

Jun (d-230): sc-25763

BACKGROUND

Drosophila melanogaster is a proven and effective model for studying developmental and cellular processes common to higher eukaryotes. Approximately 13,600 genes have been elucidated from more than 120 megabases of euchromatin, and they are organized among the chromosomes 2, 3, 4, X and Y, with the Y chromosome being predominately heterochromatic. *Drosophila* genes can be categorized based on the type of protein for which they encode and are represented by six major classifications, which include intracellular signaling proteins, transmembrane proteins, RNA binding proteins, secreted factors, transcription regulators (basic helix-loop-helix, homeodomain containing, zinc finger containing, and chromatin associated) or other functional proteins. Many of the genes expressed in *Drosophila* are structurally and functionally similar across species, as are the pathways involved in transducing intracellular signaling. Among these proteins, Jun is a transcription factor that participates in signaling pathways related to mammalian Ras, Raf and ERK cascades. Like members of the mammalian AP-1 class of transcription regulators, *Drosophila* Jun contains a DNA-binding domain consisting of a leucine zipper and an adjacent basic region.

REFERENCES

- Perkins, K.K., Admon, A., Patel, N., and Tjian, R. 1990. The *Drosophila* Fos-related AP-1 protein is a developmentally regulated transcription factor. *Genes Dev.* 4: 822-834.
- Kockel, L., Zeitlinger, J., Staszewski, L.M., Mlodzik, M., and Bohmann, D. 1997. Jun in *Drosophila* development: redundant and nonredundant functions and regulation by two MAPK signal transduction pathways. *Genes Dev.* 11: 1748-1758.
- Adams, M.D., Celniker, S.E., Holt, R.A., Evans, C.A., Gocayne, J.D., Amanatides, P., et al. 2000. The genome sequence of *Drosophila melanogaster*. *Science* 287: 2185-2195.
- The Interactive Fly. <http://www.sdbonline.org/fly/aimain/1aahome.htm>. <http://www.sdbonline.org/fly/gene/djun.htm>
- LocusLink Report (LocusID: 36057). <http://www.ncbi.nlm.nih.gov/LocusLink/>

SOURCE

Jun (d-230) is a rabbit polyclonal antibody raised against amino acids 1-230 of Jun 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

Jun (dC-20) is recommended for detection of Jun 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).

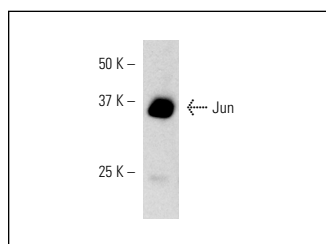
Molecular Weight of Jun: 36 kDa.

Positive Controls: Schneider's *Drosophila* Line 2 whole cell lysate: sc-364794.

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.

DATA



Jun (d-230): sc-25763. Western blot analysis of Jun expression in Schneider's *Drosophila* line 2 whole cell lysate.

SELECT PRODUCT CITATIONS

- Kim, T., Yoon, J., Cho, H., Lee, W.B., Kim, J., Song, Y.H., Kim, S.N., Yoon, J.H., Kim-Ha, J. and Kim, Y. 2005. Downregulation of lipopolysaccharide response in *Drosophila* by negative crosstalk between the AP1 and NFκB signaling modules. *Nat. Immunol.* 6: 211-218.

RESEARCH USE

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

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Try **Jun (G-7): sc-398615**, our highly recommended monoclonal alternative to Jun (d-230).