BACKGROUND

The Golgi complex plays an essential role in the post-translational modification and sorting of proteins transported from the endoplasmic reticulum (ER). The Golgi stack consists of a distinct cis face, or entry face, and a trans face, or exit face, which are connected via the cis, medial and trans Golgi networks. The networks are functionally distinct; different enzymes are contained within each compartment and impart different posttranslational modifications (glycosylation, sulfation, phosphorylation, acylation and proteolytic digestion) on proteins as they are transported through the organelle. The 130 kDa c-GMP (cis-Golgi membrane protein) localizes to both the cis and medial cisternae, whereas t-GMP (100 kDa) localizes to the trans-most cisternae and the trans-tubular network. Treatment with the fungal metabolite brefeldin A (BFA) induces both disassembly of the cis/middle- and trans-Golgi complex and also translocation of c-GMP and t-GMP to the ER. In the adult rat epididymis, t-GMP and c-GMP exhibit a reticular, perinuclear pattern in vitro expression pattern.

REFERENCES


SOURCE

c-GMP (8D8) is a mouse monoclonal antibody raised against integral membrane protein from liver fraction enriched in Golgi cisternae of rat 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.

c-GMP (8D8) is available conjugated to agarose (sc-21727 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-21727 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-21727 PE), fluorescein (sc-21727 FITC), Alexa Fluor® 488 (sc-21727 AF488), Alexa Fluor® 546 (sc-21727 AF546), Alexa Fluor® 594 (sc-21727 AF594) or Alexa Fluor® 647 (sc-21727 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-21727 AF680) or Alexa Fluor® 790 (sc-21727 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

c-GMP (8D8) is recommended for detection of c-GMP of mouse and rat 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of c-GMP: 130 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214 or 3611-RF whole cell lysate: sc-2215.

RECOMMENDED SUPPORT REAGENTS

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


DATA

212 K –
121 K –
96 K –
<
c-GMP

SELECT PRODUCT CITATIONS


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 website at www.scbt.com for detailed protocols and support products.