

ACTL9 (G-1): sc-365987



The Power to Question

BACKGROUND

Consisting of around 63 million bases with over 1,400 genes, chromosome 19 makes up over 2% of human genomic DNA. Chromosome 19 includes a diversity of interesting genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin superfamily members including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family, and Fc α receptors. Key genes for eye color and hair color also map to chromosome 19. Peutz-Jeghers syndrome, spinocerebellar ataxia type 6, the stroke disorder CADASIL, hypercholesterolemia and Insulin-dependent diabetes have been linked to chromosome 19. Translocations with chromosome 19 and chromosome 14 can be seen in some lymphoproliferative disorders and typically involve the proto-oncogene Bcl3. The ACTL9 gene product has been provisionally designated ACTL9 pending further characterization.

REFERENCES

- Zimmermann, W., et al. 1988. Chromosomal localization of the carcino-embryonic antigen gene family and differential expression in various tumors. *Cancer Res.* 48: 2550-2554.
- LaPoint, S.F., et al. 2000. Cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy (CADASIL). *Adv. Anat. Pathol.* 7: 307-321.
- Trettel, F., et al. 2000. A fine physical map of the CACNA1A gene region on 19p13.1-p13.2 chromosome. *Gene* 241: 45-50.
- Buchet-Poyau, K., et al. 2002. Search for the second Peutz-Jeghers syndrome locus: exclusion of the STK13, PRKCG, KLK10, and PSCD2 genes on chromosome 19 and the STK11IP gene on chromosome 2. *Cytogenet. Genome Res.* 97: 171-178.

CHROMOSOMAL LOCATION

Genetic locus: ACTL9 (human) mapping to 19p13.2; Actl9 (mouse) mapping to 17 B1.

SOURCE

ACTL9 (G-1) is a mouse monoclonal antibody raised against amino acids 226-280 mapping within an internal region of ACTL9 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ACTL9 (G-1) is available conjugated to agarose (sc-365987 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365987 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365987 PE), fluorescein (sc-365987 FITC), Alexa Fluor[®] 488 (sc-365987 AF488), Alexa Fluor[®] 546 (sc-365987 AF546), Alexa Fluor[®] 594 (sc-365987 AF594) or Alexa Fluor[®] 647 (sc-365987 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-365987 AF680) or Alexa Fluor[®] 790 (sc-365987 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor[®] is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

ACTL9 (G-1) is recommended for detection of ACTL9 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ACTL9 siRNA (h): sc-62608, ACTL9 siRNA (m): sc-62609, ACTL9 shRNA Plasmid (h): sc-62608-SH, ACTL9 shRNA Plasmid (m): sc-62609-SH, ACTL9 shRNA (h) Lentiviral Particles: sc-62608-V and ACTL9 shRNA (m) Lentiviral Particles: sc-62609-V.

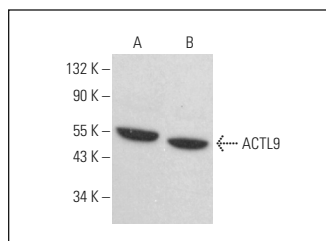
Molecular Weight of ACTL9: 46 kDa.

Positive Controls: MIA PaCa-2 cell lysate: sc-2285 or HEK293 whole cell lysate: sc-45136.

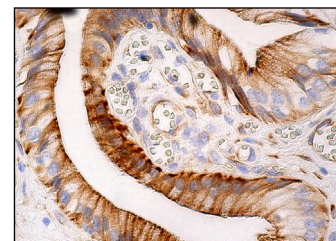
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] 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-IgG κ BP-FITC: sc-516140 or m-IgG 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. 4) Immunohistochemistry: use m-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



ACTL9 (G-1): sc-365987. Western blot analysis of ACTL9 expression in MIA PaCa-2 (A) and HEK293 (B) whole cell lysates.



ACTL9 (G-1): sc-365987. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing cytoplasmic and membrane staining of glandular cells.

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.