

GABP- α (K-17): sc-13441

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 $\beta 1$ and $\beta 2$ 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.

REFERENCES

1. Suzuki, F., et al. 1998. Functional interactions of transcription factor human GA-binding protein subunits. *J. Biol. Chem.* 273: 29302-29308.
2. Sawada, J., et al. 1999. Synergistic transcriptional activation by hGABP and select members of the activation transcription factor/cAMP response element-binding protein family. *J. Biol. Chem.* 274: 35475-35482.
3. Verhoef, K., et al. 1999. Evolution of the human immunodeficiency virus type 1 long terminal repeat promoter by conversion of an NF κ B enhancer element into a GABP binding site. *J. Virol.* 73: 1331-1340.

CHROMOSOMAL LOCATION

Genetic locus: GABPA (human) mapping to 21q21.3; Gabpa (mouse) mapping to 16 C3.3.

SOURCE

GABP- α (K-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of GABP- α 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.

Blocking peptide available for competition studies, sc-13441 P, (100 μ g 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-13441 X, 200 μ g/0.1 ml.

STORAGE

Store at 4 $^{\circ}$ 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.

APPLICATIONS

GABP- α (K-17) is recommended for detection of GABP- α 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), 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).

GABP- α (K-17) is also recommended for detection of GABP- α in additional species, including equine, canine, bovine and avian.

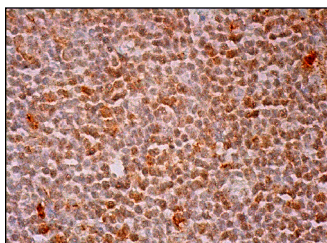
Suitable for use as control antibody for GABP- α siRNA (h): sc-37100, GABP- α siRNA (m): sc-37101, GABP- α shRNA Plasmid (h): sc-37100-SH, GABP- α shRNA Plasmid (m): sc-37101-SH, GABP- α shRNA (h) Lentiviral Particles: sc-37100-V and GABP- α shRNA (m) Lentiviral Particles: sc-37101-V.

GABP- α (K-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of GABP- α : 60 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, MCF7 nuclear extract: sc-2149 or SKBR-3 nuclear extract: sc-2134.

DATA



GABP- α (K-17): sc-13441. Immunoperoxidase staining of formalin fixed, paraffin-embedded human tonsil tissue showing nuclear staining of cells in germinal centers and cells in non-germinal centers.

PROTOCOLS

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



Try **GABP- α (G-1): sc-28312** or **GABP- α (H-2): sc-28311**, our highly recommended monoclonal alternatives to GABP- α (K-17).