to detect mouse p19 protein in immunocytochemistry

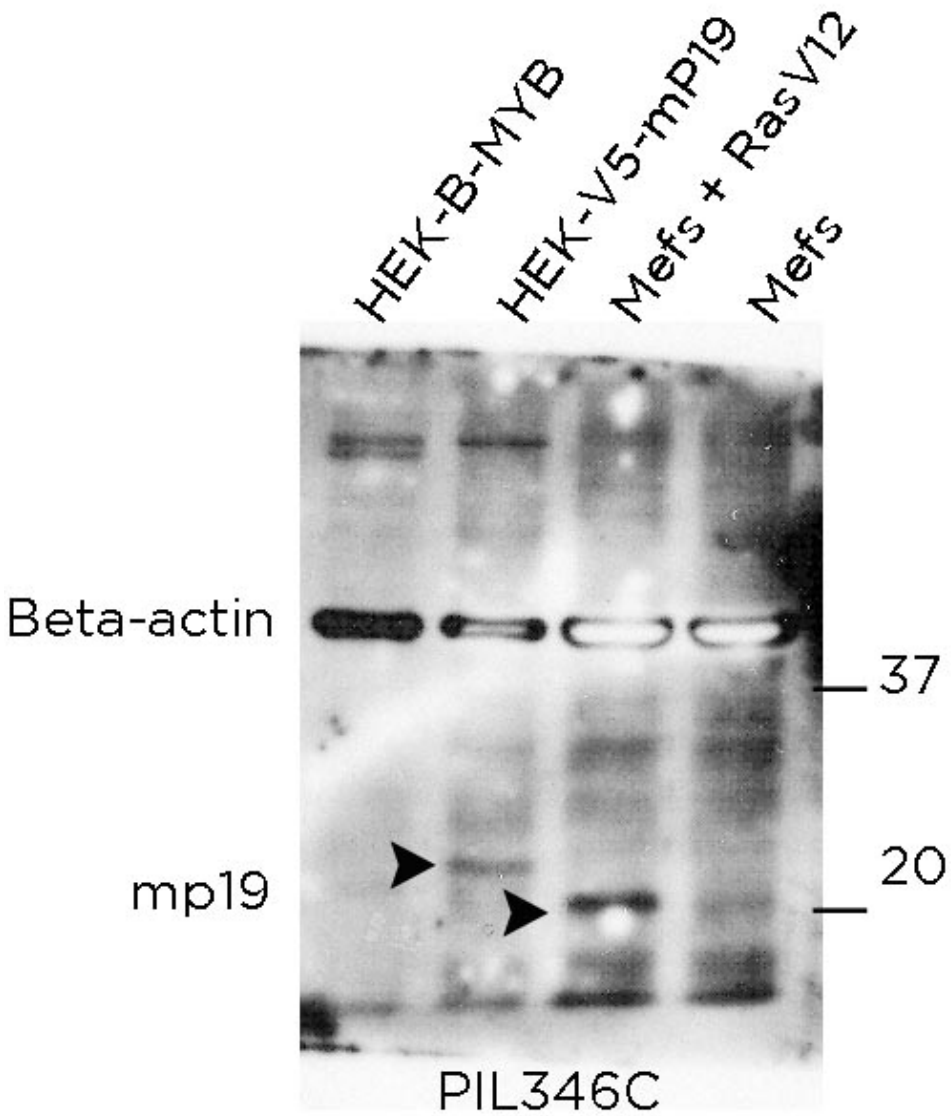
To confirm that PIL346C mAb recognizes human p19 protein, immunocytochemistry on frozen cytospin preparations of p19 and p16 expressed in HEK293 cells was performed. Anti-V5 confirmed the transfection efficiency.



PIL346C mAb can be used to detect mouse p19 protein by immunohistochemistry

WB Techniques	Clone	Dilution	Antibody concentration	Positive control	Negative control	Expected MW	Observed Mw	Positivity in other species

Western Blotting								
Recommended	PIL346C	Neat	supernatant			19kDa	19kDa	
Immunoprecipitation								



PIL346C mAb is able to detect mouse p19 protein by WB

LANES

Lane 1 HEK-B-MYB (20ug) (-)

Lane 2 HEK-V5-mP19 (20ug) (+)

Lane 3 Mefs RASV12 (50ug) (+)

Lane 4 Mef (50ug) (-)

Beta actin was used as loading control.