

Makorin-2 (N-16): sc-68204

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

- Zhang, Q.H., Ye, M., Wu, X.Y., Ren, S.X., Zhao, M., Zhao, C.J., Fu, G., Shen, Y., Fan, H.Y., Lu, G., Zhong, M., Xu, X.R., Han, Z.G., Zhang, J.W., Tao, J., Huang, Q.H., Zhou, J., Hu, G.X., Gu, J., Chen, S.J. and Chen, Z. 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.
- Gray, T.A., Azama, K., Whitmore, K., Min, A., Abe, S. and Nicholls, R.D. 2001. Phylogenetic conservation of the Makorin-2 gene, encoding a multiple zinc-finger protein, antisense to the Raf-1 proto-oncogene. *Genomics* 77: 119-126.
- 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/>

CHROMOSOMAL LOCATION

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

SOURCE

Makorin-2 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Makorin-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-68204 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-68204 X, 200 µg/0.1 ml.

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.

APPLICATIONS

Makorin-2 (N-16) is recommended for detection of Makorin-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

Makorin-2 (N-16) is also recommended for detection of Makorin-2 in additional species, including equine, canine, bovine and porcine.

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.

Makorin-2 (N-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

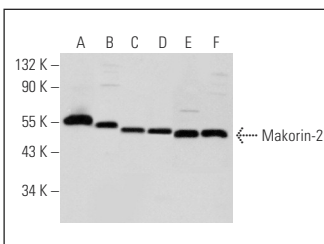
Molecular Weight of Makorin-2: 47 kDa.

Positive Controls: rat brain extract: sc-2392, HEK293 whole cell lysate: sc-45136 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Makorin-2 (N-16): sc-68204. Western blot analysis of Makorin-2 expression in rat brain tissue extract (A) and HEK293 (B), RT-4 (C), U-251-MG (D), Jurkat (E) and HeLa (F) whole cell lysates.

PROTOCOLS

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