β-Adaptin (A-5): sc-74423

BACKGROUND

Clathrin-coated pits and vesicles are assembled for receptor-mediated endocytosis through interaction with clathrin associated protein complexes. Vesicle transport is mediated from the trans-Golgi network by the adapter complex AP-1 and from the plasma membrane by the AP-2 complex. The AP-1 and AP-2 adapter protein complexes consist of clathrin binding Adaptin proteins (γ and β1 for AP-1, α and β2 for AP-2) and two smaller subunits known as AP50 and AP17. The α- and β-Adaptin chains have a similar two-domain organization with C-terminal domains that vary in both sequence and length. α-Adaptin splice variants A and C display variable relative expression levels and differential distribution in different tissues. AP180 (also designated AP-3 or F1-20) is a synapse-specific clathrin assembly protein. The protein CALM (clathrin assembly protein lymphoid myeloid leukemia) is highly homologous to AP180 and may also be involved in clathrin assembly.

REFERENCES


CHROMOSOMAL LOCATION


SOURCE

β-Adaptin (A-5) is a mouse monoclonal antibody raised against amino acids 560-594 of β1-Adaptin of human origin.

PRODUCT

Each vial contains 200 μg IgG2b kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. β-Adaptin (A-5) is available conjugated to agarose (sc-74423 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-74423 HRP), 200 μg/ml, for WB, IHCP and ELISA; to either phycoerythrin (sc-74423 PE), fluorescein (sc-74423 FTC), Alexa Fluor® 488 (sc-74423 AF488), Alexa Fluor® 546 (sc-74423 AF546), Alexa Fluor® 594 (sc-74423 AF594) or Alexa Fluor® 647 (sc-74423 AF647), 200 μg/ml, for WB (RGB), IF, IHCP and FCM; and to either Alexa Fluor® 680 (sc-74423 AF680) or Alexa Fluor® 790 (sc-74423 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLIEDS

- β-Adaptin (A-5) is recommended for detection of β1-Adaptin and β2-Adaptin of mouse, rat and human 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), 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 β-Adaptin: 106 kDa.
- Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG HRP: sc-516102 or m-IgG HRP/Cruz Marker: sc-516102-CM (dilution range 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2305, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-74423 AC, 500 µg/0.5 ml agarose. 3) Immunofluorescence: use m-IgG HRP: sc-516140 or m-IgG HRP: sc-516141 (dilution range 1:100-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA

β-Adaptin (A-5): sc-74423. Western blot analysis of β-Adaptin expression in HeLa (A), K-562 (B), Jurkat (C), NIH/3T3 (D) and COS (E) whole cell lysates.


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.

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