

Inscuteable (C-8): sc-390728

BACKGROUND

Asymmetric cell division requires the orientation of mitotic spindles along the cell-polarity axis. In *Drosophila* neuroblasts, this involves the interaction of the proteins Inscuteable and Partner of inscuteable. Inscuteable is required to mediate and coordinate basal protein localization with mitotic spindle orientation. A scute is defined as a thin platelike structure.

REFERENCES

1. Kraut, R., et al. 1996. Role of Inscuteable in orienting asymmetric cell divisions in *Drosophila*. *Nature* 383: 50-55.
2. Doe, C.Q. 1996. Spindle orientation and asymmetric localization in *Drosophila*: both Inscuteable? *Cell* 86: 695-697.
3. Tio, M., et al. 1999. A functional analysis of Inscuteable and its roles during *Drosophila* asymmetric cell divisions. *J. Cell Sci.* 112:1541-1551.
4. Orgogozo, V., et al. 2001. Lineage, cell polarity and Inscuteable function in the peripheral nervous system of the *Drosophila* embryo. *Development* 128: 631-643.
5. Ashraf, S.I., et al. 2001. The Snail protein family regulates neuroblast expression of Inscuteable and string, genes involved in asymmetry and cell division in *Drosophila*. *Development* 128: 4757-4767.
6. Du, Q., et al. 2001. A mammalian partner of Inscuteable binds NuMA and regulates mitotic spindle organization. *Nat. Cell Biol.* 3: 1069-1075.
7. Yu, F., et al. 2002. Membrane targeting and asymmetric localization of *Drosophila* partner of Inscuteable are discrete steps controlled by distinct regions of the protein. *Mol. Cell. Biol.* 22: 4230-4240.
8. Popichenko, D., et al. 2004. Cell fate decisions in the *Drosophila* dorsal vessel depend on the multiadapter protein inscuteable. *Genesis* 40: 218-222.

SOURCE

Inscuteable (C-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 806-831 of Inscuteable of *Drosophila melanogaster* origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Inscuteable (C-8) is available conjugated to agarose (sc-390728 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390728 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390728 PE), fluorescein (sc-390728 FITC), Alexa Fluor® 488 (sc-390728 AF488), Alexa Fluor® 546 (sc-390728 AF546), Alexa Fluor® 594 (sc-390728 AF594) or Alexa Fluor® 647 (sc-390728 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-390728 AF680) or Alexa Fluor® 790 (sc-390728 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-390728 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

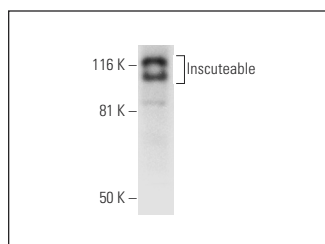
APPLICATIONS

Inscuteable (C-8) is recommended for detection of Inscuteable of *Drosophila melanogaster* origin by Western Blotting (starting dilution 1:100, 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 Inscuteable: 95 kDa.

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

DATA



Inscuteable (C-8): sc-390728. Western blot analysis of Inscuteable expression in Schneider's *Drosophila* Line 2 whole cell lysate.

STORAGE

Store at 4° C, ****DO 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 for detailed protocols and support products.

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