SANTA CRUZ BIOTECHNOLOGY, INC.

HMG-20A (C-13): sc-79517



BACKGROUND

High mobility group (HMG) proteins 1 and 2 are ubiquitous non-histone components of chromatin. The binding of HMG proteins to the minor groove of ATrich DNA sequences induces alterations in the DNA architecture, including DNA bending and unwinding of the helix. While HMG proteins do not stimulate initiation of transcription, they do enhance the binding of other transcription factors, such as Oct-2, members of the NF κ B family, ATF-2 and c-Jun, to activate transcription. HMG-20A (high-mobility group 20A), also known as HMGX1 or HMGXB1, is a 347 amino acid protein that localizes to the nucleus and contains one HMG box DNA-binding domain. Expressed ubiquitously, HMG-20A functions as an inhibitor of BRAF35 and, via its association with DNA, plays a role in neuronal differentiation and may also mediate the methylation of Histone H3. Multiple isoforms of HMG-20A exist due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HMG20A (human) mapping to 15q24.3; Hmg20a (mouse) mapping to 9 B.

SOURCE

HMG-20A (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of HMG20A of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-79517 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-79517 X, 200 $\mu g/0.1$ ml.

APPLICATIONS

HMG-20A (C-13) is recommended for detection of HMG20A 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 HMG-20A siRNA (h): sc-75267, HMG-20A siRNA (m): sc-75268, HMG-20A shRNA Plasmid (h): sc-75267-SH, HMG-20A shRNA Plasmid (m): sc-75268-SH, HMG-20A shRNA (h) Lentiviral Particles: sc-75267-V and HMG-20A shRNA (m) Lentiviral Particles: sc-75268-V.

HMG-20A (C-13) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of (predicted) HMG-20A: 40 kDa.

Molecular Weight of (observed) HMG-20A: 57 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) Immunofluo-rescence: 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.

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.