Axotrophin (B-2): sc-166945

BACKGROUND

Axotrophin is a stem cell gene that encodes a protein which is involved in T lymphocyte regulation (especially in regulating the proliferation) and leukemia inhibitory factor (LIF) release. LIF is a neurotrophic cytokine that is important for stem cell regulation and thymocyte stimulation. Both Axotrophin and LIF are linked to transplantation intolerance. Axotrophin is also involved in corpus callosum differentiation and may play a role in glial cell line-derived neurotrophic factor (GDNF)-dependent sensory neuron survival in the substantia gelatinosa of the adult spinal cord. Axotrophin is primarily expressed in the hippocampus, cortex, purkinje and granule cells of the cerebellum.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: MARCH7 (human) mapping to 2q24.2; March7 (mouse) mapping to 2 C1.1.

SOURCE

Axotrophin (B-2) is a mouse monoclonal antibody raised against amino acids 583-642 mapping near the C-terminus of Axotrophin of human origin.

PRODUCT

Each vial contains 200 µg IgG\textsubscript{K} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Axotrophin (B-2) is available conjugated to agarose (sc-166945 AC), 500 µg/ml, for IP; to HRP (sc-166945 HRP), 200 µg/ml, for WB, [HCl] and ELISA; to either phycoerythrin (sc-166945 PE), fluorescein (sc-166945 FITC), Alexa Fluor\textsuperscript{®} 488 (sc-166945 AF488), Alexa Fluor\textsuperscript{®} 546 (sc-166945 AF546), Alexa Fluor\textsuperscript{®} 594 (sc-166945 AF594) or Alexa Fluor\textsuperscript{®} 647 (sc-166945 AF647), 200 µg/ml, for WB (RGB), IF, IHC/IP and FCM; and to either Alexa Fluor\textsuperscript{®} 680 (sc-166945 AF680) or Alexa Fluor\textsuperscript{®} 790 (sc-166945 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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STORAGE

Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Axotrophin (B-2) is recommended for detection of Axotrophin of mouse, rat and human 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), immunohistochemistry (including paraffin-embedded sections) (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 Axotrophin: 78 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG\textsubscript{K} BP-HRP: sc-516102 or m-IgG\textsubscript{K} BP-HRP (Cruz Marker): sc-516102-CM (dilution range 1:1000-1:10000), Cruz Marker\textsuperscript{TM} Molecular Weight Standards: sc-2035, UltraCruz\textsuperscript{®} Blocking Reagent: sc-516214 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 m-IgG\textsubscript{K} BP-FITC: sc-516140 or m-IgG\textsubscript{K} BP-PE: sc-516141 (dilution range 1:50-1:200) with UltraCruz\textsuperscript{®} Mounting Medium: sc-24941 or UltraCruz\textsuperscript{®} Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG\textsubscript{K} BP-HRP: sc-516102 with DAB, 50X: sc-24982 and ImmunohistoMount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA

Axotrophin (B-2) sc-166945. Western blot analysis of Axotrophin expression in K-562 whole cell lysates.

SELECT PRODUCT CITATIONS


RESEARCH USE

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