SANTA CRUZ BIOTECHNOLOGY, INC.

GP73 (C-14): sc-48010



BACKGROUND

GP73 (also known as Golgi phosphoprotein 2, GOLPH 2 or Golgi membrane protein) is a widely expressed, epithelial-specific, type II transmembrane protein which resides in the Golgi apparatus, where it is responsible for the posttranslational modification of proteins produced in the rough ER while assisting in the transport of proteins through the Golgi. The human GP73 gene has been mapped within a BAC and localized to chromosome 9q21.33. GP73 levels rise in those who have been diagnosed with acute and chronic liver diseases.

REFERENCES

- Kladney, R.D., et al. 2000. GP73, a novel Golgi-localized protein upregulated by viral infection. Gene 249: 53-65.
- 2. Kladney, R.D., et al. 2002. Expression of GP73, a resident Golgi membrane protein, in viral and nonviral liver disease. Hepatology 35: 1431-1440.
- Kladney, R.D., et al. 2002. Upregulation of the Golgi protein GP73 by adenovirus infection requires the E1A CtBP interaction domain. Virology 301: 236-246.

CHROMOSOMAL LOCATION

Genetic locus: GOLPH2 (human) mapping to 9q21.33.

SOURCE

GP73 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of GP73 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-48010 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GP73 (C-14) is recommended for detection of GP73 of human 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

GP73 (C-14) is also recommended for detection of GP73 in additional species, including equine and bovine.

Suitable for use as control antibody for GP73 siRNA (h): sc-60711, GP73 shRNA Plasmid (h): sc-60711-SH and GP73 shRNA (h) Lentiviral Particles: sc-60711-V.

Molecular Weight of GP73: 73 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or SW480 cell lysate: sc-2219.

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. 4) Immuno-histochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA





GP73 (C-14): sc-48010. Western blot analysis of GP73 expression in HeLa $({\bf A})$ and SW480 $({\bf B})$ whole cell lysates.

GP73 (C-14): sc-48010. Immunofluorescence staining of methanol-fixed Hela cells showing Golgi apparatus localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human prostate tissue showing cytoplasmic staining of glandular cells (**B**).

STORAGE

Store at 4° C, **D0 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.