

Makorin-2 (C-5): sc-514185

BACKGROUND

The Makorins are a family of putative ribonucleoproteins containing two to four C3H zinc fingers that may confer RNA-binding. In addition, they contain a C3HC4 RING zinc finger that allows them to function as E3 ubiquitin ligases. Makorin-2, also known as RNF62, HSPC070 or MKRN2, is a widely expressed, evolutionarily conserved protein with four C3H-type zinc fingers (three at the N-terminus and one at the C-terminus), one RING-type zinc finger and a cysteine and histidine motif similar to that found in Makorin-1. In *Xenopus*, Makorin-2 functions, via PI 3-kinase/Akt signaling, as a negative regulator of neurogenesis. In humans, Makorin-2 is overexpressed in various cancer cell lines, suggesting a possible role of Makorin-2 in tumor progression. In addition, Makorin-2 is co-expressed with Raf-1 in the same tissues and cell lines.

REFERENCES

1. Zhang, Q.H., et al. 2000. Cloning and functional analysis of cDNAs with open reading frames for 300 previously undefined genes expressed in CD34⁺ hematopoietic stem/progenitor cells. *Genome Res.* 10: 1546-1560.
2. Gray, T.A., et al. 2001. Phylogenetic conservation of the makorin-2 gene, encoding a multiple zinc-finger protein, antisense to the RAF1 proto-oncogene. *Genomics* 77: 119-126.
3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 608426. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
4. Jarzab, B., et al. 2005. Gene expression profile of papillary thyroid cancer: sources of variability and diagnostic implications. *Cancer Res.* 65: 1587-1597.

CHROMOSOMAL LOCATION

Genetic locus: MKRN2 (human) mapping to 3p25.2; Mkrn2 (mouse) mapping to 6 E3.

SOURCE

Makorin-2 (C-5) is a mouse monoclonal antibody raised against amino acids 352-416 mapping at the C-terminus of Makorin-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Makorin-2 (C-5) is available conjugated to agarose (sc-514185 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514185 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514185 PE), fluorescein (sc-514185 FITC), Alexa Fluor® 488 (sc-514185 AF488), Alexa Fluor® 546 (sc-514185 AF546), Alexa Fluor® 594 (sc-514185 AF594) or Alexa Fluor® 647 (sc-514185 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514185 AF680) or Alexa Fluor® 790 (sc-514185 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

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

APPLICATIONS

Makorin-2 (C-5) is recommended for detection of Makorin-2 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 Makorin-2 siRNA (h): sc-62586, Makorin-2 siRNA (m): sc-62587, Makorin-2 shRNA Plasmid (h): sc-62586-SH, Makorin-2 shRNA Plasmid (m): sc-62587-SH, Makorin-2 shRNA (h) Lentiviral Particles: sc-62586-V and Makorin-2 shRNA (m) Lentiviral Particles: sc-62587-V.

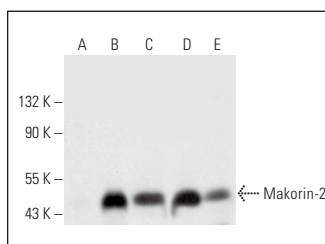
Molecular Weight of Makorin-2: 47 kDa.

Positive Controls: Makorin-2 (h): 293 Lysate: sc-112205, HeLa whole cell lysate: sc-2200 or K-562 whole cell lysate: sc-2203.

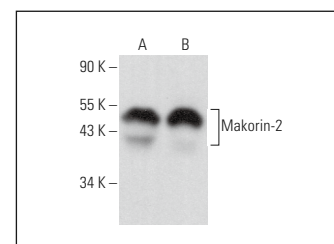
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ 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



Makorin-2 (C-5): sc-514185. Western blot analysis of Makorin-2 expression in non-transfected 293: sc-110760 (A), human Makorin-2 transfected 293: sc-112205 (B), HeLa (C), K-562 (D) and A-375 (E) whole cell lysates.



Makorin-2 (C-5): sc-514185. Western blot analysis of Makorin-2 expression in K-562 (A) and IMR-32 (B) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Kliza, K.W., et al. 2021. Reading ADP-ribosylation signaling using chemical biology and interaction proteomics. *Mol. Cell* 81: 4552-4567.e8.

RESEARCH USE

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

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