

Jumonji (H-260): sc-134548

BACKGROUND

Jumonji, a nuclear protein crucial for neural tube formation, plays an important role in downregulating atrial natriuretic factor (ANF) gene expression through its interaction with GATA4 and NKX2-5. Required for normal development of the heart, Jumonji participates in negatively regulating the signaling involved in cell proliferation. Jumonji, also designated ARID domain-containing protein 2, is a member of the JMJ transcription factor family of proteins. During embryogenesis, Jumonji, which localizes to the nucleus, is expressed primarily in neurons, especially dorsal root ganglion cells.

REFERENCES

1. Berge-LeFranc, J.L., et al. 1996. Characterization of the human Jumonji gene. *Hum. Mol. Genet.* 5: 1637-1641.
2. Kim, T.G., et al. 2004. Jumonji represses atrial natriuretic factor gene expression by inhibiting transcriptional activities of cardiac transcription factors. *Mol. Cell. Biol.* 24: 10151-10160.
3. Jung, J., et al. 2005. Jumonji regulates cardiomyocyte proliferation via interaction with retinoblastoma protein. *J. Biol. Chem.* 280: 30916-30923.
4. Kim, T.G., et al. 2005. Jumonji represses α -cardiac myosin heavy chain expression via inhibiting MEF-2 activity. *Biochem. Biophys. Res. Commun.* 329: 544-553.
5. Jensen, L.R., et al. 2005. Mutations in the JARID1C gene, which is involved in transcriptional regulation and chromatin remodeling, cause X-linked mental retardation. *Am. J. Hum. Genet.* 76: 227-236.
6. Jung, J., et al. 2005. Roles of Jumonji in mouse embryonic development. *Dev. Dyn.* 232: 21-32.

CHROMOSOMAL LOCATION

Genetic locus: JARID2 (human) mapping to 6p22.3; Jarid2 (mouse) mapping to 13 A5.

SOURCE

Jumonji (H-260) is a rabbit polyclonal antibody raised against amino acids 961-1220 mapping near the C-terminus of Jumonji of human origin.

PRODUCT

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

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-134548 X, 200 μ g/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.

PROTOCOLS

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

APPLICATIONS

Jumonji (H-260) is recommended for detection of Jumonji of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Jumonji (H-260) is also recommended for detection of Jumonji in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Jumonji siRNA (h): sc-60872, Jumonji siRNA (m): sc-60873, Jumonji shRNA Plasmid (h): sc-60872-SH, Jumonji shRNA Plasmid (m): sc-60873-SH, Jumonji shRNA (h) Lentiviral Particles: sc-60872-V and Jumonji shRNA (m) Lentiviral Particles: sc-60873-V.

Jumonji (H-260) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

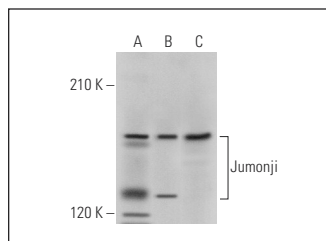
Molecular Weight of Jumonji: 150-160 kDa.

Positive Controls: Neuro-2A whole cell lysate: sc-364185, Jurkat whole cell lysate: sc-2204 or mouse testis extract: sc-2405.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Jumonji (H-260) : sc-134548. Western blot analysis of Jumonji expression in Neuro-2A (A) and Jurkat (B) whole cell lysates and mouse testis tissue extract (C).

SELECT PRODUCT CITATIONS

1. Dahlke, C., et al. 2012. A microRNA encoded by Kaposi sarcoma-associated herpesvirus promotes B-cell expansion *in vivo*. *PLoS ONE* 7: e49435.

RESEARCH USE

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