

GPBP (S-23): sc-133633

BACKGROUND

GPBP, also known as COL4A3BP (collagen, type IV, $\alpha 3$ (Goodpasture antigen) binding protein), CERT or STARD11, is a 624 amino acid protein that localizes to the cytoplasm, as well as to the Golgi apparatus and the endoplasmic reticulum, and contains one PH domain and one START domain. Expressed in a variety of tissues, GPBP interacts with COL4A3 and is thought to mediate the intracellular trafficking of ceramides (lipid molecules composed of a sphingosine and a fatty acid), possibly regulating lipid function throughout the cell. In addition, GPBP acts as a kinase that is able to phosphorylate the N-terminal region of COL4A3, an event which may play a role in the development of Goodpasture disease, a rare syndrome that can lead to severe kidney and lung damage. Two isoforms of GPBP exist due to alternative splicing events.

REFERENCES

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STORAGE

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

CHROMOSOMAL LOCATION

Genetic locus: COL4A3BP (human) mapping to 5q13.3.

SOURCE

GPBP (S-23) is an affinity purified rabbit polyclonal antibody raised against synthetic GPBP peptide of human origin.

PRODUCT

Each vial contains 50 μ g IgG in 500 μ l PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

GPBP (S-23) is recommended for detection of GPBP of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for GPBP siRNA (h): sc-62395, GPBP shRNA Plasmid (h): sc-62395-SH and GPBP shRNA (h) Lentiviral Particles: sc-62395-V.

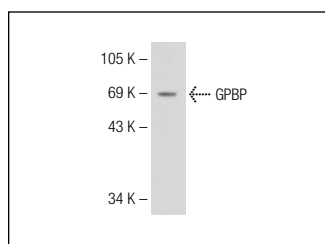
Molecular Weight of GPBP isoforms: 71/68 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

DATA



GPBP (S-23): sc-133633. Western blot analysis of GPBP expression in HeLa whole cell lysate.

RESEARCH USE

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