COPB (D-10): sc-393615

**BACKGROUND**

Membrane and vesicular trafficking in the early secretory pathway are mediated by non-Clathrin COP (coat protein) I-coated vesicles. COPB (β-COP) is a marker protein for pre-Golgi intermediates (vesicular tubular clusters or VTCs). GIV (Grox_1,35.Interacting protein) co-localizes with COPB and Grox_1,35 on vesicles found in close proximity to ER exit sites and to cis-Golgi cisternae. Afadin DIL domain-interacting protein (ADIP) co-localizes with β-COP (COPP) at the Golgi complex in Madin Darby canine kidney and normal rat kidney cells. Non-Clathrin-coated vesicles mediate membrane traffic through the Golgi complex. COPB is a major component of the coat of non-Clathrin-coated vesicles.

**APPLICATIONS**

COPB (D-10) is recommended for detection of COPB 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 1:50-1:1500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:1500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

COPB (D-10) is also recommended for detection of COPB in additional species, including equine, canine, bovine, porcine and avian.


Molecular Weight of COPB: 110 kDa.

**SOURCE**

COPB (D-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 2-19 at the N-terminus of COPB of rat origin.

**PRODUCT**

Each vial contains 200 µg IgG_kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

COPB (D-10) is available conjugated to agarose (sc-393615 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393615 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393615 PE), fluorescein (sc-393615 FITC), Alexa Fluor® 488 (sc-393615 AF488), Alexa Fluor® 546 (sc-393615 AF546), Alexa Fluor® 594 (sc-393615 AF594) or Alexa Fluor® 647 (sc-393615 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393615 AF680) or Alexa Fluor® 790 (sc-393615 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-393615 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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