

Antibody Validation Report

aVR.CDKN2A.P42771-1.AB_2799960.v1.0 (November 16_2020)



A. Basic Target Information

Target Information

UniProt Accession Number: P42771-1

Target Name: Cyclin-dependent kinase inhibitor 2A (p16INK4a)

Antibody Information

RRID: AB_2799960

Antibody Name: p16 INK4A (D7C1M)

Host Organism: Rabbit

Clonality: Monoclonal

Vendor: Cell Signaling Technology

Catalog Number: 80772

Lot Number: 3

Recombinant (Y/N): No

Organ/Tissue used for validation: HeLa

HuBMAP Platform Used: IP-MS

Protocols.io doi for Validation Protocol: 10.17504/protocols.io.bq9mmz46

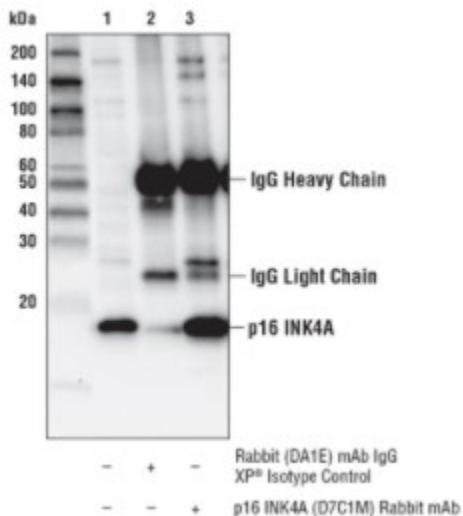
ORCID ID of submitter: 0000-0002-5631-512X

B. Validation Data

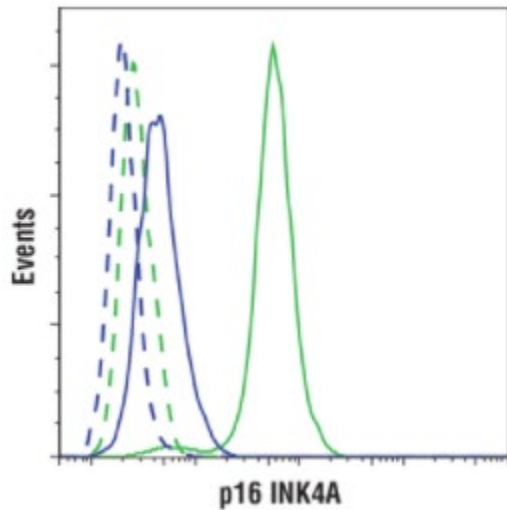
B.1. Vendor Validation: IP, WB, FC

Date Accessed: 11/16/20

URL: <https://www.cellsignal.com/products/primary-antibodies/p16-ink4a-d7c1m-rabbit-mab/80772>



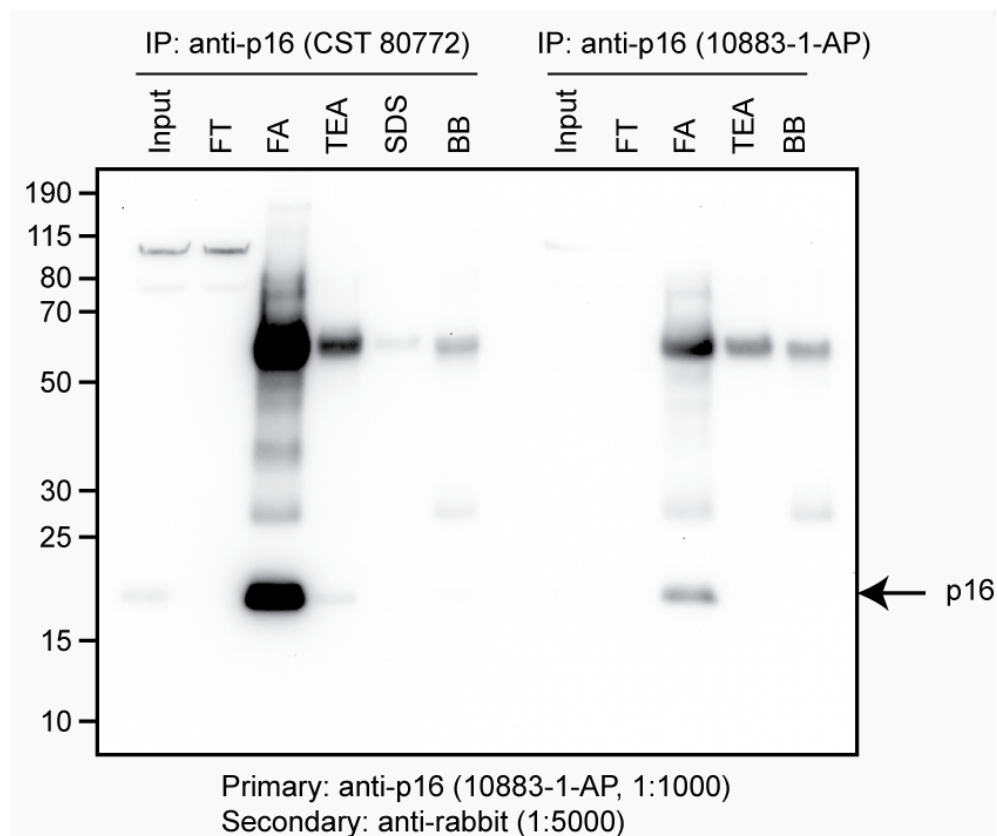
Immunoprecipitation of p16 INK4A from HeLa cells. Lane 1 is 10% input, lane 2 is Rabbit (DA1E) mAb IgG XP® Isotype Control #3900, and lane 3 is p16 INK4A (D7C1M) Rabbit mAb. Western blot was performed using p16 INK4A (D7C1M) Rabbit mAb. Anti-rabbit IgG, HRP-linked Antibody #7074 was used as the secondary antibody.



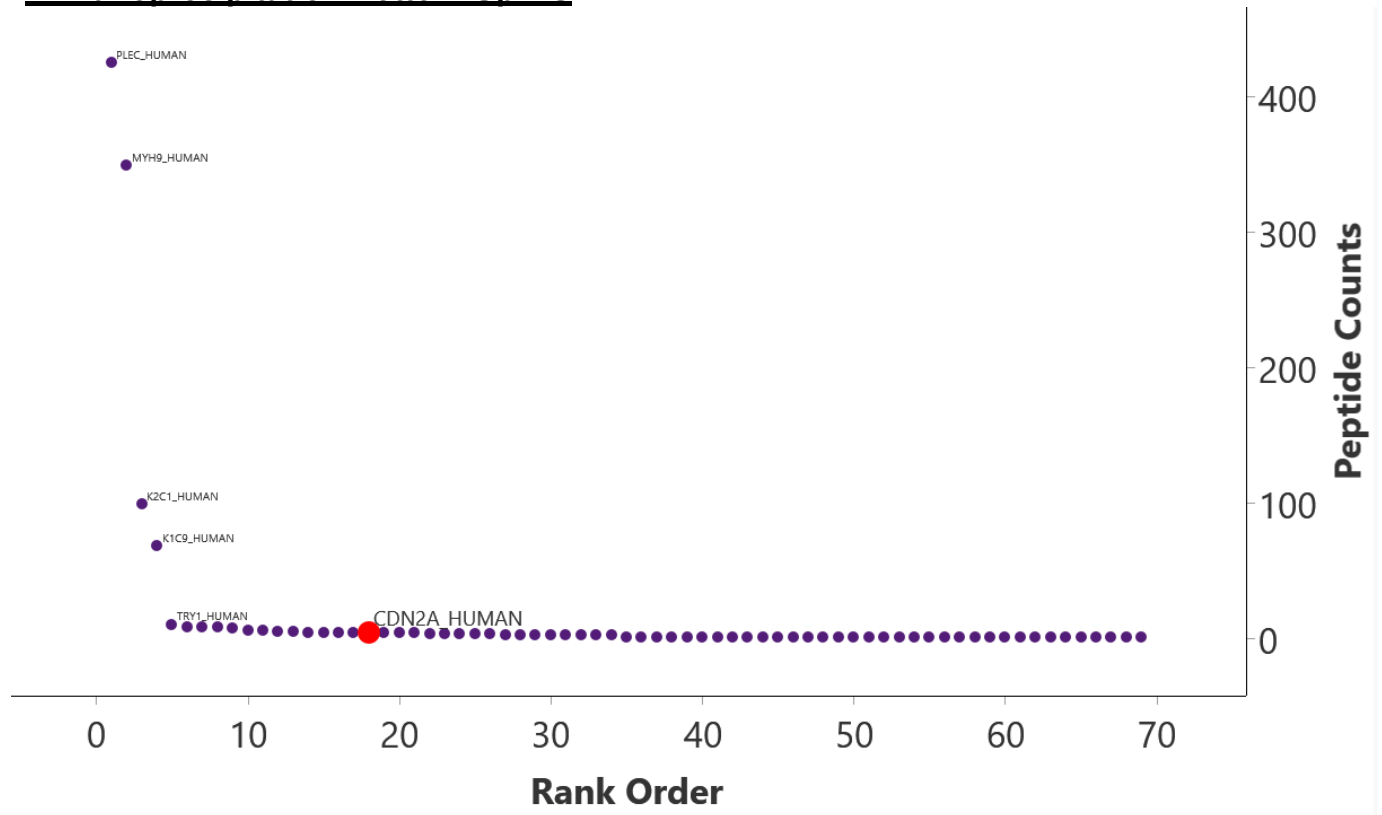
Flow cytometric analysis of MCF7 cells (blue) and HeLa cells (green) using p16 INK4A (D7C1M) Rabbit mAb (solid lines) or a concentration-matched Rabbit (DA1E) mAb IgG XP® Isotype Control #3900 (dashed lines). Anti-rabbit IgG (H+L), F(ab')₂ Fragment (Alexa Fluor® 488 Conjugate) #4412 was used as a secondary antibody.

B.2. Laboratory Validation:

Immunoprecipitation/Western Blot



Immunoprecipitation/Bottom-Up MS



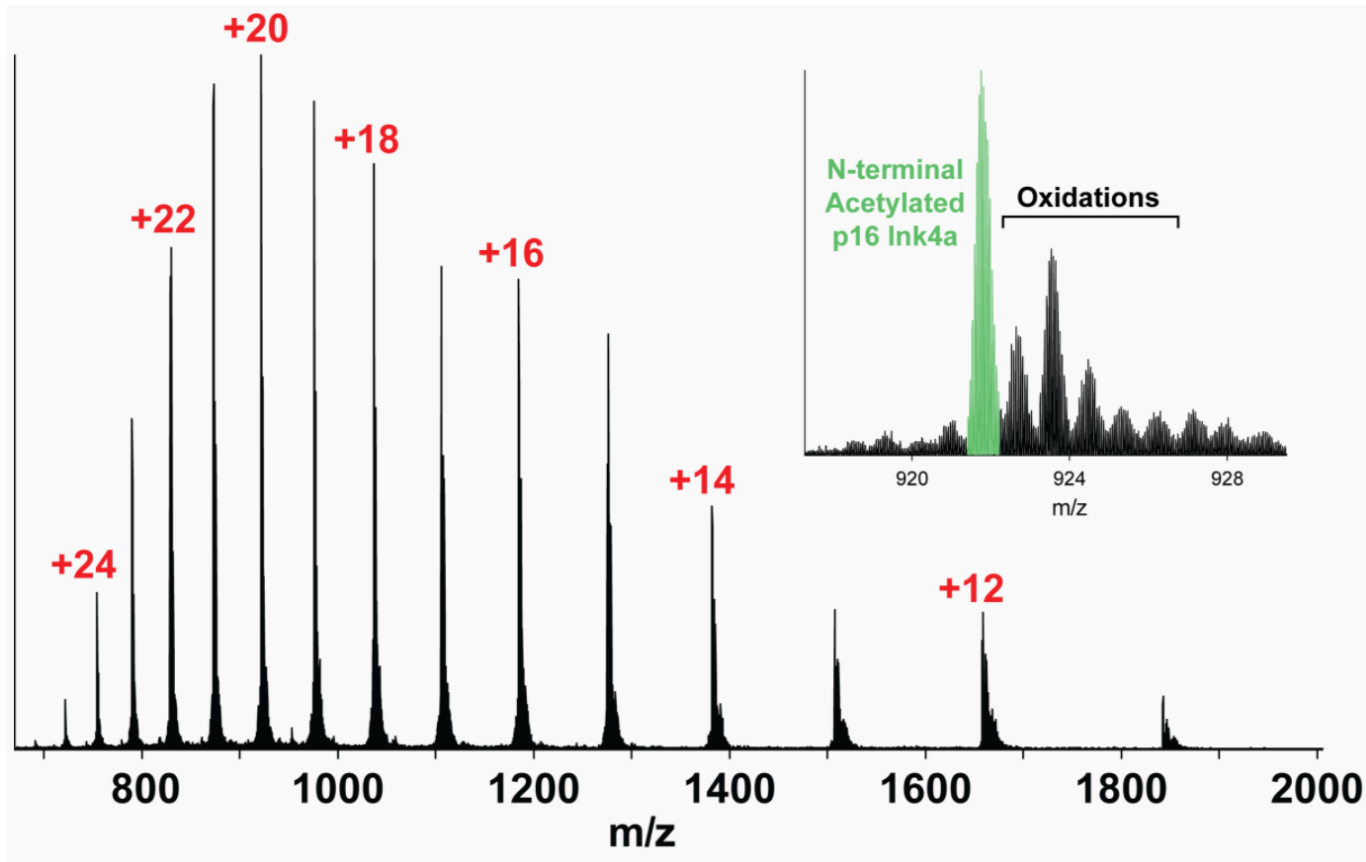
Immunoprecipitation/Top-Down MS

Proteoforms Identified:

1: PFR3892, p16lnk4a-NAc, 16564.38 Da, [MOD:00394]-

MEPAAGSSMEPSADWLATAAARGRVEEVRALLEAGALPNAPNSYGRRPIQVMMMGSARVAEL
LLLHGAEPNCADPATLTRPVHDAAREGFLDTLVVLHRAGARLDVRDAWGRLPVDLAEELGHRD
VARYLRAAAGGTRGSNHARIDAAEGPSDIPD

Intact Mass Profile



extra

intra

PTMs

variants

disulfide bonds

signal peptide

N-term: Phobius

TMRs: UniProt

H₂N-

10

20

30

40

50

60

70

80

90

100

110

120

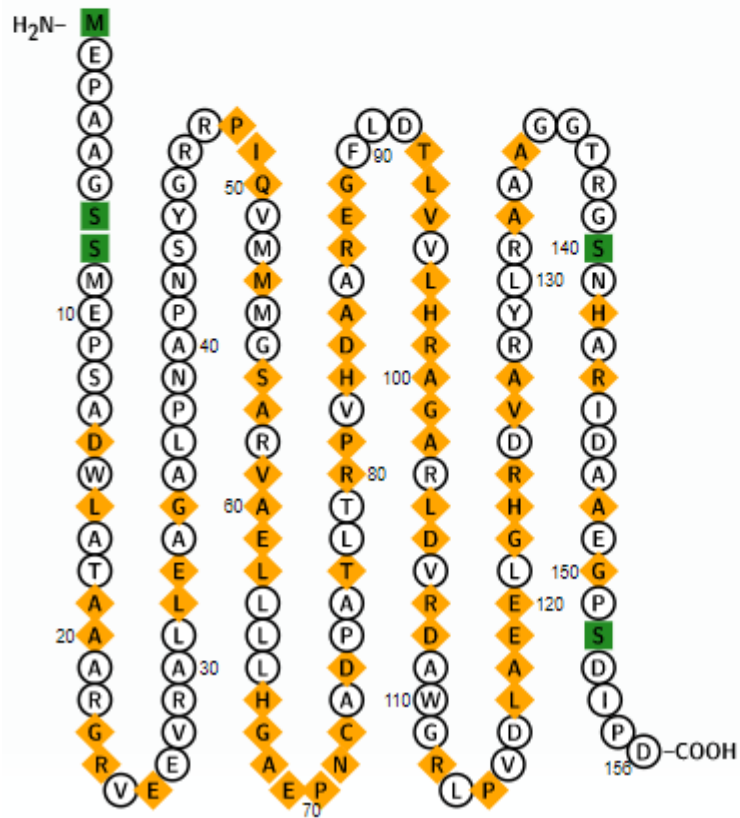
130

140

150

155

COOH



Supporting Data:

Fragment Map for PFR3892

N M E P A A G S S M E P S A D W L A T A A A R G R V 25
26 E E V R A L L E A G A L P N A P N S Y G R R P I Q 50
51 V M M M G S A R V A E L L L L H G A E P N C A D P 75
76 A T L T R P V H D A A R E G F L D T L V V L H R A 100
101 G A R L D V R D A W G R L P V D L A E E L G H R D 125
126 V A R Y L R A A A G G T R G S N H A R I D A A E G 150
151 P S D I P D C