



# GMEB-1 (S-15): sc-104276

## BACKGROUND

GMEB-1 (glucocorticoid modulatory element-binding protein-1), also known as PIF p96 (parvovirus initiation factor p96), is a 573 amino acid protein that contains one SAND domain and is a member of the KDWK family of combinatorial transcription modulators. Localized to both the cytoplasm and the nucleus, GMEB-1 forms a heterodimer with GMEB-2 (glucocorticoid modulatory element-binding protein-2) and, once associated with GMEB-2, plays a key role in parvovirus DNA replication. In addition, GMEB-1 functions alone as a *trans*-acting factor that, by binding to glucocorticoid modulatory elements (GMEs) in TAT (tyrosine aminotransferase) promoters, increases intracellular sensitivity to glucocorticoid concentrations. GMEB-1 also interacts with initiator procaspases and, via this interaction, can inhibit caspase-induced apoptosis. Due to alternative splicing events, GMEB-1 is expressed as two isoforms.

## REFERENCES

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- Surdo, P.L., et al. 2003. Crystal structure and nuclear magnetic resonance analyses of the SAND domain from glucocorticoid modulatory element binding protein-1 reveals deoxyribonucleic acid and zinc binding regions. *Mol. Endocrinol.* 17: 1283-1295.
- Tsuruma, K., et al. 2004. Regulation of procaspase-2 by glucocorticoid modulatory element-binding protein 1 through the interaction with caspase recruitment domain. *Biochem. Biophys. Res. Commun.* 325: 1246-1251.

## CHROMOSOMAL LOCATION

Genetic locus: GMEB1 (human) mapping to 1p35.3; Gmeb1 (mouse) mapping to 4 D3.

## RESEARCH USE

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

## SOURCE

GMEB-1 (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GMEB-1 of human 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-104276 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-104276 X, 200 µg/0.1 ml.

## APPLICATIONS

GMEB-1 (S-15) is recommended for detection of GMEB-1 of mouse, rat and human 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 GMEB-1 siRNA (h): sc-88666, GMEB-1 siRNA (m): sc-105402, GMEB-1 shRNA Plasmid (h): sc-88666-SH, GMEB-1 shRNA Plasmid (m): sc-105402-SH, GMEB-1 shRNA (h) Lentiviral Particles: sc-88666-V and GMEB-1 shRNA (m) Lentiviral Particles: sc-105402-V.

GMEB-1 (S-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of GMEB-1: 85 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or HS 181. Tes whole cell lysate.

## 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.

## PROTOCOLS

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