SANTA CRUZ BIOTECHNOLOGY, INC.

GATAD1 (GATA9A1D3): sc-81092

BACKGROUND

GATAD1 (GATA zinc finger domain-containing protein 1), also known as ODAG (ocular development-associated gene protein), is a 269 amino acid protein that is involved in early ocular development. Expressed highly in postnatal eye tissue, GATAD1 is associated with formation of the lens and its surrounding structures, suggesting a possible role in the transformation of ocular tissues into a working eye. GATAD1 expression declines dramatically after the early stages of development. GATAD1 contains one GATA-type zinc finger which functions as a DNA-binding domain. Additionally, GATAD1 gene expression is amplified in certain cancerous cells, suggesting that it may be involved in carcinogenesis.

REFERENCES

1. Tsuruga, T., et al. 2002. Ocular development-associated gene (ODAG), a novel gene highly expressed in ocular development. Gene 290: 125-130.
2. Pang, E.Y., et al. 2007. Identification of PFTAIRE protein kinase 1, a novel cell division cycle-2 related gene, in the motile phenotype of hepatocellular carcinoma cells. Hepatology 46: 436-445.
3. Agelopoulos, K., et al. 2007. EGFR amplification specific gene expression in phyllodes tumours of the breast. Cell. Oncol. 29: 443-451.
4. Nagel, S., et al. 2008. Amplification at 7q22 targets cyclin-dependent kinase 6 in T cell lymphoma. Leukemia 22: 387-392.
5. Sasaki, T., et al. 2008. Overexpression of ocular development-associated gene (ODAG) in the eye induced elevated intraocular pressure, optic nerve atrophy, and impaired retinal development. Invest. Ophthalmol. Vis. Sci. 50: 242-248.

CHROMOSOMAL LOCATION

Genetic locus: GATAD1 (human) mapping to 7q21.2; Gatad1 (mouse) mapping to 5 A1.

SOURCE

GATAD1 (GATA9A1D3) is a mouse monoclonal antibody raised against a recombinant protein corresponding to the C-terminal region of 1 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2b} in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

PROTOCOLS

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

APPLICATIONS

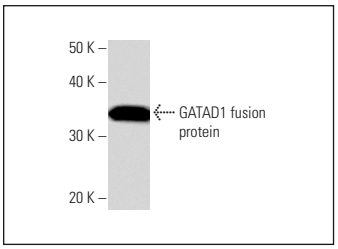
GATAD1 (GATA9A1D3) is recommended for detection of GATAD1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1 µg per 1 x 10^6 cells).

Suitable for use as control antibody for GATAD1 siRNA (h): sc-89708, GATAD1 siRNA (m): sc-145341, GATAD1 shRNA Plasmid (h): sc-89708-SH, GATAD1 shRNA Plasmid (m): sc-145341-SH, GATAD1 shRNA (h) Lentiviral Particles: sc-89708-V and GATAD1 shRNA (m) Lentiviral Particles: sc-145341-V.

Molecular Weight of GATAD1: 29 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or NIH/3T3 whole cell lysate: sc-2210.

DATA



GATAD1 (GATA9A1D3): sc-81092. Western Blot analysis of human recombinant GATAD1 fusion protein.

SELECT PRODUCT CITATIONS

1. Varier, R.A., et al. 2016. Recruitment of the mammalian histone-modifying EMSY complex to target genes is regulated by ZNF131. J. Biol. Chem. 291: 7313-7324.

RESEARCH USE

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