APC15 (H-9): sc-398488



The Power to Question

BACKGROUND

With approximately 135 million base pairs and 1,400 genes, chromosome 11 makes up around 4% of human genomic DNA and is considered a gene and disease association-dense chromosome. The chromosome 11-encoded Atm gene is important for regulation of cell cycle arrest and apoptosis following double strand DNA breaks. Atm mutation leads to the disorder known as ataxia-telangiectasia. The blood disorders Sickle cell anemia and β thalassemia are caused by HBB gene mutations. Wilms' tumors, WAGR syndrome and Denys-Drash syndrome are associated with mutations of the WT1 gene. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are also associated with defects in chromosome 11.

CHROMOSOMAL LOCATION

Genetic locus: ANAPC15 (human) mapping to 11q13.4; Anapc15 (mouse) mapping to 7 E3.

SOURCE

APC15 (H-9) is a mouse monoclonal antibody raised against amino acids 1-66 mapping at the N-terminus of APC15 of human origin.

PRODUCT

Each vial contains 200 $\mu g \; lgG_{2a}$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APC15 (H-9) is available conjugated to agarose (sc-398488 AC), 500 $\mu g/0.25$ ml agarose in 1 ml, for IP; to HRP (sc-398488 HRP), 200 $\mu g/ml$, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398488 PE), fluorescein (sc-398488 FITC), Alexa Fluor® 488 (sc-398488 AF488), Alexa Fluor® 546 (sc-398488 AF546), Alexa Fluor® 594 (sc-398488 AF594) or Alexa Fluor® 647 (sc-398488 AF647), 200 $\mu g/ml$, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398488 AF680) or Alexa Fluor® 790 (sc-398488 AF790), 200 $\mu g/ml$, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

APC15 (H-9) is recommended for detection of APC15 of human origin, 3200002M19Rik of mouse origin and the corresponding rat homolog by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000). APC15 (H-9) is also recommended for detection of APC15 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for APC15 siRNA (h): sc-96308, 3200002M19Rik siRNA (m): sc-108916, APC15 shRNA Plasmid (h): sc-96308-SH, 3200002M19Rik shRNA Plasmid (m): sc-108916-SH, APC15 shRNA (h) Lentiviral Particles: sc-96308-V and 3200002M19Rik shRNA (m) Lentiviral Particles: sc-108916-V.

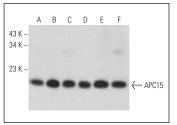
Molecular Weight of APC15: 14 kDa.

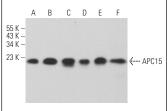
Positive Controls: 3T3-L1 cell lysate: sc-2243, Caco-2 cell lysate: sc-2262 or Jurkat whole cell lysate: sc-2204.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-lgG κ BP-FITC: sc-516140 or m-lgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA





APC15 (H-9): sc-398488. Western blot analysis of APC15 expression in HeLa (A), Jurkat (B), HUV-EC-C (C), MCF7 (D), A549 (E) and Caki-1 (F) whole cell lysates.

APC15 (H-9): sc-398488. Western blot analysis of APC15 expression in HeLa (A), Caco-2 (B), 3T3-L1 (C), L6 (D), A-10 (E) and KNRK (F) whole cell lysates.

SELECT PRODUCT CITATIONS

- Garvanska, D.H., et al. 2016. Synergistic inhibition of the APC/C by the removal of APC15 in HCT-116 cells lacking UBE2C. Biol. Open 5: 1441-1448.
- Skowyra, A., et al. 2018. USP9X limits mitotic checkpoint complex turnover to strengthen the spindle assembly checkpoint and guard against chromosomal instability. Cell Rep. 23: 852-865.
- 3. Alfieri, C., et al. 2018. Mechanism for remodelling of the cell cycle checkpoint protein MAD2 by the ATPase TRIP13. Nature 559: 274-278.
- Lau, H.W., et al. 2021. Quantitative differences between cyclin-dependent kinases underlie the unique functions of CDK1 in human cells. Cell Rep. 37: 109808.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

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