Glucosidase IIβ (N-15): sc-20280



The Power to Question

BACKGROUND

Trimming of glucoses from N-linked core glycans on newly synthesized glycoproteins occurs sequentially through the action of Glucosidases I and II in the endoplasmic reticulum (ER). Glucosidase II is an ER-localized enzyme that contains α and β subunits (Glucosidase II α and Glucosidase II β) which form a defined heterodimeric complex. Glucosidase IIa is the catalytic core of the enzyme and can function independently of the β subunit. The sequence of Glucosidase II β encodes protein rich in glutamic and aspartic acid with a putative ER retention signal (HDEL) at the C-terminus. The phosphorylated form of Glucosidase II β is localized in the plasma membrane and is highly expressed in FGF-stimulated fibroblasts and epidermal carcinoma cells. Glucosidase II β was first purified from a human carcinoma cell line as a potential substrate for protein kinase C. Through the HDEL signal at the C-terminus, Glucosidase II β retains the complete complex in the ER.

CHROMOSOMAL LOCATION

Genetic locus: PRKCSH (human) mapping to 19p13.2; Prkcsh (mouse) mapping to 9 A3.

SOURCE

Glucosidase II β (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Glucosidase II β of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-20280 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Glucosidase II β (N-15) is recommended for detection of the β subunit of Glucosidase II of mouse, rat 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Glucosidase II β (N-15) is also recommended for detection of the β subunit of Glucosidase II in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Glucosidase II β siRNA (h): sc-29598, Glucosidase II β siRNA (m): sc-29599, Glucosidase II β shRNA Plasmid (h): sc-29598-SH, Glucosidase II β shRNA Plasmid (m): sc-29599-SH, Glucosidase II β shRNA (h) Lentiviral Particles: sc-29598-V and Glucosidase II β shRNA (m) Lentiviral Particles: sc-29599-V.

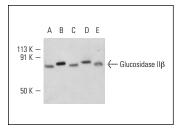
Molecular Weight of Glucosidase IIB: 80-90 kDa.

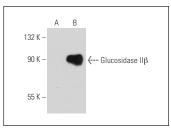
Positive Controls: NIH/3T3 whole cell lysate: sc-2210, U-87 MG cell lysate: sc-2411 or Glucosidase II β (m): 293T Lysate: sc-120511.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA





Glucosidase II β (N-15): sc-20280. Western blot analysis of Glucosidase II β expression in NIH/373 (A), U-87 MG (B), RAW 264.7 (C), A-431 (D) and 3611-RF (E) whole cell I vsates.

Glucosidase II β (N-15): sc-20280. Western blot analysis of Glucosidase II β expression in non-transfected: sc-117752 (\mathbf{A}) and mouse Glucosidase II β transfected: sc-120511 (\mathbf{B}) 293T 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 or our catalog for detailed protocols and support products.

MONOS Satisfation Guaranteed Try **Glucosidase II\beta (H-4): sc-374457** or **Glucosidase II\beta (D-1): sc-46685**, our highly recommended monoclonal alternatives to Glucosidase II β (N-15).

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