SANTA CRUZ BIOTECHNOLOGY, INC.

# GLTSCR1 (H-10): sc-515086

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

GLTSCR1 (glioma tumor suppressor candidate region gene 1 protein) is a 1,560 amino acid protein. A polymorphism within the GLTSCR1 gene has been associated with prostate carcinoma aggressiveness. GLTSCR1 is ex-pressed at moderate levels in heart, brain, placenta, skeletal muscle and pancreas, with lower levels in lung, liver and kidney. GLTSCR1 is highly conserved among humans, chimps, mice and rats. GLTSCR1 exists as two alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 19q13.33. Chromosome 19 consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin (Ig) superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG families and Fc receptors (FcRs).

## CHROMOSOMAL LOCATION

Genetic locus: GLTSCR1 (human) mapping to 19q13.33; Gltscr1 (mouse) mapping to 7 A2.

## SOURCE

GLTSCR1 (H-10) is a mouse monoclonal antibody raised against amino acids 506-574 mapping within an internal region of GLTSCR1 of human origin.

## PRODUCT

Each vial contains 200 µg $IgG_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

GLTSCR1 (H-10) is available conjugated to agarose (sc-515086 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515086 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515086 PE), fluorescein (sc-515086 FITC), Alexa Fluor® 488 (sc-515086 AF488), Alexa Fluor® 546 (sc-515086 AF546), Alexa Fluor® 594 (sc-515086 AF594) or Alexa Fluor® 647 (sc-515086 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515086 AF680) or Alexa Fluor® 790 (sc-515086 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## APPLICATIONS

GLTSCR1 (H-10) is recommended for detection of GLTSCR1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for GLTSCR1 siRNA (h): sc-97514, GLTSCR1 siRNA (m): sc-145443, GLTSCR1 shRNA Plasmid (h): sc-97514-SH, GLTSCR1 shRNA Plasmid (m): sc-145443-SH, GLTSCR1 shRNA (h) Lentiviral Particles: sc-97514-V and GLTSCR1 shRNA (m) Lentiviral Particles: sc-145443-V.

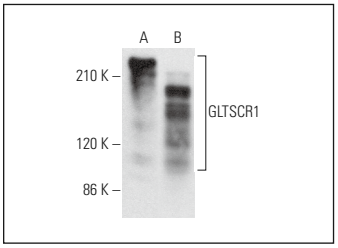
Molecular Weight of GLTSCR1 isoforms 1/2: 158/134 kDa.

Positive Controls: MDA-MB-435S whole cell lysate: sc-364184, human ovary extract: sc-363769 or BYDP whole cell lysate: sc-364368.

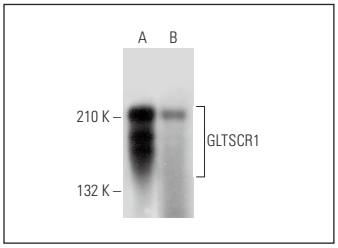
## STORAGE

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

## DATA




GLTSCR1 (H-10): sc-515086. Western blot analysis of GLTSCR1 expression in MDA-MB-435S (**A**) and BYDP (**B**) whole cell lysates.




GLTSCR1 (H-10): 515086. Western blot analysis of GLTSCR1 expression in MDA-MB-435S whole cell lysate (**A**) and human ovary tissue extract (**B**).

## SELECT PRODUCT CITATIONS


1. Mashtalir, N., et al. 2018. Modular organization and assembly of SWI/SNF family chromatin remodeling complexes. Cell 175: 1272-1288.e20.
2. Gatchalian, J., et al. 2018. A non-canonical BRD9-containing BAF chromatin remodeling complex regulates naive pluripotency in mouse embryonic stem cells. Nat. Commun. 9: 5139.
3. Alpsoy, A. and Dykhuizen, E.C. 2018. Glioma tumor suppressor candidate region gene 1 (GLTSCR1) and its paralog GLTSCR1-like form SWI/SNF chromatin remodeling subcomplexes. J. Biol. Chem. 293: 3892-3903.
4. Wang, X., et al. 2019. BRD9 defines a SWI/SNF sub-complex and constitutes a specific vulnerability in malignant rhabdoid tumors. Nat. Commun. 10: 1881.
5. Inoue, D., et al. 2019. Spliceosomal disruption of the non-canonical BAF complex in cancer. Nature 574: 432-436.
6. Park, D.E., et al. 2020. Merkel cell polyomavirus activates LSD1-mediated blockade of non-canonical BAF to regulate transformation and tumorigenesis. Nat. Cell Biol. 22: 603-615.
7. Börold, J., et al. 2021. BRD9 is a druggable component of interferon-stimulated gene expression and antiviral activity. EMBO Rep. 22: e52823.
8. Carcamo, S., et al. 2022. Altered BAF occupancy and transcription factor dynamics in PBAF-deficient melanoma. Cell Rep. 39: 110637.


## RESEARCH USE

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

## PROTOCOLS

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