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## Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

## Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand


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SANTA CRUZ BIOTECHNOLOGY, INC.

# Glucosidase IIα (D-1): sc-518226

SANTA CRUZ BIOTECHNOLOGY

*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 IIα and Glucosidase IIβ). The α and β subunits form a defined heterodimeric complex. Glucosidase IIα is the catalyitc core of the enzyme and can function independently of the β subunit. The sequence of Glucosidase IIβ encodes protein rich in glutamic and aspartic acid with a putative ER retention signal (HDEL) at the C terminus. The phosphorylated form of Glucosidase IIβ is localized in the plasma membrane and is highly expressed in FGF stimulated fibroblasts and epidermal carcinoma cells. Glucosidase IIβ 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 IIβ retains the complete complex in the ER.

## REFERENCES


1. Shailubhai, K., et al. 1987. Purification and characterization of Glucosidase I involved in N-linked glycoprotein processing in bovine mammary gland. Biochem. J. 247: 555-562.
2. Saxena, S., et al. 1987. Purification and characterization of Glucosidase II involved in N-linked glycoprotein processing in bovine mammary gland. Biochem. J. 247: 563-570.
3. Trombetta, E.S., et al. 1996. Endoplasmic reticulum Glucosidase II is composed of a catalytic subunit, conserved from yeast to mammals, and a tightly bound noncatalytic HDEL-containing subunit. J. Biol. Chem. 271: 27509-27516.
4. Treml, K., et al. 2000. The α- and β-subunits are required for expression of catalytic activity in the hetero-dimeric Glucosidase II complex from human liver. Glycobiology 10: 493-502.


## CHROMOSOMAL LOCATION

Genetic locus: GANAB (human) mapping to 11q12.3; Ganab (mouse) mapping to 19 A.

## SOURCE

Glucosidase IIα (D-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 904-925 of Glucosidase IIα of human origin.

## PRODUCT

Each vial contains 200 µg $IgG_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Glucosidase IIα (D-1) is available conjugated to agarose (sc-518226 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-518226 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-518226 PE), fluorescein (sc-518226 FITC), Alexa Fluor® 488 (sc-518226 AF488), Alexa Fluor® 546 (sc-518226 AF546), Alexa Fluor® 594 (sc-518226 AF594) or Alexa Fluor® 647 (sc-518226 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-518226 AF680) or Alexa Fluor® 790 (sc-518226 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

Glucosidase IIα (D-1) is recommended for detection of Glucosidase IIα 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 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

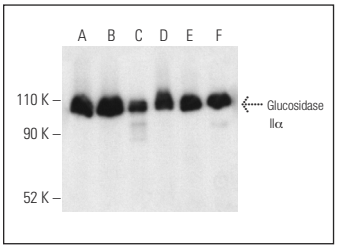
Suitable for use as control antibody for Glucosidase IIα siRNA (h): sc-41517, Glucosidase IIα siRNA (m): sc-41518, Glucosidase IIα shRNA Plasmid (h): sc-41517-SH, Glucosidase IIα shRNA Plasmid (m): sc-41518-SH, Glucosidase IIα shRNA (h) Lentiviral Particles: sc-41517-V and Glucosidase IIα shRNA (m) Lentiviral Particles: sc-41518-V.

Positive Controls: Hep G2 cell lysate: sc-2227, A-431 whole cell lysate: sc-2201 or Raji whole cell lysate: sc-364236.

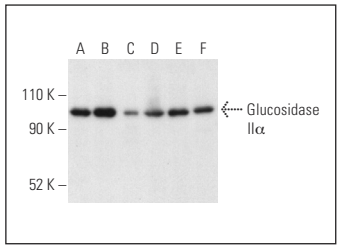
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA




Glucosidase IIα (D-1): sc-518226. Western blot analysis of Glucosidase IIα expression in Hep G2 (**A**), A-431 (**B**), HeLa (**C**), Raji (**D**), MOLT-4 (**E**) and NIH/3T3 (**F**) whole cell lysates. Detection reagent used: m-$IgG_1$ BP-HRP: sc-525408.




Glucosidase IIα (D-1): sc-518226. Western blot analysis of Glucosidase IIα expression in Hep G2 (**A**), A-431 (**B**), HeLa (**C**), Raji (**D**), MOLT-4 (**E**) and NIH/3T3 (F) whole cell lysates. Detection reagent used: m-$IgG_κ$ BP-HRP: sc-516102.

## 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.