

# CWC22 (K-20): sc-242525

## 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 posttranscriptional 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.

## REFERENCES

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2. Lindsey, L.A. and Garcia-Blanco, M.A. 1998. Functional conservation of the human homolog of the yeast pre-mRNA splicing factor Prp17p. *J. Biol. Chem.* 273: 32771-32775.
3. Ben-Yehuda, S., Dix, I., Russell, C.S., McGarvey, M., Beggs, J.D. and Kupiec, M. 2000. Genetic and physical interactions between factors involved in both cell cycle progression and pre-mRNA splicing in *Saccharomyces cerevisiae*. *Genetics* 156: 1503-1517.
4. Zhou, Z., Licklider, L.J., Gygi, S.P. and Reed, R. 2002. Comprehensive proteomic analysis of the human spliceosome. *Nature* 419: 182-185.
5. Jurica, M.S., Licklider, L.J., Gygi, S.R., Grigorieff, N. and Moore, M.J. 2002. Purification and characterization of native spliceosomes suitable for three-dimensional structural analysis. *RNA* 8: 426-439.

## CHROMOSOMAL LOCATION

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

## SOURCE

CWC22 (K-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CWC22 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.

Blocking peptide available for competition studies, sc-242525 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

CWC22 (K-20) is recommended for detection of CWC22 of mouse 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); non cross-reactive with CWC15.

CWC22 (K-20) is also recommended for detection of CWC22 in additional species, including equine, canine, bovine, porcine and avian.

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.

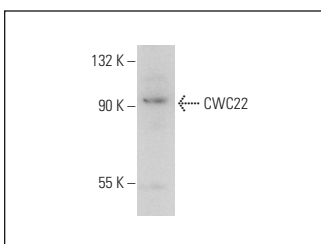
Molecular Weight of CWC22: 105 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409.

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: 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.

## DATA



CWC22 (K-20): sc-242525. Western blot analysis of CWC22 expression in IMR-32 whole cell lysate.

## RESEARCH USE

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

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Try **CWC22 (A-6): sc-398178**, our highly recommended monoclonal alternative to CWC22 (K-20).