

γ 1-Adaptin (100/3): sc-58214

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 β 1 for AP-1, α and β 2 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

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- Morris, S.A., et al. 1993. Clathrin assembly protein AP180: primary structure, domain organization and identification of a Clathrin binding site. *EMBO J.* 12: 667-675.
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- Dreyling, M.H., et al. 1996. The t(10;11) (p13;q14) in the U937 cell line results in the fusion of the AF10 gene and CALM, encoding a new member of the AP-3 Clathrin assembly protein family. *Proc. Natl. Acad. Sci. USA* 93: 4804-4809.
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SOURCE

γ 1-Adaptin (100/3) is a mouse monoclonal antibody raised against full length γ 1-Adaptin of bovine origin.

PRODUCT

Each vial contains 200 μ g IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

γ 1-Adaptin (100/3) is recommended for detection of γ 1-Adaptin 100 kDa in bovine liver, human heart fibroblasts and Madin-Darby bovine kidney cultured cells (MDBK) of bovine and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with any components in the 110-115 kDa range from above mentioned sources, rat pheochromocytoma cultured cells (PC12), neuroblastoma or astrocytes, or with the γ -subunit in rat and mouse.

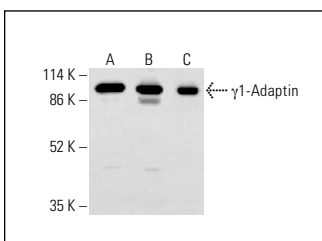
Molecular Weight of γ 1-Adaptin: 91 kDa.

Positive Controls: HISM cell lysate: sc-2229, HCT-116 whole cell lysate: sc-364175 or HeLa whole cell lysate: sc-2200.

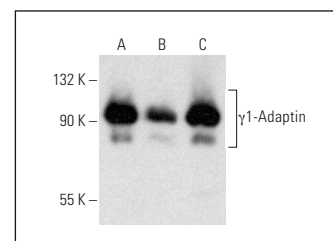
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® 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).

DATA



γ 1-Adaptin (100/3): sc-58214. Western blot analysis of γ 1-Adaptin expression in HeLa (A), K-562 (B) and HCT-116 (C) whole cell lysates. Detection reagent used: m-IgG_{2b} BP-HRP: sc-542741.



γ 1-Adaptin (100/3): sc-58214. Western blot analysis of γ 1-Adaptin expression in 293T (A), HISM (B) and HeLa (C) 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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.