



## EMBP (S-20): sc-18241

### BACKGROUND

MBP (PRG2, proteoglycan 2, BMPG, bone marrow natural killer cell activator, eosinophil granule major basic protein) is a constituent of the crystalline core of the eosinophil granule. High levels of the pro-MBP are present in placenta and pregnancy serum, where it exists as a complex with several other proteins including pregnancy-associated plasma protein A (PAPPA), angiotensinogen (AGT), and C3dg. MBP may influence antiparasitic defense mechanisms as a cytotoxin and helminthotoxin, and in immune hypersensitivity reactions. MBP stimulates a Src kinase-dependent activation of class II(A) phosphoinositide 3-kinase and, in turn, activation of protein kinase C zeta in neutrophils. MBP transcription is under regulation by novel combinatorial interactions of GATA-1, PU.1, and C/EBPepsilon isoforms.

### REFERENCES

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- Shenoy, N.G., et al. 2003. Eosinophil major basic protein stimulates neutrophil superoxide production by a class IA phosphoinositide 3-kinase and protein kinase C-zeta-dependent pathway. *J. Immunol.* 171: 3734-3741.

### CHROMOSOMAL LOCATION

Genetic locus: EMBP (human) mapping to 18q23; EMbp (mouse) mapping to 2 D.

### SOURCE

EMBP (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of EMBP of mouse 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-18241 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

EMBP (S-20) is recommended for detection of EMBP 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 EMBP siRNA (m): sc-42905.

Molecular Weight of MBP: 25/14 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™ 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) 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.

### STORAGE

Store at 4° C, **\*\*DO 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](http://www.scbt.com) or our catalog for detailed protocols and support products.