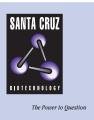
## SANTA CRUZ BIOTECHNOLOGY, INC.

# MBPH (A-12): sc-109316



### BACKGROUND

MBPH, also known as PRG3 (proteoglycan 3), is a 225 amino acid protein that contains one C-type lectin domain and localizes to cytoplasmic granules. Expressed in bone marrow, MBPH functions to stimulate neutrophil superoxide production and IL-8 release, possibly playing a role in cytotoxic and cytostimulatory activities within the cell. The gene encoding MBPH maps to human chromosome 11, which comprises approximately 4% of human genomic DNA and is considered a gene and disease association dense chromosome. The chromosome 11 encoded Atm gene is important for regulation of cell cycle arrest and apoptosis following double strand DNA breaks. Atm mutation leads to the disorder known as ataxia-telangiectasia. The blood disorders Sickle cell anemia and thalassemia are caused by HBB gene mutations, while Wilms' tumors, WAGR syndrome and Denys-Drash syndrome are associated with mutations of the WT1 gene. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are also associated with defects in chromosome 11-encoded genes.

## REFERENCES

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#### **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.

#### CHROMOSOMAL LOCATION

Genetic locus: Prg3 (mouse) mapping to 2 D.

#### SOURCE

MBPH (A-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MBPH of mouse origin.

#### PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-109316 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

MBPH (A-12) is recommended for detection of MBPH of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 MBPH siRNA (m): sc-149311, MBPH shRNA Plasmid (m): sc-149311-SH and MBPH shRNA (m) Lentiviral Particles: sc-149311-V.

Molecular Weight of pre-pro form MBPH: 25 kDa.

Molecular Weight of active peptide MBPH: 14 kDa.

## **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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluo-rescence: 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<sup>™</sup> Mounting Medium: sc-24941.

#### **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.