

# MIBP (M-15): sc-240683

## BACKGROUND

MIBP (muscle integrin-binding protein), also known as NRK 2 (nicotinamide riboside kinase 2), integrin  $\beta$ -1-binding protein 3 or RNK 2 (ribosylnicotinamide kinase 2), is a 230 amino acid protein that belongs to the uridine kinase family and NRK subfamily. Highly expressed in skeletal muscle, MIBP is found at lower levels in heart and is downregulated during myoblast differentiation. MIBP catalyzes the phosphorylation of nicotinic acid riboside and nicotinamide riboside to form nicotinic acid mononucleotide and nicotinamide mononucleotide. Existing as a monomer, MIBP forms two alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 19p13.3.

## REFERENCES

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3. Battle, M.A., Maher, V.M. and McCormick, J.J. 2003. ST7 is a novel low-density lipoprotein receptor-related protein (LRP) with a cytoplasmic tail that interacts with proteins related to signal transduction pathways. *Biochemistry* 42: 7270-7282.
4. Li, J., Rao, H., Burkin, D., Kaufman, S.J. and Wu, C. 2003. The muscle integrin binding protein (MIBP) interacts with  $\alpha$ 7 $\beta$ 1 integrin and regulates cell adhesion and laminin matrix deposition. *Dev. Biol.* 261: 209-219.
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## CHROMOSOMAL LOCATION

Genetic locus: Itgb1bp3 (mouse) mapping to 10 C1.

## SOURCE

MIBP (M-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of MIBP 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-240683 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

MIBP (M-15) is recommended for detection of MIBP 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).

MIBP (M-15) is also recommended for detection of MIBP in additional species, including bovine.

Suitable for use as control antibody for MIBP siRNA (m): sc-149420, MIBP shRNA Plasmid (m): sc-149420-SH and MIBP shRNA (m) Lentiviral Particles: sc-149420-V.

Molecular Weight of MIBP isoforms: 26/21 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) 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<sup>™</sup> Mounting Medium: sc-24941.

## STORAGE

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

## PROTOCOLS

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