



UBX (dS-19): sc-26184

BACKGROUND

In *Drosophila melanogaster*, segment identity is determined by specific expression of homeotic genes (Hox). The Hox expression pattern is first initiated by gap and pair-rule genes and then maintained by genes of the Polycomb-group (Pc-G) and the trithorax-group (trx-G). Ultrabithorax (Ubx), a homeodomain containing transcription factor, is essential for the proper patterning of the posterior thorax and anterior abdomen in *Drosophila*. Ubx is the sole Hox gene responsible for the differential development of the fore-wing and haltere in *Drosophila*. Mutations in Ubx result in the transformation of the third thoracic (the haltere and third leg) segment into the second thoracic (wing and second leg) segment.

REFERENCES

1. Bennett, R.L., Brown, S.J. and Denell, R.E. 1999. Molecular and genetic analysis of the *Tribolium* Ultrabithorax ortholog, Ultrathorax. *Dev. Genes Evol.* 209: 608-619.
2. Roch, F. and Akam, M. 2000. Ultrabithorax and the control of cell morphology in *Drosophila* halteres. *Development* 127: 97-107.
3. Lopez, A., Higuete, D., Rosset, R., Deutsch, J. and Peronnet, F. 2001. Corto genetically interacts with Pc-G and trx-G genes and maintains the anterior boundary of Ultrabithorax expression in *Drosophila* larvae. *Mol. Genet. Genomics* 266: 572-583.
4. Rivlin, P.K., Gong, A., Schneiderman, A.M. and Booker, R. 2001. The role of Ultrabithorax in the patterning of adult thoracic muscles in *Drosophila melanogaster*. *Dev. Genes Evol.* 211: 55-66.
5. Frazee, R.W., Taylor, J.A. and Tullius, T.D. 2002. Interchange of DNA-binding modes in the deformed and ultrabithorax homeodomains: a structural role for the N-terminal arm. *J. Mol. Biol.* 323: 665-683.

SOURCE

UBX (dS-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of UBX 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.

Blocking peptide available for competition studies, sc-26184 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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

UBX (dS-19) is recommended for detection of UBX 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™ 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.

RESEARCH USE

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