## SANTA CRUZ BIOTECHNOLOGY, INC.

# CUT (dP-14): sc-28185



## BACKGROUND

The *Drosophila melanogaster* protein CUT regulates cell fate decisions in multiple lineages and is a determination factor that specifies sensory organ identity in precursor cells. Direct flight muscle (DFM) development as well as cell type specification of Malpighian tubules require the regulatory protein CUT.

## REFERENCES

- Adams, M.D., Celniker, S.E., Holt, R.A., Evans, C.A., Gocayne, J.D., Amanatides, P.G., Scherer, S.E., Li, P.W., Hoskins, R.A., Galle, R.F., George, R.A., Lewis, S.E., Richards, S., Ashburner, M., Henderson, S.N., Sutton, G.G., et al. 2000. The genome sequence of *Drosophila melanogaster*. Science 287: 2185-2195.
- Bernard, F., Lalouette, A., Gullaud, M., Jeantet, A.Y., Cossard, R., Zider, A., Ferveur, J.F., and Silber, J. 2003. Control of apterous by vestigial drives indirect flight muscle development in *Drosophila*. Dev. Biol. 260: 391-403.
- Rollins, R.A., Korom, M., Aulner, N., Martens, A., and Dorsett, D. 2004. Drosophila nipped-B protein supports sister chromatid cohesion and opposes the stromalin/Scc3 cohesion factor to facilitate long-range activation of the cut gene. Mol. Cell. Biol. 24: 3100-3111.
- Krupp, J.J., Yaich, L.E., Wessells, R.J., and Bodmer, R. 2005. Identification of genetic loci that interact with cut during *Drosophila* wing-margin development. Genetics 170: 177517-95.
- Sun, J. and Deng, W.M. 2005. Notch-dependent downregulation of the homeodomain gene cut is required for the mitotic cycle/endocycle switch and cell differentiation in *Drosophila* follicle cells. Development 132: 4299-4308.

#### SOURCE

CUT (dP-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CUT of *Drosophila melanogaster* origin.

## PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-28185 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

Store at 4° C, \*\*D0 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.

### **APPLICATIONS**

CUT (dP-14) is recommended for detection of CUT of *Drosophila melanogaster* 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).

### **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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluo-rescence: 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<sup>™</sup> Mounting Medium: sc-24941.