

# GP73 (N-19): sc-48014

## 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

1. 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.
3. 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.
4. Iftikhar, R., et al. 2004. Disease- and cell-specific expression of GP73 in human liver disease. *Am. J. Gastroenterol.* 99: 1087-1095.
5. Maitra, A. and Thuluvath, P.J. 2004. GP73 and liver disease: a (Golgi) complex enigma. *Am. J. Gastroenterol.* 99: 1096-1098.
6. Block, T.M., et al. 2005. Use of targeted glycoproteomics to identify serum glycoproteins that correlate with liver cancer in woodchucks and humans. *Proc. Natl. Acad. Sci. USA* 102: 779-784.
7. Marrero, J.A., et al. 2005. GP73, a resident Golgi glycoprotein, is a novel serum marker for hepatocellular carcinoma. *J. Hepatol.* 43: 1007-1012.
8. Tsuji, A.B., et al. 2005. Fine mapping of radiation susceptibility and gene expression analysis of LEC congenic rat lines. *Genomics* 86: 271-279.

## CHROMOSOMAL LOCATION

Genetic locus: GOLPH2 (human) mapping to 9q21.33; Golph2 (mouse) mapping to 13 B2.

## SOURCE

GP73 (N-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of GP73 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-48014 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

GP73 (N-19) is recommended for detection of GP73 of mouse and, to a lesser extent, 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

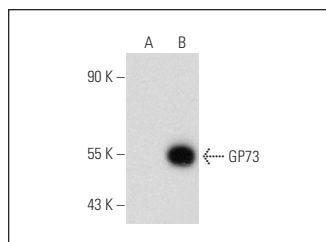
GP73 (N-19) is also recommended for detection of GP73 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for GP73 siRNA (h): sc-60711, GP73 siRNA (m): sc-60712, GP73 shRNA Plasmid (h): sc-60711-SH, GP73 shRNA Plasmid (m): sc-60712-SH, GP73 shRNA (h) Lentiviral Particles: sc-60711-V and GP73 shRNA (m) Lentiviral Particles: sc-60712-V.

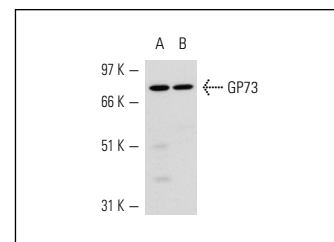
Molecular Weight of GP73: 73 kDa.

Positive Controls: GP73 (m): 293T Lysate: sc-120573, c4 whole cell lysate: sc-364186 or mouse prostate extract: sc-364249.

## DATA



GP73 (N-19): sc-48014. Western blot analysis of GP73 expression in non-transfected: sc-117752 (A) and mouse GP73 transfected: sc-120573 (B) 293T whole cell lysates.



GP73 (N-19): sc-48014. Western blot analysis of GP73 expression in c4 whole cell lysate (A) and mouse prostate tissue extract (B).

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **GP73 (E-7): sc-393935** or **GP73 (F-2): sc-365817**, our highly recommended monoclonal alternatives to GP73 (N-19). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **GP73 (E-7): sc-393935**.