

# GATAD1 (K-13): sc-104263

## 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 1 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., Kanamoto, T., Kato, T., Yamashita, H., Miyagawa, K. and Mishima, H.K. 2002. Ocular development-associated gene (ODAG), a novel gene highly expressed in ocular development. *Gene* 290: 125-130.
2. Pang, E.Y., Bai, A.H., To, K.F., Sy, S.M., Wong, N.L., Lai, P.B., Squire, J.A. and Wong, N. 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., Kersting, C., Korsching, E., Schmidt, H., Kuijper, A., August, C., Wülfing, P., Tio, J., Boecker, W., van Diest, P.J., Brandt, B. and Buerger, H. 2007. EGFR amplification specific gene expression in phyllodes tumours of the breast. *Cell. Oncol.* 29: 443-451.
4. Nagel, S., Leich, E., Quentmeier, H., Meyer, C., Kaufmann, M., Drexler, H.G., Zettl, A., Rosenwald, A. and Macleod, R.A. 2008. Amplification at 7q22 targets cyclin-dependent kinase 6 in T cell lymphoma. *Leukemia* 22: 387-392.
5. Sasaki, T., Watanabe, W., Muranishi, Y., Kanamoto, T., Aihara, M., Miyazaki, K., Tamura, H., Saeki, T., Oda, H., Souchelnytskyi, N., Souchelnytskyi, S., Aoyama, H., Honda, Z.I., Furukawa, T., Mishima, H.K., Kiuchi, Y. and Honda, H. 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 (K-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GATAD1 of human origin.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## 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-104263 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

GATAD1 (K-13) 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), 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 family members GATAD2A or GATAD2B.

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.

## 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) 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.

## STORAGE

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