# SANTA CRUZ BIOTECHNOLOGY, INC.

# ELL2 (H-85): sc-98406



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

- 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.
- Trembley, J.H., et al. 2002. PITSLRE p110 protein kinases associate with transcription complexes and affect their activity. J. Biol. Chem. 277: 2589-2596.
- 3. Simone, F., et al. 2003. ELL-associated factor 2 (EAF2), a functional homolog of EAF1 with alternative ELL binding properties. Blood 101: 2355-2362.
- Daibata, M., et al. 2004. Differential gene-expression profiling in the leukemia cell lines derived from indolent and aggressive phases of CD56+ T cell large granular lymphocyte leukemia. Int. J. Cancer 108: 845-851.
- Sakurai, K., et al. 2004. Inhibition of the canonical Wnt signaling pathway in cytoplasm: a novel property of the carboxyl-terminal domains of two *Xenopus* ELL genes. Zool. Sci. 21: 407-416.
- Maurus, D., et al. 2005. Noncanonical Wnt-4 signaling and EAF2 are required for eye development in *Xenopus laevis*. EMBO J. 24: 1181-1191.
- 7. Romero, D.G., et al. 2007. Adrenal transcription regulatory genes modulated by angiotensin II and their role in steroidogenesis. Physiol. Genomics 30: 26-34.
- Shell, S.A., et al. 2007. Increased phosphorylation of the carboxyl-terminal domain of RNA polymerase II and loading of polyadenylation and cotranscriptional factors contribute to regulation of the ig heavy chain mRNA in plasma cells. J. Immunol. 179: 7663-7673.

## CHROMOSOMAL LOCATION

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

### SOURCE

ELL2 (H-85) is a rabbit polyclonal antibody raised against amino acids 377-461 mapping within an internal region of ELL2 of human origin.

# **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

# PRODUCT

Each vial contains 200  $\mu$ g IgG 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-98406 X, 200  $\mu$ g/0.1 ml.

## **APPLICATIONS**

ELL2 (H-85) is recommended for detection of ELL2 of human and, to a lesser extent, mouse and rat 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 ELL1.

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 (H-85) 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: ES-2 cell lysate: sc-24674 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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

# **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.

#### MONOS Satisfation Guaranteed

Try ELL2 (B-7): sc-515276 or ELL2 (G-5): sc-376611, our highly recommended monoclonal alternatives to ELL2 (H-85).