

GABP- β 1/2 (H-265): sc-28684

BACKGROUND

The transcription factor GA-binding protein (GABP) is composed of two subunits, the Ets-related GABP- α and a GABP- α -associated subunit, GABP- β . GABP- α binds to a specific DNA sequence and GABP- β exists as β 1 and β 2 splice variants that differ in their C-termini. In primary neuronal cultures, GABP- β is expressed in both the cytoplasm and the nucleus, whereas GABP- α is expressed mainly in the nucleus. GABP is constitutively expressed as either a GABP- $\alpha\beta$ heterodimer or a GABP- $\alpha\beta$ heterotetramer, both of which can modify GABP-dependent transcription *in vitro* and *in vivo*. The GABP- $\alpha\beta$ tetrameric complex performs many different functions, such as stimulating transcription of the adenovirus E4 gene, differentially activating BRCA1 expression in human breast cell lines, potentiating Tat-mediated activation of long terminal repeat promoter transcription and viral replication in certain cell types, acting as a coordinator of mitochondrial and nuclear transcription for cytochrome oxidase in neurons and assisting in the regulation of rpl32 gene transcription.

CHROMOSOMAL LOCATION

Genetic locus: GABPB1 (human) mapping to 15q21.2, GABPB2 (human) mapping to 1q21.3; Gabpb1 (mouse) mapping to 2 F1, Gabpb2 (mouse) mapping to 3 F2.1.

SOURCE

GABP- β 1/2 (H-265) is a rabbit polyclonal antibody raised against amino acids 131-383 mapping at the C-terminus of GABP- β 1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-28684 X, 200 μ g/0.1 ml.

APPLICATIONS

GABP- β 1/2 (H-265) is recommended for detection of GABP- β 1 and GABP- β 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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).

GABP- β 1/2 (H-265) is also recommended for detection of GABP- β 1 and GABP- β 2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for GABP- β 1/2 siRNA (h): sc-37903, GABP- β 1/2 siRNA (m): sc-37904, GABP- β 1/2 shRNA Plasmid (h): sc-37903-SH, GABP- β 1/2 shRNA Plasmid (m): sc-37904-SH, GABP- β 1/2 shRNA (h) Lentiviral Particles: sc-37903-V and GABP- β 1/2 shRNA (m) Lentiviral Particles: sc-37904-V.

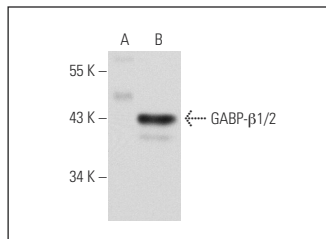
GABP- 1/2 (H-265) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of GABP- β 1/2: 42 kDa.

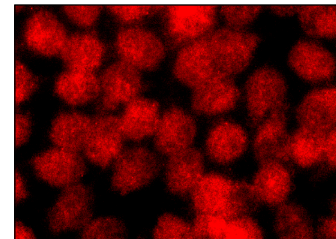
STORAGE

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

DATA



GABP- β 1/2 (H-265): sc-28684. Western blot analysis of GABP- β 1/2 expression in non-transfected: sc-117752 (A) and human GABP- β 1/2 transfected: sc-113433 (B) 293T whole cell lysates.



GABP- β 1/2 (H-265): sc-28684. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

SELECT PRODUCT CITATIONS

1. Thompson, C., et al. 2011. Decreased expression of BRCA1 in SK-BR-3 cells is the result of aberrant activation of the GABP β promoter by an NRF-1-containing complex. *Mol. Cancer* 10: 62.
2. Ritter, H.D., et al. 2012. The unliganded glucocorticoid receptor positively regulates the tumor suppressor gene BRCA1 through GABP β . *Mol. Cancer Res.* 10: 558-569.
3. Bremer, K., et al. 2012. Transcriptional regulation of temperature-induced remodeling of muscle bioenergetics in goldfish. *Am. J. Physiol. Regul. Integr. Comp. Physiol.* 303: R150-R158.
4. Manukjan, G., et al. 2015. Expression of the ETS transcription factor GABP α is positively correlated to the Bcr-Abl1/Abi1 ratio in CML patients and affects imatinib sensitivity *in vitro*. *Exp. Hematol.* 43: 880-890.
5. Ripperger, T., et al. 2015. The heteromeric transcription factor GABP activates the ITGAM/CD11b promoter and induces myeloid differentiation. *Biochim. Biophys. Acta* 1849: 1145-1154.

RESEARCH USE

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

PROTOCOLS

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



Try **GABP- β 1/2 (E-7): sc-271571** or **GABP- β 1/2 (E-1): sc-271531**, our highly recommended monoclonal alternatives to GABP- β 1/2 (H-265).