SANTA CRUZ BIOTECHNOLOGY, INC.

GATAD2A (H-90): sc-134712

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

GATAD2A (GATA zinc finger domain containing 2A), also known as p66α, is a ubiquitously expressed, highly conserved protein that is essential for development. GATAD2A contains a GATA-type zinc finger and is a component of the NuRD (nucleosome remodeling and histone deacetylation) complex along with MBD2, HDAC1 and HDAC2. The NuRD complex is associated with ATP-dependent chromatin-remodeling and histone deacetylase activity. GATAD2A interacts with MBD2 and MBD3 and colocalizes with MBD2 in nuclear speckles. This interaction enhances repression mediated by MBD2 and allows for the interaction with histone tails. GATAD2A contains two domains involved in transcriptional repression. For functional repressor activity, GATAD2A requires SUMOylation at Lys-30 and Lys-487.

REFERENCES

1. Brackertz, M., et al. 2002. Two highly related p66 proteins comprise a new family of potent transcriptional repressors interacting with MBD2 and MBD3. J. Biol. Chem. 277: 40958-40966.
2. Gururaja, T., et al. 2003. Use of MEDUSA-based data analysis and capillary HPLC-ion-trap mass spectrometry to examine complex immunoaffinity extracts of RBAp48. J. Proteome Res. 1: 253-261.

CHROMOSOMAL LOCATION

Genetic locus: GATAD2A (human) mapping to 19p13.11; Gatad2a (mouse) mapping to 8 B3.3.

SOURCE

GATAD2A (H-90) is a rabbit polyclonal antibody raised against amino acids 186-275 mapping within an internal region of GATAD2A 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.

APPLICATIONS

GATAD2A (H-90) is recommended for detection of GATAD2A 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); non cross-reactive with GATAD2B. GATAD2A (H-90) is also recommended for detection of GATAD2A in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GATAD2A siRNA (h): sc-97791, GATAD2A siRNA (m): sc-145342, GATAD2A shRNA Plasmid (h): sc-97791-SH, GATAD2A shRNA Plasmid (m): sc-145342-SH, GATAD2A shRNA (h) Lentiviral Particles: sc-97791-V and GATAD2A shRNA (m) Lentiviral Particles: sc-145342-V.

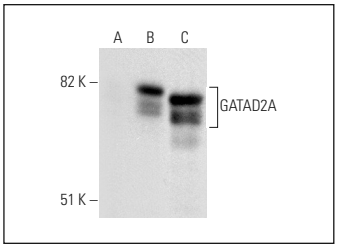
Molecular Weight of GATAD2A: 68 kDa.

Positive Controls: GATAD2A (h): 293T Lysate: sc-370033 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 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



GATAD2A (H-90): sc-134712. Western blot analysis of GATAD2A expression in non-transfected 293T: sc-117752 (**A**), human GATAD2A transfected 293T: sc-370033 (**B**) and HeLa (**C**) 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 or our catalog for detailed protocols and support products.