SANTA CRUZ BIOTECHNOLOGY, INC.

CWC22 (A-6): sc-398178

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Spliceosomes are multi-protein complexes that are composed of snRNPs (small nuclear ribonucleoproteins) and a variety of associated protein factors, all of which work in concert to regulate the splicing of pre-mRNA, a critical step in the post-transcriptional regulation of gene expression. CWC22 (CWC22 spliceosome-associated protein), also known as NCM, fSAPb or EIF4GL, is a 908 amino acid nuclear protein and component of the spliceosome C complex. CWC22 is associated with the spliceosome prior to catalytic steps and remains associated throughout the reaction. Belonging to the CWC22 family, CW22 contains one MI domain and a MIF4G domain. The gene encoding CWC22 maps to human chromosome 2q31.3. As the second largest human chromosome, chromosome 2 makes up approximately 8% of the human genome and contains 237 million bases encoding over 1,400 genes.

CHROMOSOMAL LOCATION

Genetic locus: CWC22 (human) mapping to 2q31.3; Cwc22 (mouse) mapping to 2 C3.

SOURCE

CWC22 (A-6) is a mouse monoclonal antibody raised against amino acids 121-420 mapping within an internal region of CWC22 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.

CWC22 (A-6) is available conjugated to agarose (sc-398178 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-398178 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398178 PE), fluorescein (sc-398178 FITC), Alexa Fluor® 488 (sc-398178 AF488), Alexa Fluor® 546 (sc-398178 AF546), Alexa Fluor® 594 (sc-398178 AF594) or Alexa Fluor® 647 (sc-398178 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398178 AF680) or Alexa Fluor® 790 (sc-398178 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

APPLICATIONS

CWC22 (A-6) is recommended for detection of CWC22 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), 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).

CWC22 (A-6) is also recommended for detection of CWC22 in additional species, including canine.

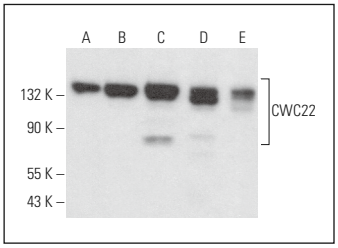
Suitable for use as control antibody for CWC22 siRNA (h): sc-94265, CWC22 siRNA (m): sc-141492, CWC22 shRNA Plasmid (h): sc-94265-SH, CWC22 shRNA Plasmid (m): sc-141492-SH, CWC22 shRNA (h) Lentiviral Particles: sc-94265-V and CWC22 shRNA (m) Lentiviral Particles: sc-141492-V.

Molecular Weight of CWC22: 105 kDa.

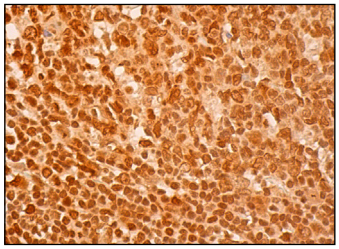
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



CWC22 (A-6): sc-398178. Western blot analysis of CWC22 expression in HeLa (**A**), IMR-32 (**B**), HL-60 (**C**), M1 (**D**) and BYDP (**E**) whole cell lysates.



CWC22 (A-6): sc-398178. Immunoperoxidase staining of formalin fixed, paraffin-embedded human tonsil tissue showing nuclear staining of cells in germinal center and cells in non-germinal center. Blocked with 0.25X UltraCruz® Blocking Reagent: sc-516214. Detected with m-IgGκ BP-B: sc-516142 and ImmunoCruz® ABC Kit: sc-516216.

SELECT PRODUCT CITATIONS

1. Wei, T., et al. 2021. Phosphorylation-regulated HMGA1a-P53 interaction unveils the function of HMGA1a acidic tail phosphorylations via synthetic proteins. Cell Chem. Biol. 28: 722-732.e8.
2. Yano, K., et al. 2021. PRPF19 regulates p53-dependent cellular senescence by modulating alternative splicing of MDM4 mRNA. J. Biol. Chem. 297: 100882.

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.

PROTOCOLS

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