

# ELL2 (G-5): sc-376611

## BACKGROUND

ELL2 (RNA polymerase II elongation factor ELL2) is a 640 amino acid nuclear protein that belongs to the ELL/Occludin family. This family is defined by a highly conserved domain of approximately 100 amino residues found within all eukaryotic Occludin proteins and the RNA polymerase II elongation factor ELL. These elongation factors activate elongation by suppressing transient pausing by polymerase at many sites along the DNA and govern its interaction with RNA polymerase II and the ternary elongation complex. ELL2 may also contain a novel type of RNA polymerase II interaction domain that is capable of negatively regulating polymerase activity in promoter-specific transcription initiation *in vitro*.

## REFERENCES

1. Simone, F., et al. 2001. EAF1, a novel ELL-associated factor that is delocalized by expression of the MLL-ELL fusion protein. *Blood* 98: 201-209.
2. Trembley, J.H., et al. 2002. PITSLRE p110 protein kinases associate with transcription complexes and affect their activity. *J. Biol. Chem.* 277: 2589-2596.

## CHROMOSOMAL LOCATION

Genetic locus: ELL2 (human) mapping to 5q15; Ell2 (mouse) mapping to 13 C1.

## SOURCE

ELL2 (G-5) is a mouse monoclonal antibody raised against amino acids 377-461 mapping within an internal region of ELL2 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-376611 X, 200 µg/0.1 ml.

## APPLICATIONS

ELL2 (G-5) is recommended for detection of ELL2 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 ELL2 siRNA (h): sc-77259, ELL2 siRNA (m): sc-77260, ELL2 shRNA Plasmid (h): sc-77259-SH, ELL2 shRNA Plasmid (m): sc-77260-SH, ELL2 shRNA (h) Lentiviral Particles: sc-77259-V and ELL2 shRNA (m) Lentiviral Particles: sc-77260-V.

ELL2 (G-5) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight (predicted) of ELL2: 72 kDa.

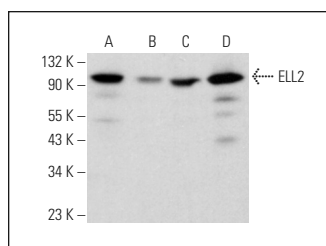
Molecular Weight (observed) of ELL2: 88 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, NTERA-2 cl.D1 whole cell lysate: sc-364181 or HeLa whole cell lysate: sc-2200.

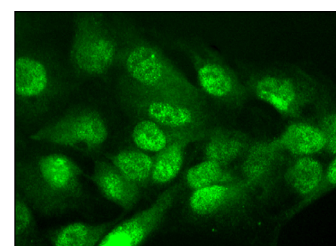
## RECOMMENDED SUPPORT REAGENTS

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.

## DATA



ELL2 (G-5): sc-376611. Western blot analysis of ELL2 expression in HeLa (A), NTERA-2 cl.D1 (B) and MDA-MB-231 (C) whole cell lysates and HeLa nuclear extract (D).



ELL2 (G-5): sc-376611. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear and cytoplasmic localization.

## SELECT PRODUCT CITATIONS

1. Narayanan, A., et al. 2012. Use of ATP analogs to inhibit HIV-1 transcription. *Virology* 432: 219-231.
2. Ali, M., et al. 2018. The multiple myeloma risk allele at 5q15 lowers ELL2 expression and increases ribosomal gene expression. *Nat. Commun.* 9: 1649.
3. Song, L., et al. 2022. Hotspot mutations in the structured ENL YEATS domain link aberrant transcriptional condensates and cancer. *Mol. Cell* 82: 4080-4098.e12.

## 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](http://www.scbt.com) for detailed protocols and support products.