

# ACPL2 (H-4): sc-377262

## BACKGROUND

ACPL2 (acid phosphatase-like 2), also known as UNQ370 or PRO706, is a 480 amino acid secreted protein that functions to catalyze the H<sub>2</sub>O-dependent conversion of a phosphate monoester to an alcohol and a phosphate. Expressed as 2 alternatively spliced isoforms, ACPL2 is encoded by a gene that maps to chromosome 3, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci. Key tumor suppressing genes on chromosome 3 include those that encode the apoptosis mediator RASSF1, the cell migration regulator HYAL1 and the angiogenesis suppressor SEMA3B. Marfan syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

## REFERENCES

1. Müller, S., et al. 2000. Molecular cytogenetic dissection of human chromosomes 3 and 21 evolution. *Proc. Natl. Acad. Sci. USA* 97: 206-211.
2. Braga, E.A., et al. 2003. New tumor suppressor genes in hot spots of human chromosome 3: new methods of identification. *Mol. Biol.* 37: 194-211.
3. Tsend-Ayush, E., et al. 2004. Plasticity of human chromosome 3 during primate evolution. *Genomics* 83: 193-202.
4. Yue, Y., et al. 2005. Comparative cytogenetics of human chromosome 3q21.3 reveals a hot spot for ectopic recombination in hominoid evolution. *Genomics* 85: 36-47.

## CHROMOSOMAL LOCATION

Genetic locus: ACPL2 (human) mapping to 3q23; *Acpl2* (mouse) mapping to 9 E3.3.

## SOURCE

ACPL2 (H-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 37-73 within an internal region of ACPL2 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ACPL2 (H-4) is available conjugated to agarose (sc-377262 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-377262 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377262 PE), fluorescein (sc-377262 FITC), Alexa Fluor<sup>®</sup> 488 (sc-377262 AF488), Alexa Fluor<sup>®</sup> 546 (sc-377262 AF546), Alexa Fluor<sup>®</sup> 594 (sc-377262 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-377262 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-377262 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-377262 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-377262 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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## APPLICATIONS

ACPL2 (H-4) is recommended for detection of ACPL2 of mouse, rat and human origin 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).

Suitable for use as control antibody for ACPL2 siRNA (h): sc-78198, ACPL2 siRNA (m): sc-140823, ACPL2 shRNA Plasmid (h): sc-78198-SH, ACPL2 shRNA Plasmid (m): sc-140823-SH, ACPL2 shRNA (h) Lentiviral Particles: sc-78198-V and ACPL2 shRNA (m) Lentiviral Particles: sc-140823-V.

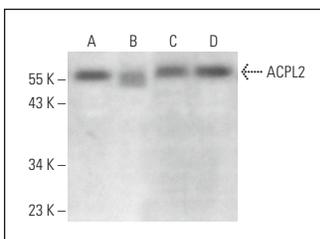
Molecular Weight of ACPL2: 55 kDa.

Positive Controls: ACPL2 (h): 293T Lysate: sc-115369, AN3 CA cell lysate: sc-24662 or SW480 cell lysate: sc-2219.

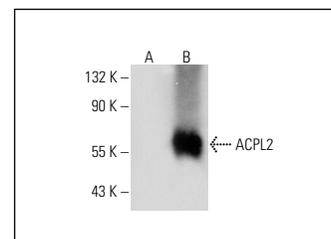
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BPHRP: sc-516102 or m-IgGκ BPHRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> 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-IgGκ BPFITC: sc-516140 or m-IgGκ BPE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

## DATA



ACPL2 (H-4): sc-377262. Western blot analysis of ACPL2 expression in AN3 CA (A), RT-4 (B), COLO 205 (C) and SW480 (D) whole cell lysates.



ACPL2 (H-4): sc-377262. Western blot analysis of ACPL2 expression in non-transfected: sc-117752 (A) and human ACPL2 transfected: sc-115369 (B) 293T whole cell lysates.

## 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](http://www.scbt.com) for detailed protocols and support products.