

HMGN3 (P-12): sc-138956

BACKGROUND

HMGN3 (high mobility group nucleosome-binding domain-containing protein 3), also known as TRIP7 (thyroid receptor-interacting protein 7), is a 99 amino acid member of the HMGN protein family. Localized to the nucleus, HMGN3 is believed to enhance transcription from chromatin templates by reducing the compactness of the chromatin fibers in the nucleosomes. HMGN3 also interacts with the ligand binding domain of the thyroid receptor. HMGN3 is induced by estrogen, and is abundantly expressed in skeletal muscle, kidney and heart with lower levels found in liver, pancreas and lung. HMGN3 is expressed as two isoforms produced by alternative splicing events.

REFERENCES

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- West, K.L., et al. 2001. HMGN3a and HMGN3b, two protein isoforms with a tissue-specific expression pattern, expand the cellular repertoire of nucleosome-binding proteins. *J. Biol. Chem.* 276: 25959-25969.
- Leong, P.W., et al. 2002. Differential display RT-PCR analysis of enterovirus-71-infected rhabdomyosarcoma cells reveals mRNA expression responses of multiple human genes with known and novel functions. *Virology* 295: 147-159.
- Wu, C., et al. 2007. Systematic identification of SH3 domain-mediated human protein-protein interactions by peptide array target screening. *Proteomics* 7: 1775-1785.
- Lukey, M.M., et al. 2008. Differential expression of the HMGN family of chromatin proteins during ocular development. *Gene Expr. Patterns* 8: 433-437.
- Cherukuri, S., et al. 2008. Cell cycle-dependent binding of HMGN proteins to chromatin. *Mol. Biol. Cell* 19: 1816-1824.

CHROMOSOMAL LOCATION

Genetic locus: HMGN3 (human) mapping to 6q14.1; Hmgn3 (mouse) mapping to 9 E2.

SOURCE

HMGN3 (P-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of HMGN3 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-138956 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-138956 X, 200 µg/0.1 ml.

APPLICATIONS

HMGN3 (P-12) is recommended for detection of HMGN3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with HMGN4.

Suitable for use as control antibody for HMGN3 siRNA (h): sc-95436, HMGN3 siRNA (m): sc-146053, HMGN3 shRNA Plasmid (h): sc-95436-SH, HMGN3 shRNA Plasmid (m): sc-146053-SH, HMGN3 shRNA (h) Lentiviral Particles: sc-95436-V and HMGN3 shRNA (m) Lentiviral Particles: sc-146053-V.

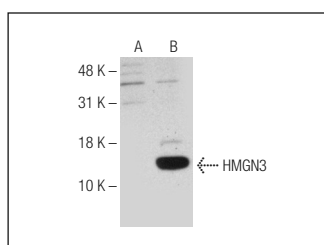
HMGN3 (P-12) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Positive Controls: HMGN3 (h): 293T Lysate: sc-111227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



HMGN3 (P-12): sc-138956. Western blot analysis of HMGN3 expression in non-transfected: sc-117752 (A) and human HMGN3 transfected: sc-111227 (B) 293T whole cell lysates.

STORAGE

Store at 4° 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.