

# EMBP (A-19): sc-34012

## BACKGROUND

The eosinophil major basic protein (EMBP), also designated MBP, PRG2, proteoglycan 2, BMPG, or bone marrow natural killer cell activator, is a constituent of the crystalline core of the eosinophil granule. High levels of the pro-EMBP 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. EMBP may influence antiparasitic defense mechanisms as a cytotoxin and helminthotoxin, and may play a role in immune hypersensitivity reactions. EMBP stimulates an Src kinase-dependent activation of class I (A) phosphoinositide 3-kinase and, in turn, activation of protein kinase C  $\zeta$  in neutrophils. EMBP transcription is under regulation by novel combinatorial interactions of GATA-1, PU.1, and C/EBP $\epsilon$  isoforms.

## CHROMOSOMAL LOCATION

Genetic locus: PRG2 (human) mapping to 11q12.1; Prg2 (mouse) mapping to 2 D.

## SOURCE

EMBP (A-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of EMBP of human 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-34012 P, (100  $\mu$ g 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

EMBP (A-19) is recommended for detection of EMBP of human and, to a lesser extent, mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 (h): sc-44577, EMBP siRNA (h): sc-44577, EMBP shRNA Plasmid (h): sc-44577-SH, EMBP shRNA Plasmid (h): sc-44577-SH, EMBP shRNA (h) Lentiviral Particles: sc-44577-V and EMBP shRNA (h) Lentiviral Particles: sc-44577-V. Molecular Weight of precursor EMBP: 25 kDa.

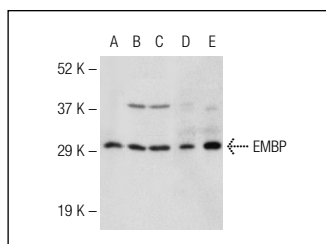
Molecular Weight of mature EMBP: 14 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209, K-562 whole cell lysate: sc-2203 or HEL 92.1.7 cell lysate: sc-2270.

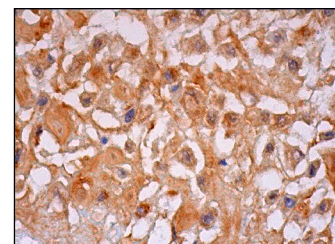
## RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



EMBP (A-19): sc-34012. Western blot analysis of EMBP expression in HL-60 (A), JAR (B), JEG-3 (C), K-562 (D) and HEL 92.1.7 (E) whole cell lysates.



EMBP (A-19): sc-34012. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic and membrane staining of decidual cells.

## 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.


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Try **EMBP (F-6): sc-365701** or **EMBP (F-2): sc-365702**, our highly recommended monoclonal alternatives to EMBP (A-19).