SANTA CRUZ BIOTECHNOLOGY, INC.

GAGA Factor (d-280): sc-98263

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Chromatin structure plays a critical role in the regulation of transcription. *Drosophila* GAGA Factor (Trithorax-like protein, GAF) directs chromatin remodeling to its binding sites and is known to activate the expression of many genes in *Drosophila*.

REFERENCES

1. Pagans, S., et al. 2002. The *Drosophila* transcription factor tramtrack (TTK) interacts with Trithorax-like (GAGA) and represses GAGA-mediated activation. Nucleic Acids Res. 30: 4406-4413.
2. Shimojima, T., et al. 2003. *Drosophila* FACT contributes to Hox gene expression through physical and functional interactions with GAGA factor. Genes Dev. 17: 1605-1616.
3. van Steensel, B., et al. 2003. Genomewide analysis of *Drosophila* GAGA factor target genes reveals context-dependent DNA binding. Proc. Natl. Acad. Sci. USA 100: 2580-2585.
4. Schweinsberg, S., et al. 2004. The enhancer-blocking activity of the Fab-7 boundary from the *Drosophila* bithorax complex requires GAGA-factor-binding sites. Genetics 168:1371-1384.
5. Melnikova, L., et al. 2004. Interaction between the GAGA factor and Mod(mdg4) proteins promotes insulator bypass in *Drosophila*. Proc. Natl. Acad. Sci. USA 101: 14806-14811.
6. Bonet, C., et al. 2005.The GAGA protein of *Drosophila* is phosphorylated by CK2. J. Mol. Biol. 351: 562-572.
7. Petrascheck, M., et al. 2005. DNA looping induced by a transcriptional enhancer *in vivo*. Nucleic Acids Res. 33: 3743-3750.
8. Wang, Y.V., et al. 2005. Identification *in vivo* of different rate-limiting steps associated with transcriptional activators in the presence and absence of a GAGA element. Mol. Cell. Biol. 25:3543-3552.

SOURCE

GAGA Factor (d-280) is a rabbit polyclonal antibody raised against amino acids 101-380 mapping within an internal region of GAGA Factor of *Drosophila melanogaster* origin.

PRODUCT

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

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

GAGA Factor (d-280) is recommended for detection of GAGA Factor of *Drosophila melanogaster* 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).

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.

SELECT PRODUCT CITATIONS

1. Agelopoulos, M., et al. 2012. Developmental regulation of chromatin conformation by Hox proteins in *Drosophila*. Cell Rep. 1: 350-359.

RESEARCH USE

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