

# C19orf47 (H-5): sc-393896

## BACKGROUND

C19orf47 (chromosome 19 open reading frame 47) is a 422 amino acid protein that exists as three alternatively spliced isoforms and are encoded by a gene located on human chromosome 19. Chromosome 19 consists of approximately 63 million bases and 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 $\alpha$  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.

## REFERENCES

1. Zimmermann, W., et al. 1988. Chromosomal localization of the carcinoembryonic antigen gene family and differential expression in various tumors. *Cancer Res.* 48: 2550-2554.
2. LaPoint, S.F., et al. 2000. Cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy (CADASIL). *Adv. Anat. Pathol.* 7: 307-321.
3. Trettel, F., et al. 2000. A fine physical map of the CACNA1A gene region on 19p13.1-p13.2 chromosome. *Gene* 241: 45-50.

## CHROMOSOMAL LOCATION

Genetic locus: C19orf47 (human) mapping to 19q13.2; 2310022A10Rik (mouse) mapping to 7 A3.

## SOURCE

C19orf47 (H-5) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 199-234 within an internal region of C19orf47 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

C19orf47 (H-5) is available conjugated to agarose (sc-393896 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393896 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393896 PE), fluorescein (sc-393896 FITC), Alexa Fluor® 488 (sc-393896 AF488), Alexa Fluor® 546 (sc-393896 AF546), Alexa Fluor® 594 (sc-393896 AF594) or Alexa Fluor® 647 (sc-393896 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393896 AF680) or Alexa Fluor® 790 (sc-393896 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393896 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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## APPLICATIONS

C19orf47 (H-5) is recommended for detection of C19orf47 of human origin, 2310022A10Rik of mouse origin and RGD1307554 of rat origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 C19orf47 siRNA (h): sc-97383, 2310022A10Rik siRNA (m): sc-108674, C19orf47 shRNA Plasmid (h): sc-97383-SH, 2310022A10Rik shRNA Plasmid (m): sc-108674-SH, C19orf47 shRNA (h) Lentiviral Particles: sc-97383-V and 2310022A10Rik shRNA (m) Lentiviral Particles: sc-108674-V.

Molecular Weight (predicted) of C19orf47: 45 kDa.

Molecular Weight (observed) of C19orf47: 37 kDa.

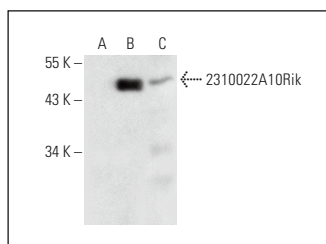
Positive Controls: 2310022A10Rik (m): 293T Lysate: sc-126315 or human skeletal muscle extract: sc-363776.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

- 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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 $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  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



C19orf47 (H-5): sc-393896. Western blot analysis of 2310022A10Rik expression in non-transfected: sc-117752 (A) and mouse 2310022A10Rik transfected: sc-126315 (B) 293T whole cell lysates and human skeletal muscle tissue extract (C).

## 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.