

HBO1 (H-180): sc-25379

BACKGROUND

In the cell, transcription is regulated in part by the histone modification of chromatin. Specifically, histone acetyltransferase proteins and their associated complexes function with co-activators to regulate transcription. One family of histone acetyltransferases is the MYST family of transcriptional silencers, which is linked to ORC (origin recognition complex) function. The ORC is an initiator protein for DNA replication and mediates the acetylation of chromatin to control both DNA replication and gene expression. HBO1 (histone acetyltransferase binding to ORC) is a MYST family protein that interacts with ORC1, the largest subunit of the human ORC complex. HBO1 is a nuclear protein that is highly expressed in human testis. In addition to binding ORC, HBO1 represses AR (androgen receptor)-mediated transcription by binding AR through its N-terminal transcriptional repression domain. HBO1 may play a role in regulating AR-dependent gene transcription in normal and prostate cancer cells.

CHROMOSOMAL LOCATION

Genetic locus: KAT7 (human) mapping to 17q21.33; Myst2 (mouse) mapping to 11 D.

SOURCE

HBO1 (H-180) is a rabbit polyclonal antibody raised against amino acids 1-180 of HBO1 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.

STORAGE

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

APPLICATIONS

HBO1 (H-180) is recommended for detection of HBO1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

HBO1 (H-180) is also recommended for detection of HBO1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for HBO1 siRNA (h): sc-35530, HBO1 siRNA (m): sc-35531, HBO1 shRNA Plasmid (h): sc-35530-SH, HBO1 shRNA Plasmid (m): sc-35531-SH, HBO1 shRNA (h) Lentiviral Particles: sc-35530-V and HBO1 shRNA (m) Lentiviral Particles: sc-35531-V.

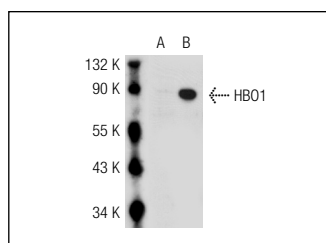
Molecular Weight of HBO1: 83 kDa.

Positive Controls: HBO1 (m): 293T Lysate: sc-125432, HBO1 (h): 293T Lysate: sc-115259 or HeLa whole cell lysate: sc-2200.

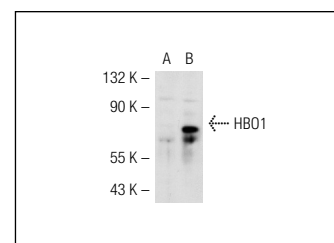
RECOMMENDED SECONDARY REAGENTS

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



HBO1 (H-180): sc-25379. Western blot analysis of HBO1 expression in non-transfected: sc-117752 (A) and human HBO1 transfected: sc-115259 (B) 293T whole cell lysates.



HBO1 (H-180): sc-25379. Western blot analysis of HBO1 expression in non-transfected: sc-117752 (A) and mouse HBO1 transfected: sc-125432 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Lu, Y.C., et al. 2012. Small-conductance calcium-activated K⁺ channels 3 (SK3) regulate blastocyst hatching by control of intracellular calcium concentration. *Hum. Reprod.* 27: 1421-1430.
- Neri, F., et al. 2012. Myc regulates the transcription of the PRC2 gene to control the expression of developmental genes in embryonic stem cells. *Mol. Cell. Biol.* 32: 840-851.

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 **HBO1 (G-2): sc-398346**, our highly recommended monoclonal alternative to HBO1 (H-180).